

Minutes of the Meeting

30th Meeting of Higher Education Research Committee (HERC)

held on

**30 June 2022
Through VLC**



**Directorate of Research, Innovation & Commercialization (RIC)
Bahria University Head Office
Islamabad**

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Reference Designators & Terms

These designators/terms are meant to introduce clarity, standardization and ease of reference while consulting or referring to this document.

Item Number Item oonn

Where

oo = ordinal sequence of HERC Meeting

nn= serial number of item in that HERC Meeting

Example:

Item 1712 means Item No. 12 of 17 HERC Meeting

Decision on a Decision oonn

New Item

Example:

Decision 1712 means Decision on Item 1712

Example:

Decision 1712.b means Decision 1712, Clause 'b'

Example:

Decision 1712.b.2 means Decision 1712, Clause 'b', sub-clause '2'

Decision on a Decision o₂ (oonn)

Previous Item

Example:

Decision 17 (1512) means decision taken by 17 HERC Meeting on the prevision review item 1512

Example:

Decision 17 (1512) b means decision taken by 17 HERC Meeting on the prevision review item 1512 clause 'b'

Example:

Decision 17 (1512) b.3 means decision taken by 17 HERC Meeting on the prevision review item 1512 clause 'b' sub clause '3'

Action

Authority, Entity, Official, Person, Unit, Dept, Office, etc. required to implement the decision

Responsibility

The supra single Authority, Entity, Official, Person, etc required to:

- a. Coordinate the actions taken by the Authorities, Entities, Officials, Persons, Units, Depts., Offices listed against the action
- b. Report to the Council the progress on the matter, through periodic progress reports and at the meeting of the Council.
- c. Be overall responsible to the Competent Authority, and the Council, for the case/issue/point/item he or she has been made responsible for.

Deadlines

Any time period deadlines shall count from the date of issue of the minutes. Time period in days shall imply working days.

Acronyms & Abbreviations

AAI	Additional Agenda Item
BBS	Bahria Business School
BUHS	Bahria University Health Sciences
BSEAS	Bahria School of Engineering & Applied Sciences
CE	Computer Engineering
CS	Computer Sciences
DIC	Director Admin Islamabad Campus
DIPP	Director Institute of Professional Psychology
DKC	Director Admin Karachi Campus
DLC	Director Admin Lahore Campus
DNCMPR	Director National Centre for Maritime Policy Research
DS	Dental Section
EDC	Estimated Date of Completion
EE	Electrical Engineering
E&ES	Earth & Environmental Sciences
ES	Engineering Sciences
H&NS	Humanities & Natural Sciences
HSC	Health Sciences Campus
H&SS	Humanities & Social Sciences
IC	Islamabad Campus
IO	International Office
KC	Karachi Campus
LC	Lahore Campus
MS	Management Sciences
SE	Software Engineering
SMP	Strategic Management Plan
PP	Professional Psychology

Bahria University Head Office			
1.	Vice Admiral Kaleem Shaukat HI (M) (Retd)	Rector	In Chair
2.	R/Adm Nasir Mahmood (HI) M (Retd)	Pro-Rector (RIC)	Member
3.	Surg. R/Adm Najam Ul Saqib HI(M) TBt (Retd)	Pro-Rector (Health Sciences)	Member
4.	R/Adm Zaka-ur-Rehman HI (M)	Pro-Rector (Academics)	Member
5.	R/Adm Naveed Ahmed Rizvi HI(M) (Retd)	DG IC	Member
6.	Cdre. Shafqat Azad SI(M), S.Bt (Retd)	Registrar	Member
7.	Dr. Saleem Aslam	Director RIC	Member/Secy
8.	Dr. Atif Raza Jafri	Dean/Principal BSEAS	Member
9.	Dr. Muhammad Naveed	Dean MS/Principal BBS	Member
10.	Dr. Usman Hameed	Dean Law	Member
11.	Cdre. Nasrullah SI (M)	Controller Examinations	Member
12.	Cdre. Asim Raza SI (M) (Retd)	Director Academics	Member
13.	Dr. Riaz Ahmed	Director PGP	Member
14.	Mr. Fazal Wahab	Director QA	Member
Bahria University Islamabad Campus			
15.	Dr. Samreen Faheem Babar	HOD, Dept. of MS	Member
16.	Dr. Said Akbar Khan	HOD, Dept of E&ES	Member
17.	Dr. Khalil Ullah Muhammad	HOD, Dept. of BS	Member
18.	Dr. Muhammad Umer Hayat	HOD, Dept. of H&SS	Member
19.	Dr. Rizwana Amin	HOD, Dept. of PP	Member
20.	Dr. Shehzad Hassan	HOD, Dept. of CE	Member
21.	Dr. Awais Majeed	HOD, Dept. of SE	Member
22.	Dr. Arif-ur-Rahman	HOD, Dept. of CS	Member
23.	Dr. Farrukh Shahzad	HOD, Dept. of Media Std.	Member
24.	Dr. Muhammad Fayyaz	HOD, Dept. of Law	Member
25.	Dr. Syed M. Tirmazi	HOD, Dept. of Islamic Std.	Member
Bahria University Karachi Campus			
26.	Cdre. Muzammil Hussain SI (M) SE (Retd)	DG (AOL)	Member
27.	Prof. Dr. Zainab Hussain Bhutto	Dean, Professional Psychology	Member
28.	Prof. Dr. Mustaghis-ur-Rehman	Associate Dean – MS	Member
29.	Dr. Sohaib Ahmed	Principal – BSEAS	Member
30.	Dr. Oyoona Abdul Razzaq	Principal – H&SS	Member
31.	Dr. Sayma Zia	Principal – BBS	Member
32.	Dr. Liaquat Ali	HOD, Dept. of MS	Member
33.	Dr. Salma Hamza	HOD, Dept. of E&ES	Member
34.	Dr. Najam Muhammad Amin	HOD, Dept. of EE	Member
35.	Dr. Syed Safdar Ali	HOD, Dept. of CS	Member

36.	Dr. Osama Rehman	HOD, Dept. of SE	Member
37.	Dr. Shoaib Mughal	HOD, Dept. of CE	Member
38.	Dr. Kiran Bashir Ahmad	HOD, IPP	Member
39.	Dr. Talat Sharafat Rehmani	HOD, Dept. of H&SS	Member
40.	Dr. Asif Inam	HOD, Dept. of Maritime	Member
41.	Dr. Samina Riaz	HOD, Dept. of BS	Member
42.	Ms. Mah-e-Darakshah	HOD, Dept. of Media Std.	Member
43.	Dr. Abdul Qadir	HOD, Dept. of Islamic Std.	Member

Bahria University Lahore Campus

44.	Cdr. Sajid Rahim (Retd)	Director Campus (AOL)	Member
45.	Dr. Muhammad Ahmed	HOD, Dept. of MS (AOL)	Member
46.	Dr. Khawaja Qasim Maqbool	HOD, Dept. of CS	Member
47.	Dr. Urooj Sadiq	HOD, Dept. of PP	Member

Bahria University Health Science Campus, Karachi

48.	Cdre Muhammad Irfan SI (M) (Retd)	DG (AOL)	Member
49.	Dr. Ambreen Usmani	Principal/Dean HS	Member
50.	Dr. Wahab Buksh Qadri	Principal Dental Section	Member
51.	Dr. Nasim Karim	HoD, Pharmacology	Member
52.	Dr. Mehreen Lateef	HoD, MDRL	Member

In Attendance

53.	Cdre. Zahid Hasan Bawar SI (M) Retd	Director Technology Development
54.	Dr. M. Awais Mehmood	Director IO/SMP
55.	Mr. Rizwan Aamir	Director IT
56.	Cdr. Afshan	Principal PNNC
57.	Capt. Azhar Iqbal PN (Retd)	Deputy Registrar Academics
58.	Cdr. Zulfiqar Haider Malik (Retd)	Deputy Registrar Regulations & Statutes
59.	Capt. Zaheer Ahmad PN (Retd)	DD Academics – KC
60.	Capt. Sarfraz Khan SI (M) PN	DD Academics – IC
61.	Dr. Waqar-ud-Din	DD ORIC – KC
62.	Dr. Khalid Mustafa	VP – Medical, BUM&DC
63.	Dr. Kulsoom Fatima Rizvi	VP – Dental, BUM&DC
64.	Ms. Abida Razzaq	VP – Nursing
65.	Dr. Khalid Aziz	VP – BUCPT
66.	Dr. Naveed Ahmad	Head ADRC – KC
67.	Dr. Abdul Attayyab Khan	FM – Dept. of EE – KC
68.	Dr. Haroon Rasheed	FM – Dept. of EE – KC
69.	Dr. Yasmin Zamir Ahmed	FM – Dept. of Maritime – KC
70.	Dr. Mukesh Kumar	FM – Dept. of EE – KC

- 71.** Dr. Akhtair Ali
- 72.** Mr. Atif Naseer Awan
- 73.** Mr. Adeel Ahmad
- 74.** Mr. Abrar Hussain
- 75.** Ms. Erum Shafiq
- 76.** Syed Rizwan Ali

FM – Dept. of MS – KC
FM – Dept. of BS – KC
AD R&D – BUHO
AD I&C – BUHO
AD QA – KC
Manager BIC – KC

Proceedings

1. The proceedings commenced at 1100 hrs on 30 June 2022 with recitation of few verses from the Holy Quran.
2. The Honorable Rector/Chairperson HERC in his opening remarks welcomed all the members of HERC from HO, IC, KC, LC and HSC. He expressed that HERC is the highest forum to discuss and deliberate about the ecosystem of research. He said that BU has revamped the RIC ecosystem and provided needful support to different RIC endeavors of BU FMs. He further opined that now the FMs have to take the lead and utilize the offered support and incentives for achieving excellence in research.

Confirmation of the Minutes of 29th HERCM held on 21 October 2021

3. After soliciting the approval of the Chairperson HERC, Minutes of the 29th HERCM were communicated to all members and non-member participants.
4. Following typo mistakes were identified and recommended for needful incorporation in the Minutes of 29th HERCM:

Para	For	Read
69(a)	The Committee decided that language of the existing policy is comprehensive and needs no change. However, the distribution ratio between BU & FM under the ambit of BU Led Consultancy Stream be changed to 60:40	The Committee decided that language of the existing policy is comprehensive and needs no change. However, the distribution ratio between FM & BU under the ambit of BU Led Consultancy Stream be changed to 60:40
69(d)	Relevant clauses of all BU documents wherein BU led endeavors are explained including HR Manual, LDC Training Policy and Psychological Services Policies of BU should be amended by the office of Registrar incorporating the ratio 60:40 between BU & FM respectively.	Relevant clauses of all BU documents wherein BU led endeavors are explained including HR Manual, LDC Training Policy and Psychological Services Policies of BU should be amended by the office of Registrar incorporating the ratio 60:40 between FM & BU respectively.

5. The minutes of the 29th HERCM with aforementioned amendments were, therefore, tabled for confirmation.

Decision:

6. The minutes of the 29th HERCM with following amendments were confirmed by the committee.

Para	For	Read
69(a)	The Committee decided that language of the existing policy is comprehensive and needs no change. However, the distribution ratio between BU & FM under the ambit of BU Led Consultancy Stream be changed to 60:40	The Committee decided that language of the existing policy is comprehensive and needs no change. However, the distribution ratio between FM & BU under the ambit of BU Led Consultancy Stream be changed to 60:40
69(d)	Relevant clauses of all BU documents wherein BU led endeavors are explained including HR Manual, LDC Training Policy and Psychological Services Policies of BU should be amended by the office of	Relevant clauses of all BU documents wherein BU led endeavors are explained including HR Manual, LDC Training Policy and Psychological Services Policies of BU should be amended by the office of

	Registrar incorporating the ratio 60:40 between BU & FM respectively.	Registrar incorporating the ratio 60:40 between FM & BU respectively.
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7. *Point dropped.*

Review Items (07)

Item No. 2313: Measures to Improve Quality of PhD Research Work

Action By: **a. Director PGP**

b. All HoDs

c. Deputy Registrar (Regulations)

Responsibility: **a. Director PGP**

b. All Principals/Deans

c. Registrar

Decision 29 (2602): Standard Manual for Writing Research Proposal and Thesis (MS/MPhil and PhD) at BU

Decision 29 (2602):

8. Following decision were undertaken by the HERCM:

- a. There should be one booklet containing approved format and guidelines for writing Research Proposal and Thesis for MS/MPhil & PhD Programs as well as already promulgated 'BU Thesis Writing Manual' in line with the relevant rules.
- b. All the concerned departments/committees including Departmental Research Committee(s) and Faculty Research Committee(s) of all departments/faculties of BU shall have to ensure compliance of approved BU formats and guidelines for writing Research Proposal and Thesis of MS/MPhil & PhD Programs.
- c. The approved format and guidelines for writing Research Proposal and Thesis for MS/MPhil & PhD degrees at BU shall be incorporated in all relevant statutory documents of BU for ensuring strict compliance.

Progress Reported:

9. Following progress was reported by relevant offices:

- a. One booklet containing approved format and guidelines for writing Research Proposal and Thesis for MS/MPhil & PhD degree as well as 'BU Thesis Writing Manual' have been promulgated both in PhD Rules 2017 and MS/MPhil Rules 2017 by the office of Registrar vide letter no. BU-HO/Reg/2022/L/180, dated 26 January 2022.
- b. Point noted by all concerned for future compliance.

Decision 30 (2313):

10. Needful has been done. *Point dropped.*

Item No. 2803: Incentivizing Maritime Research; BU as Maritime University

Action By: **Pro-Rector (RIC)**

Responsibility: **Pro-Rector (RIC)**

Decision 2803:

11. HERC decided that Maritime Thematic areas to be identified by Pro-Rector RIC and the same shall be made part of the Cash Award Application Form after approval from Chairperson HERC.

Progress Reported:

12. Keeping in view the directions, a comprehensive document has been prepared including the following Key thematic areas of Maritime and Marine Domains.

- a. Maritime Businesses & Industries
- b. Maritime Social Sciences
- c. Maritime Psychology
- d. Maritime Law
- e. Marine Health Sciences
- f. Marine Sciences
- g. Maritime Engineering & Technologies

13. Relevant subthemes and scope applicable to the respective key thematic areas were also identified. Furthermore, currently available impact factor journals applicable to these Maritime themes were also mentioned with the view that cash awards in Maritime domain should preferably be linked with these journals.

14. The document placed at **Appendage 2803** of Agenda Booklet was presented before the HERCM for approval and subsequent implementation across BU.

Discussion:

15. D RIC presented the booklet titled *“Applied Research in Maritime & Marine Domain”* before the committee. The committee appreciated the efforts of Dte. of RIC in developing the comprehensive booklet.

16. The Chairperson directed to print the booklet and distribute the same among all the internal and external stakeholders including all relevant collaborating organizations of BU. Furthermore, the booklet shall be uploaded on the official website of BU for digital distribution.

Decision 30 (2803):

17. Following decisions were undertaken by the HERC:

- a. Booklet titled *“Applied Research in Maritime & Marine Domain”* placed at **Appendage 2803** stands approved.
- b. Dte. of RIC to distribute the printed booklet among all the relevant internal and external stakeholders including collaborating organizations (*with whom BU has signed MoUs*), industrial entities and academic institutes.
- c. Digital form of the booklet shall also be uploaded on the official website/CMS of BU for ensuring digital distribution.

Action Required	Action By	Responsibility
Implementation of Decision (b)	Director RIC	Director RIC
Implementation of Decision (c)	Director IT	Director RIC

18. Needful has been done. Point dropped.

Item No. 2901: Progress Review of ORIC

Action By: a. Director CUs
b. All HoDs

Responsibility: a. Pro-Rector (RIC)
b. Director RIC

Summary of the Case:

19. Following decisions were undertaken:

- a. HERC decided that calendar of events be developed to monitor the progress of KPIs achieved by the relevant offices under BU Strategic Plan including conduct of national/international conferences.
- b. All CUs to identify list of thematic areas for holding national/international conferences in line with the key socio-economic and technological problems of Pakistani Society and get it approved by the Chairperson HERC through Pro-Rector (RIC).

Progress Reported:

20. Following progress is reported:

- a. All the Campuses including IC, KC, LC and HSC have confirmed to develop a monitoring mechanism to assess the status of progress of different KPIs. The same will be ensured by Dte. of RIC through presentation on bi-annual basis via HERCM for the information of all relevant stakeholders.
- b. The CUs have identified different thematic areas keeping in view the current socio-economic and industrial requirements. The Dte. of RIC is ensuring identification and incorporation of latest thematic areas of national/international conference in each proposal processed at BUHO level before soliciting the approval of the Honorable Rector.

21. Furthermore, the Dte. of RIC has revamped its Progress Review Presentation and mapped the same on the newly approved Strategic Plan of BU. From now onwards, ORIC review presentation (presented via mandatory fresh agenda item in each HERCM) will depict the target achievement of all FIFTY-NINE Key Performance Indicators (KPIs) under NINE Objectives of Strategic Theme – 2: ‘Excellence in Research’

Discussion:

22. D SMP briefed the house regarding the status of data uploading on SMP software. He further reiterated that all the relevant offices shall ensure timely uploading of data w.r.t. to the progress on all the KPIs of BU Strategic Plan.

Decision 30 (2901):

23. Needful has been done. *Point Dropped.*

Item No. 2902: Progress Review of Funded Research Projects

Action By: **Treasurer**

Responsibility: **Treasurer**

Decision 2902:

24. The office of Treasurer to ensure timely availability of approved funds for the smooth execution of the approved projects.

Progress Reported:

25. The office of Treasurer has provided the requisite funds vide letter no. BU-HO/Fin/2021/L/304, dated 3 December 2021 for the needful execution of the research projects.

Decision 30 (2902):

26. Needful has been done. *Point Dropped.*

Item No. 2903: Review / Standardization of Income Distribution from Projects / Consultancies / Studies @ BU

Action By: **Deputy Registrar (Regulations)**

Responsibility: **Registrar**

Decision 2903:

27. Following decisions were undertaken by the HERC:

- a. The Committee decided that language of the existing policy is comprehensive and needs no change. However, the distribution ratio between FM and BU under the ambit of BU-Led Consultancy Stream be changed to 60:40 thereby amending Clause 6.2 (c) as follows:

6.2 BU-Led Consultancy Stream (c) Financial Distribution	
For	Read
"Income from consulting services shall be shared between the faculty member undertaking consultancy and the BU in the ratio of 80:20 , respectively".	"Income from consulting services shall be shared between the faculty member undertaking consultancy and the BU in the ratio of 60:40 , respectively".

- b. It was also decided to add another clause for addressing the consultancy endeavors executed through external resource person hired from outside BU. Hence following new clause has been added in the Consultancy Policy of BU:

6 (f) In case External Resource Person is Hired by BU
In case external resource person is hired for any Consultancy Endeavor(s), the payment of honorarium or profit-sharing mechanism will be decided on case-to-case basis by the Competent Authority.

- c. Relevant clauses of all BU documents wherein BU-Led endeavors are explained including HR Manual, LDC Training Policy and Psychological Services Policies of BU should be amended by the office of Registrar incorporating the ratio 60:40 between FM & BU respectively.

Progress Reported:

28. The income distribution ratio of 60:40 pertaining to BU-Led Consultancy Streams between FM and BU from projects/consultancies/studies has been incorporated in the following documents:

- a. Corporate Training Services Policy (CTSP)
b. Psychological Services Policy (Chapter XI of HR Policy Document)
c. Faculty Consultancy Policy (Chapter VII of HR Policy Document)

Decision 30 (2903):

29. Needful has been done. *Point Dropped.*

Item No. 2904 – 2908: Cancellation of PhD Student CandidaciesAction By: **Relevant HoDs**Responsibility: **Controller Examinations****Decision 2904 – 2908:**

30. Based on FRC's recommendation and BU PhD Rules, HERC dropped following PhD Scholars from PhD Programs of BU.

Item No.	Student Name	Enrollment	Program/Campus
2904	Muhammad Saqib Ali	01-286172-006	PhD Environmental Sciences – IC
2905	Nirmal Niazi	05-274171-002	PhD Professional Psychology – KC
2906	Qazi Ziaullah	01-281131-007	PhD Computer Engineering – IC
	Shahida Khanum	01-281182-001	
2907	Affifa Sardar	02-280172-004	PhD Management Sciences – KC
2908	Rizwan Riaz	01-280181-001	PhD Management Sciences – IC
	Asma Iftikhar	01-280162-003	

Progress Reported:

31. The status of dropped students has been incorporated in BU Examination Database. Program interim Transcript will be issued on demand with status as “incomplete”.

Decision 30 (2904-2908):

32. Needful has been done. *Points Dropped.*

Item No. 2910: Approval of Adding New Names in the List of Foreign & Local External Examiners for PhD Programs of ES – IC & KCAction By: **All HoDs**Responsibility: **All Deans****Decision 2910:**

33. Following decisions were undertaken by the HERC:

- Only those Pakistani origin evaluators having foreign PhD degrees and currently affiliated with foreign universities are eligible to be part of Foreign External Examiners list of BU PhD theses.
- FRCs of respective faculties shall have to review the existing pool of Local & Foreign External Examiners and recommend the names for deletion in the 30th HERCM.

Progress Reported:

34. Consequent to the review by the Chairperson HERC, Dte. of PGP disseminated the following revised eligibility criteria of Foreign External Examiners for evaluation of PhD Theses of all BU PhD scholars vide letter no. BU-HO/PGP/2022/L/187, dated 17 February 2022.

- No Pakistani/Expatriate be nominated as foreign evaluator for assessment of thesis of BU PhD scholars, with immediate effect.
- Nomination of foreign evaluators should be from top ranking international universities and the names of foreign evaluators to be proposed by the respective FRCs to HERC for approval, should be from top 500 ranked international universities.
- The ranking of university in respect of each foreign evaluator be mentioned while processing the cases of PhD scholars for foreign evaluation.

- d. The current lists of foreign evaluators be prioritized by the respective FRCs with respect to the ranking of university of foreign evaluator(s).
35. Subsequently, all Deans were requested to review the existing pool of Foreign External Examiners and forward the list of names of Foreign External Examiners after needful tabulation/vetting in their respective FRCs for subsequent approval of HERC.
36. Lists of Foreign External Examiners forwarded by Deans of respective faculties were hereby tabled before the HERCM for approval.

S.No.	Name of Faculty	Attachment
i.	Faculty of Professional Psychology	Appendage 2910-A
ii.	Faculty of Humanities & Social Sciences	Appendage 2910-B
iii.	Faculty of Engineering Sciences	Appendage 2910-C
iv.	Faculty of Management Sciences	Appendage 2910-D

Discussion:

37. D PGP said that the new criteria is applicable on the new names processed by respective departments for the approval of HERC. He further said that the names shall be prioritized w.r.t. the new criteria. Dean ES briefed that the faculty of ES has already sorted the list of already approved foreign external examiners as per new criteria.

Decision 30 (2910):

38. HERC approved the list of Foreign External Examiners placed at **Appendage 2910-A, Appendage 2910-B, Appendage 2910-C & Appendage 2910-D** in light of the new eligibility criteria.

Action Required	Action By	Responsibility
Implementation of Decision	All HoDs	All Deans

39. *Point Dropped.*

New Items (10)

Item No. 3001: Progress Review of RIC	
Sponsor: Director RIC	Referral Authority: 29th HERCM

Summary of the Case:

40. Consequent to the decision of 29th HERCM via Item # 2901, the Progress Review Presentation of RIC has been mapped on the Strategic Theme – 2: Excellence in Research of newly approved BU Strategic Plan 2030 of BU.
41. The Strategic Theme – 2 constitutes NINE (9) Objectives which will be achieved through targets assigned in FIFTY-NINE (59) Key Performance Indicators (KPIs).
42. The progress on the achievement of FIFTY-NINE KPIs by the relevant offices will be presented before the HERCM for their information and perusal.

Discussion:

43. Pro-Rector (RIC) appraised the house about revamping of Progress Review Presentation with the Strategic Theme – 2 of BU Strategic Plan. He said that the presentation includes progress on achievement of different targets on all Fifty-Nine KPIs.

44. D QA expressed that the impact factor publications have been increased from the faculty of MS, Law and H&SS which depicts the success of different policies implemented by BU for the promotion of RIC endeavors. He further said that award of patents shall be pursued with Intellectual Property Organization of Pakistan. The Chair reiterated that the details of patents including respective status of each patent filed to IPO shall be provided in the presentation.
45. D Acad proposed that a separate session shall be arranged for reviewing the progress on complete Strategic Plan of BU. D SMP briefed that a session will be arranged in due course of time based on the targets achieved by all the relevant offices w.r.t. the complete Strategic Plan of BU.
46. Associate Dean MS-KC opined that incentive should be introduced for the publication of Book Chapters and Books authored by BU FMs. He further said that writing of Books and Book Chapters also provides recognition of BU on National/International Forums. D QA suggested that BU may award letter of appreciation for publication of Books/Book Chapters by BU FMs.
47. The Chair recommended that the RIC Progress Review Presentation be revamped and progress on vital KPIs shall only be presented in the HERCM. He further said that rigorous measures should be undertaken to pursue the patent application filed by BU FMs.

Decision 3001:

48. Following decisions were undertaken by the HERC:

- Dte. of QA to propose incentives in consultation with all Deans under the ambit of Cash Award Policy of BU for inclusion of Books and Book Chapters authored by BU FMs in line with HEC recognition criteria.
- Requisite measures should be undertaken by Incharge – Technology, Innovation & Support Center (TISC) of BU for accelerating the process of patent recognition filed by BU FMs in IPO-Pakistan and the same shall be included in the presentation.
- Call for Proposal for BU Funding shall be issued for provision of indigenous funding by BU to the applied research projects of BU researchers.
- RIC Progress Review presentation shall be of 15 minutes. Format be adjusted accordingly.

Action Required	Action By	Responsibility
Implementation of Decision – a	All Deans/Director QA	Director QA
Implementation of Decision – b	Incharge TISC	Director RIC
Implementation of Decision – c	Director RIC	Director RIC
Implementation of Decision – d	Director RIC	Pro-Rector (RIC)

49. *Progress to be Reported.*

Item No. 3002: Progress Review of Funded Research Projects

Sponsor: **Director RIC**

Referral Authority: **28th HERCM**

Summary of the Case:

50. Following FIVE applied Research Projects were approved by the Honorable Rector in light of BU Funding Policy of Applied Research Projects.

S.No.	Project Title	Domain	Name of PI
i	Development of Memory Boost Nutraceutical from Indigenous Marine Sources of Algae Plants and Coral Reefs Approved Funding: Rs. 553,400	Medical Sciences	Dr. Mehreen Lateef
ii	Effect of Naturally Isolated Bioactive Compounds as Anticorrosive and Antifouling agents for its use in Shipping Industry: A Novel Approach to Identify and Prevent Marine Biofouling Approved Funding: Rs. 1,291,000	Maritime Sciences & Medical Sciences	Dr. Mehreen Lateef & Dr. Yasmin Zamir
iii	Marine Bioprospecting of Novel Bioactive Compounds from Medicinally Important Unexplored Species for Drug Discovery Approved Funding: Rs. 548,519	Medical Sciences	Dr. Mehreen Lateef
iv	Cable Driven Parallel Robot Workbench Approved Funding: Rs. 898, 300	Engineering Sciences	Dr. Abdul Attayyab Khan
v	Methodology development for testing of SARS-CoV-2, COVID-19 infection by 2 genes (ORF1 ab and E) for the enhancement of seafood export from Pakistan to meet the global seafood trade demand Approved Funding: Rs. 934,500	Aquatic Diagnostics Lab	Dr. Saima Majeed

51. The PIs presented the progress on the execution of the research projects before the HERC for the information of the committee.

Decision 3002:

52. HERC expressed satisfaction on the progress of the projects. It was reiterated that needful steps should be undertaken to conclude the projects in time.

53. *Point dropped.*

Item No. 3003: Review of Policy on Publishing of Journals by BU

Sponsor: **Director (RIC)**

Summary of the Case:

54. Policy on Publishing of Journals was promulgated in 2014 for ensuring implementation of standard operating procedures for the publication and recognition of all journals published by different faculties of BU. Policy on Publishing of Journals by BU is attached as Appendage 3003 for the information.

55. The details of current journals published by BU are as follows:

S. #	Journal Title	Dept. & Campus	Current HEC Recognition Status
i.	Global Management Journal for Academic and Corporate Studies (GMJACS)	MS, KC	HEC Recognized "Y" Category
ii.	Journal of Bahria University Medical & Dental College (JBUMDC)	BUHSC, KC	HEC Recognized "Y" Category
iii.	Bahria Journal of Professional Psychology (BJPP)	IPP, KC	HEC Recognized "Y" Category

iv.	BU Research Journal in Earth Sciences (BURJES)	E&ES, KC	HEC Recognized “Y” Category
v.	Polaris – Journal of Maritime Research (P-JMR)	NIMA, KC	HEC Recognized “Y” Category
vi.	Bahria University Journal of Humanities and Social Sciences (BUJHSS)	H&SS, KC	<i>Applied to HEC for Recognition in 2022</i>
vii.	BU Journal of Information & Communication Technologies (BUJICT)	EE, KC	<i>Will Apply for HEC Recognition after publishing regular issues</i>
viii.	Journal of Law and Social Policy (JLSP)	Law, IC	<i>Applied to HEC for Recognition in 2022</i>
ix.	BU Journal of Management & Technology (BJMT)	MS, IC	<i>Applied to HEC for Recognition in 2022</i>

56. After detailed scrutiny, following clauses were recommended for deletion based on the justification mentioned below:

Clause #	Clause	Justification
5.14	Honorarium of Rs. 2,000/- and up to USD 250 per article can be paid to local and foreign reviewers respectively.	<ul style="list-style-type: none"> • In 2014, this clause was introduced to motivate and involve renowned national/international experts for becoming the reviewers of BU journals along with ensuring quality of published papers. • At the time of implementation, HEC was not providing any funding for the journals to meet such expenses. However, now HEC is providing funding through its “Seed Funding for HEC Recognized Journal Program” for meeting all such expenses. Currently no BU journal is paying to reviewers for reviewing of papers. • Furthermore, as per the Internationally adopted practice, no honorarium/payment has been made by the journals to the researchers for reviewing the journal articles. • Forgoing in view, it is recommended that Clause 5.14 of subject policy may be deleted.
5.15	The research papers published by BU faculty in BU journals will also be considered towards promotion and award of annual increments.	<ul style="list-style-type: none"> • The clause was introduced for motivating BU FMs/Researchers to publish their research work in newly launched BU journals in 2014. Consequent to that, the quality of BU journals in their respective domains were enhanced which is evident from the recognition of BU journals by HEC. • Currently, BU Promotion policy only recognizes the research papers published in HEC recognized journals (including BU HEC recognized journals) towards faculty promotions. • As BU is now only considering research papers published in HEC recognized journals, it is, therefore, proposed that Clause 5.15 of subject policy may be deleted (as BU Non-HEC Recognized Journals are not counted towards promotions/appointments).

Discussion:

57. Dean PP expressed that HEC is providing funds for meeting the expenses of publishing of journals every year and HEC has allowed to pay the reviewers of the journals from their grant. She further opined that the journals also charge under the head of publication fee from the researchers whose papers are accepted for publication. She recommended that BU may allow to pay the external reviewers of the journal articles from HEC funds as well as funds generated by the journals through other means (publication fee., etc.).
58. D RIC briefed the house that renowned international journals do not pay any honorarium to the reviewers for reviewing the submitted articles. D Acad suggested that the proposed clause may be relooked for the development of consensus among all the faculties.

Decision 3003:

59. Following amendments in BU Policy on Publishing of Journals placed at **Appendage 3003** were approved by the HERC.

- a. Clause 5.14 has been amended. The amended clause will be:

Clause #	Clause Description
For	Honorarium of Rs. 2,000/- and up to USD 250 per article can be paid to local and foreign reviewers respectively.
Read	Honorarium of Rs. 2,000/- and up to USD 50 per article can be paid to local and foreign reviewers respectively from <i>the funds generated by BU Journals through HEC or any other sources without any financial liability on BU.</i>

- b. Clause 5.15 stating *“The research papers published by BU faculty in BU journals will also be considered towards promotion and award of annual increments”* is to be **DELETED** from the policy.

Action Required	Action By	Responsibility
Implementation of Decision	Director RIC	Director RIC

60. *Point Dropped.*

Item No. 3004: Promotion of Research Culture at BU

Sponsor: **Director (RIC)**

Summary of the Case:**Background:**

61. The initiatives to enhance research productivity of BU has borne fruits resulting in promotion of research culture at BU and achieving several milestones in research publications and externally funded research projects. However, a lot more needs to be done to stay competitive at national level and join list of top ranked universities of Pakistan.
62. Top ranked universities of the world provide multiple opportunities to their PhD scholars for polishing their research skills during their course of PhD. For instance, they are provided with funding to attend reputed conferences, provide access to state-of-the-art labs, exposure to latest industrial developments so on and so forth.

Proposal:

63. In order to enhance the academic & research excellence of PhD programs and improve research culture at BU, it is proposed that all Schools shall arrange a Research Symposium in

each semester wherein maximum faculty members and all PhD scholars (who are in research phase) shall present their research work in brief format with an aim to adopt the intellectual and research input from the PhD faculty in their discourse of PhD research work.

64. It is also proposed that the Top Ranked research papers presented by the PhD scholars in the Research Symposiums shall be rewarded with the following Prize(s).

Ranking of Research Paper	Prize
First	Rs. 15,000 with Appreciation Shield with Certificate
Second	Rs. 10,000 with Appreciation Shield with Certificate
Third	Rs. 5,000 with Appreciation Shield with Certificate

Estimated Financial Effect:

65. The estimated financial effect for the arrangement of proposed Research Symposiums at each campus in each semester is as follows:

Campus	Number of Schools	Estimated Financial Effect (Rs. 40,000 per School)
BUIC	04	160,000
BUKC	04	160,000
Total Expense (Per Semester)		280,000

66. The total estimated financial effect for the arrangement of Research Symposiums each year will be Rs. 560,000/- only.

Recommendation:

67. The proposal for the arrangement of Research Symposiums in each semester by every School/Institute with estimated yearly expense of Rs. 560,000/- only was recommended for the approval of HERC.

Discussion:

68. Dean ES said that this will depict the progress of PhD scholars and directions will be aligned with the latest developments of their respective field. DPGP expressed that the subject proposal shall be aligned with the PhD milestones of the scholars.

Decision 3004:

69. The Chairperson referred the proposal to Faculty Research Committees (FRCs) of all faculties for needful tabulation and deliberation. The proposal (if approved/recommended by the FRCs) shall be tabled in 31st HERCM for further deliberations and approval.

Action Required	Action By	Responsibility
Implementation of Decision	All Deans	Director RIC

70. Progress to be Reported.

Item No. 3005: Reconstitution of Higher Education Research Committee (HERC)

Sponsor: Director (RIC)

Summary of the Case:

Background:

71. In order to enhance the administrative, academic and research efficiency at BU, the organogram of BU has been revamped and implemented. In the new organogram, the

specialized schools have been established at Constituent Units. Furthermore, several directorates have also been established at BUHO for looking after new initiatives of BU.

Proposal:

72. With the implementation of new organogram, it is proposed that the constitution of Higher Education Research Committee (HERC) w.r.t Permanent Members may be revised.

73. The current HERC constitution is appended below:

- a. Rector (Chairperson)
- b. Pro-Rector
- c. DG CUs
- d. Registrar
- e. Deans
- f. Director Academic Affairs
- g. Director Exam
- h. Professors
- i. Director QA
- j. Director PGP
- k. Director Admissions
- l. Director CUs
- m. All HoDs (All CUs)
- n. PGP Coordinators
- o. Director R&D/ORIC
- p. Additional Co-Opted Members (if required)

74. The following officials were recommended to be included as Permanent Members of HERCM;

- a. Pro-Rector RIC
- b. Pro-Rector Academics
- c. Pro-Rector Health Sciences
- d. Director Technology Development (TD)
- e. Director Strategic Management Plan (SMP)
- f. Associate Deans
- g. All Principals

75. However, keeping in view the scope and constitution of HERCM, following officials were recommended to be removed as permanent members of HERCM.

- a. Professors
- b. PGP Coordinators
- c. Director Admissions

Recommendation:

76. The proposal for reconstitution of Higher Education Research Committee (HERC) with the following members was recommended for the approval of HERC.

- a. Rector (Chairperson)
- b. Pro-Rector RIC
- c. Pro-Rector Academics
- d. Pro-Rector Health Sciences
- e. DG CUs
- f. Registrar

- g. All Deans/Associate Deans
- h. Director Academics
- i. Controller Examinations
- j. Director Quality Assurance (QA)
- k. Director Post Graduate Programs (PGP)
- l. Director Technology Development (TD)
- m. Director Strategic Management Plan (SMP)
- n. Director CUs
- o. All Principals
- p. All HoDs (All CUs)
- q. Director RIC (Secretary)
- r. Additional Co-Opted Members (*if required*)

Discussion:

77. The Chair viewed that the PGP Coordinators shall remain part of HERC in order to address the issues of PhD student Candidacies. Furthermore, Head of Research Centers/CoEs shall also be included as permanent members of HERC.

Decision 3005:

78. HERC approved reconstitution of Higher Education Research Committee with the following Permanent Members:

- a. Rector (Chairperson)
- b. Pro-Rector RIC
- c. Pro-Rector Academics
- d. Pro-Rector Health Sciences
- e. DG CUs
- f. Registrar
- g. All Deans/Associate Deans
- h. Director Academics
- i. Controller Examinations
- j. Director Quality Assurance (QA)
- k. Director Post Graduate Programs (PGP)
- l. Director Technology Development (TD)
- m. Director Strategic Management Plan (SMP)
- n. Director CUs
- o. All Principals
- p. All HoDs (All CUs)
- q. PGP Coordinators
- r. Head of Research Centers/Centers of Excellence
- s. Director RIC (Secretary)
- t. Additional Co-Opted Members (*if required*)

79. A notification in this regard be issued by the office of Registrar for incorporation of reconstituted HERC in all relevant BU Statutory documents.

Action Required	Action By	Responsibility
Implementation of Decision	Deputy Registrar (Regulations)	Registrar

80. Progress to be Reported.

Item No. 3006: Ratification for Award of PhD Degrees

Sponsor: **Controller Examinations**

Referral Authority: **Case Files**

Summary of the Case:

81. Undermentioned PhD Scholars of Management Sciences, Software Engineering and Electrical Engineering, Computer Engineering, Professional Psychology and Earth & Environmental Sciences from Islamabad/Karachi Campuses have completed all requirements for award of PhD Degrees.

82. The details received from the office of Controller Examinations in respect of the following TWELVE PhD Scholars are attached as **Appendage 3006**.

S.#	Student Name	Department	Campus
i.	Muhammad Jahangir Khan	Earth & Environmental Sciences	BUKC
ii.	Hina Shakir	Electrical Engineering	BUKC
iii.	Adeel Saqib	Management Sciences	BUIC
iv.	Chaudry Bilal Ahmad Khan	Management Sciences	BUIC
v.	Asma Fazal	Management Sciences	BUIC
vi.	Muhammad Naveed	Management Sciences	BUIC
vii.	Nouman Malik	Management Sciences	BUIC
viii.	Syed Rashid Aziz	Software Engineering	BUIC
ix.	Samina Rafique	Electrical Engineering	BUIC
x.	Shahid Ismail	Electrical Engineering	BUIC
xi.	Hasan Daud Butt	Management Sciences	BUIC
xii.	Syed Muhammad Usman	Computer Engineering	BUIC
xiii.	Erum Kausar	Institute of Professional Psychology	BUKC
xiv.	Syeda Qurat ul Ain Rizvi	Management Sciences	BUKC
xv.	Khalid Mumtaz	Management Sciences	BUIC
xvi.	Imran Khan	Management Sciences	BUIC
xvii.	Kashif Abrar	Management Sciences	BUIC
xviii.	Kamran Iqbal	Management Sciences	BUIC
xix.	Ayesha Saba	Management Sciences	BUIC
xx.	Altamash Khan	Management Sciences	BUIC
xxi.	Muhammad Iftikhar Ali	Management Sciences	BUIC

Decision 3006:

83. HERC ratified Award of PhD Degrees in respect of **Twenty-One PhD Scholars** along with degree completion details mentioned in the **Appendage 3006**.

84. Point Dropped.

Item No. 3007: Cancellation of PhD Student CandidaciesSponsor: **Relevant HoDs – All CUs**Referral Authority: **Relevant FRCs****Summary of the Case:**

85. The following Five cases are recommended by the DRCs and FRCs after due debate for cancellation of their candidacies.

3007 – A Department of Management Sciences – BUKC (THREE SCHOLARS)			
Sr. #	Name	Enroll/Batch	Remarks
i.	Mr. Mansoor Zakir	02-280192-005 Fall 2019	BU PhD rule 2017, allowed both scholars to successfully defend their thesis proposal defense latest by 4 November 2021.
ii.	Ms. Shahiroz Shaukat	02-280192-004 Fall 2019	However, Mr. Mansoor Zakir and Ms. Shahiroze Shaukat, have not submitted PhD Research Proposal to the department for the arrangement of proposal defense.
iii.	Ms. Faiza Abdullah	02-280161-001 Spring 2016	The scholar was enrolled in PhD (MS) program in spring 2016. The scholar has successfully completed her course work and proposal thesis defense. However, thereafter she did not show up. Her supervisor has awarded 3rd unsatisfactorily report and has confirmed that she did not come to discuss her research work.

3007 – B Department of Management Sciences – BUIC (ONE SCHOLAR)			
Sr. #	Name	Enroll/Batch	Remarks
i.	Ms. Maryum Shams	01-280201-002 Spring 2020	Ms. Maryum Shams got admission in PhD-Management Sciences Program at Dept. of MS – IC in Spring 2020. She passed her comprehensive examination on 31 March – 1 April 2021 but her proposal is not yet submitted to the department. Currently her status is “Time barred”.

3007 – C Department of Computer Sciences – BUIC (ONE SCHOLAR)			
Sr. #	Name	Enroll/Batch	Remarks
i.	Mr. M. Waseem	01-284172-001 Fall 2017	Mr. Muhammad Waseem did not submit the research proposal within the time frame allowed in PhD Rules of BU.

86. Based on FRC’s recommendation and BU PhD Rules, HERC was requested to drop the following five PhD Candidates of PhD Programs and transcript may kindly be issued clearly depicting the degree status as “INCOMPLETE”.

Sr. #	Name	Enrollment	Department & Campus
i.	Mr. Mansoor Zakir	02-280192-005	Management Sciences – KC

ii.	Ms. Shahiroz Shaukat	02-280192-004	
iii.	Ms. Faiza Abdullah	02-280161-001	
iv.	Ms. Maryum Shams	01-280201-002	Management Sciences – IC
v.	Mr. M. Waseem	01-284172-001	Computer Sciences – IC

Discussion:

87. HoD, Dept. of MS-KC briefed the house regarding the two cases from Dept. of MS-KC. He said that scholars have not responded to the official correspondence and not requested for any extension despite repeated intimations.
88. HoD, Dept. of MS-IC briefed the house regarding the case from Dept. of MS-IC. She said that the scholar has not submitted the proposal within the stipulated timeline. Furthermore, she has not responded to any mode of communication.
89. Controller Exam briefed the house that Dte. of Examinations have compiled a list of currently admitted scholars in different PhD Programs who were not enrolled/registered in the current semesters.
90. D PGP opined that the departments have the data about the status of admitted PhD scholars and they can only intimate the status to the Dte. of Examinations. The outstanding cases of PhD scholars shall be processed by each CU for cancellation of PhD student candidacies to remove the back log. He further added that all PGP Coordinators shall present the progression of their PhD scholars in every FRC meeting. The role of Advisory Committee shall be enhanced to overlook the progress of each PhD scholar.
91. DG – IC expressed that we should analyze the data of cancellation of PhD student candidacies and address the issues to decrease the cancellation of PhD student candidacies. The departments shall maintain/review each PhD scholar w.r.t. their milestones.
92. Registrar said that all the rules & regulations have been made by BU to minimize such cases. The visibility of the status of PhD students on milestone basis shall be enhanced. He reiterated that there are many discrepancies in monitoring mechanism of PhD Programs. All Deans/HoDs shall present the status of PhD students before the HERC for ensuring prompt action. He further added that during the PhD final defense, Advisory Committee of each scholar shall also attend and provide their candid input during the discourse of their PhD program. Dean ES expressed those maximum cases of student candidacies in PhD Program arouse during the stage of Proposal Defense and Proposal Acceptance.
93. Pro-Rector (RIC) said that the Thesis Tracking Module (TTM) should be adopted by all the relevant departments. He further said that TTM can address all issues of PhD scholar progression from Research Proposal till the completion of the degree. He reiterated that all concerned department should adopt TTM for removing the ambiguities.
94. D Acad said that all the back log cases shall be processed by all the faculties and recommend the student cancellation cases for the approval of the Rector. The same may be ratified in the forthcoming HERCM. Furthermore, standard agenda item shall be included in every DRC and FRC meeting regarding the Progress Review of PhD scholars and the same may be included in every HERCM as standing agenda item.
95. The Chairperson recommended that status of PhD scholars shall be presented in every HERCM after needful deliberations at DRC and FRC level. PhD supervisor shall present the progress of their respective PhD scholars in DRC and FRC. A consolidated progress report shall be presented by respective Deans in the HERCM for the information. He further expressed

reservations on the number of cases pertaining to Time Bar waivers submitted for his approval, which were beyond the maximum duration given in BU Rules. He advised that such cases should be reviewed by the Deans' Committee prior to further processing to solicit the approval of the Rector.

Decision 3007:

96. Following decisions were undertaken by HERC:

- a. Based on FRC's recommendation and BU PhD Rules, HERC dropped the following five PhD Candidates of PhD in MS & CS from IC & KC and transcript should be issued clearly depicting the degree status as "INCOMPLETE".

Sr. #	Name	Enrollment	Department & Campus
i.	Mr. Mansoor Zakir	02-280192-005	Management Sciences – KC
ii.	Ms. Shahiroz Shaukat	02-280192-004	
iii.	Ms. Faiza Abdullah	02-280161-001	
iv.	Ms. Maryum Shams	01-280201-002	Management Sciences – IC
v.	Mr. M. Waseem	01-284172-001	Computer Sciences – IC

- b. HoDs of relevant departments shall issue a notification letter addressed to the respective scholars clearly indicating the cancellation of their PhD Student Candidacy.
- c. Each PhD supervisor shall present the progress of all PhD scholars in his/her supervision in DRC/FRC. A consolidated progress report depicting the status of achieved milestones shall be presented by respective Deans in every HERCM for the information.
- d. Time Bar waivers cases beyond the maximum duration given in BU Rules, be prioritized by the respective schools/campuses, and subsequently reviewed by the Deans' Committee prior to further processing to solicit the approval of the Rector.
- e. All forums including constitution and effectiveness of Advisory Committees/DRCs/FRCs shall be made functional as per approved Rules of BU.
- f. A committee to be constituted by the Office of Registrar for recommending measures to improve the monitoring mechanism of PhD Scholars in line with the best practices adopted by NUST and NDU during the following phases:
 - i. Passing of Comprehensive Examinations to Successful defense of Thesis Proposal
 - ii. Successful defense of Thesis Proposal to Conduct of Internal Thesis Defense (ITD)
 - iii. Successful defense of ITD to Conduct of Final Thesis Defense

Action Required	Action By	Responsibility
Implementation of Decision – a & b	Relevant HoDs – IC & KC	Controller Examinations
Implementation of Decision – c, d & e	All HoDs – IC, KC & LC	Deans
Implementation of Decision – f	Registrar	Registrar

97. *Progress to be Reported.*

Item No. 3008: Approval of Adding New Names in the List of Foreign & Local External Examiners for PhD Programs of BU

Sponsor: **Relevant HoDs – All CUs**

Referral Authority: **Relevant FRCs**

Summary of the Case:

98. Lists of foreign & local examiners/evaluators (recommended by FRC) attached as **Appendage 3008** were submitted for inclusion in list of foreign & local examiners/evaluators of respective faculties.
99. Based on FRC's recommendation, HERC was requested to approve aforementioned names for inclusion in the list of Foreign & Local External Examiners of BU.

Discussion:

100. D PGP expressed that the honorarium paid by BU to the Local Evaluators for PhD Theses has not been revised by BU since after 2016. He proposed that the honorarium Rates shall be revised keeping in view current adopted rates of other universities along with inflationary effect. He also added that the local examiners are facing concerns of non-payment at the time of re-defense of proposals and Theses defense of BU scholars.
101. Chairperson directed all Deans of Faculties to review the Honorarium Rates paid to Local Evaluators for evaluation MS/MPhil & PhD Theses of BU scholars.

Decision 3008:

102. Following decisions were undertaken by HERC:
- HERC approved the list of foreign/local external examiners attached as **Appendage 3008** for Theses evaluation of PhD Program of different faculties.
 - Local External Examiners shall be paid as per current approved honorarium rates in case of conduct of re-defense of proposal or thesis of BU scholars.
 - All Deans to review and recommend the revised Honorarium rates paid to Local External Evaluators for evaluating MS/MPhil & PhD Theses of BU scholars keeping in view the rates adopted by other universities and process the same on file for the approval of the Honorable Rector through Dte. of PGP and Office of Treasurer.

Action Required	Action By	Responsibility
Implementation of Decision	All Deans	All Deans

103. Progress to be Reported.

Item No. 3009: Amendments Required in MS/MPhil & PhD Rules 2017

Sponsor: **Principal BBS-KC**

Referral Authority: **FRC – MS**

Summary of the Case:

104. Departments are now evolved into schools and organogram of BU is also revised, therefore, amendments in PhD and MS/MPhil rules are required to compliment the current organogram. Hence, amendments in some clauses are recommended.
105. Director Campus shall be replaced with Principal since the organogram is changed and the position of Director Campus is replaced with Director Admin. Therefore, amendments in MS/MPhil & PhD Rules 2017 are also required. The proposed amendments are attached as **Appendage 3009** of this booklet.

Discussion:

- 106.** Principal BBS-BUKC presented the item before the HERC. She highlighted the amendments are proposed keeping in view current practice adopted by Campuses and schools. She further said that with the revision of organogram, the relevant rules may also be amended.
- 107.** D PGP said that as per current practice HoDs forward the relevant documents directly to the Dte. of PGP for further processing without keeping in loop the respective Principals.
- 108.** The Chairperson expressed that all correspondence from Schools shall be routed through the respective Principal whereas the correspondence from Campuses shall be routed through the respective Director General(s).

Decision 3009:

- 109.** The amendments attached as **Appendage 3009** of this document stands approved. Notification in this regard be issued by the office of Registrar.

Action Required	Action By	Responsibility
Implementation of Decision	Director PGP	Registrar

- 110.** *Point Dropped.*

Item No. 3010: Inclusion of Experts in the List of Local External Examiners

Sponsor: **Dean ES**

Referral Authority: **FRC – ES**

Summary of the Case:

- 111.** Recently clause 32.1 of PhD rules have been amended. With this new amendment External Examiners shall be appointed from the list of HERC approved External Examiners. A consolidated FRC ES external examiner list is submitted for the approval of HERC.

Decision 3010:

- 112.** HERC approved the list of local external examiners attached as **Appendage 3010** for Theses evaluation of PhD Program of Faculty of Engineering Sciences.

Action Required	Action By	Responsibility
Implementation of Decision	All Relevant HoDs	Dean ES

- 113.** *Point Dropped.*

Closing of the Meeting

- 114.** The Chairperson thanked all the participants of the meeting for having conclusive discussions. The meeting concluded at 1645 hrs.

Dr. Saleem Aslam
Director RIC
Secretary HERC

1 August 2022

Appendages

Appendage 2803

APPLIED RESEARCH IN MARITIME AND MARINE DOMAINS

JUNE 2022



KEY THEMATIC AREAS AND SCOPE

1. MARITIME BUSINESS AND INDUSTRIES

2. MARINE SOCIAL SCIENCES

3. MARITIME PSYCHOLOGY

4. MARITIME LAW

5. MARINE HEALTH SCIENCES

6. MARINE SCIENCES

**7. MARITIME ENGINEERING
AND TECHNOLOGIES**



Innovation Eco-System- Focused on Marine Sciences, Technologies & Industries

Maritime Industries

Aquaculture, Fish Capturing & Processing	Coaral Reefs & Mangroves	Maritime & Coastal Tourism	Offshore O&G, Gas Hydrates & Minerals	Ship building/ Breaking & Maritime Eqpt	Offshore Renewable Energy	Port Activities & Shipping
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Crossectional Disciplines & Approaches

Marine Sciences	Marine Technologies	Marine Technologies	Ocean Energy Tech
<ul style="list-style-type: none">• Oceanology• Geological Investigations• Biological Investigations• Geophysical Sciences• Marine Ecology: Marine life survey• Marine Environment• Hydrography	<ul style="list-style-type: none">• Advanced Material• Maritime Electronics• ICT, AI, Big Data Analytics, Neural NW• Senior Tech/Products• Geoteach-seafloor mapping & drilling• Maritime Nanotech	<ul style="list-style-type: none">• Merchant/Naval Vessels designing and construction tech• Naval weapons, sensors, systems, Eqpt• Propulsion, Power & Auxiliary systems• Marine Bio-Tech• Oceanic Engineering	<ul style="list-style-type: none">• Thermal & Osmotics• Wave & Tidal• Offshore Wind/Solar• Hydrocarbons <p>Maritime integrated Logistics Tech</p> <ul style="list-style-type: none">• Smart Integrated Log• Automated Logistics• Packaging Solutions• Cold Chain Logistics• Warehousing/Mobility• 2PL/3PL Asset Based Logistics

Maritime Science & Technologies

Rector's Message

Bahria University (BU) is committed towards creating and building a robust ecosystem focusing on research, innovation, and commercialization. The University's strategic theme of achieving excellence in research has many core objectives and KPIs that have been set to ensure societal impact through research. In view of the growing importance of Blue Economy in Pakistan, there is special focus set on excelling in maritime research leading to development of cutting-edge technologies through a Conjoint Operational Research Model (CORM). To achieve this, a comprehensive document has been prepared specifying the maritime themes applicable to all faculties of BU. I, therefore, urge all the stakeholders, to make best use of this document to ensure their valuable contribution in building and sustaining this Model, through active research in Maritime domain.



Globally, the maritime sector represents an illustrative example of a capital-intensive, sophisticated industry. Realizing the same, maritime sector in Pakistan is also evolving to match global trends. This has transformed the focus of maritime education from basic skill development to advance knowledge creation, emphasizing development of business and analytical skills for required industry revolution in maritime sector. Research plays a pivotal role in attaining this objective. However, the scale and extent of maritime scientific research is quite vast. To ensure a focused approach, this document entails research themes identified after taking lead from the UN Sustainable Development Goals (SDGs), International Maritime Organization's (IMO) Strategic Directions, and research published in renowned maritime journals. The objective is to achieve and maintain excellence in Maritime research, which can benefit the Academia, Industry and Government to effectively contribute towards maritime economy.

I strongly urge BU researchers to undertake maritime and marine related research with an aim to play their pivotal role in tapping the unaccountable marine resources and achieve excellence in Blue Economy.

MARITIME BUSINESSES & INDUSTRIES



1. MARITIME BUSINESSES & INDUSTRIES

The marine industry is being defined to include any economic activity of or relating to the oceans, rivers, and the Great Lakes. This includes traditional maritime activities such as designing, constructing, manufacturing, supplying, maintaining vessels or parts, operating, and managing shipping lines, or crewing ships. It can also include engaging in maritime law, brokerage services, insurance, customs services, fishing operations, marine science, salvage operations and the operation of ports, shipyards, drydocks, and cruise lines. Additionally, the exploration for and exploitation of both offshore renewable and nonrenewable energy sources are included in the marine industry.

In the key thematic area of maritime businesses and industries, the research themes with relevant scope and reputed journals for publication of research by the BU's FMs are listed below:

1.1 SHIPPING AND TRANSPORT LOGISTICS

The scope of shipping and transport logistics subtheme includes:

- Analysis of economies of scale in ship size and firm size.
- Container positioning in liner shipping.
- International trade and shipping.
- Managing intermodal transport.
- Market analysis in sectors of shipping and transport logistics.
- Modelling and analysis of problems pertinent to shipping and transport logistics.
- Risk analysis in transport logistics and physical distribution infrastructure.
- Service quality in shipping and transport logistics.
- Strategic alliances and relationship management in shipping and transport distribution.
- Strategic management for managing shipping and transport logistics.
- Transshipment and the development of hub and spoke in shipping.
- Transport security.
- IT and decision support systems for shipping management and physical distribution.
- Warehouse and terminal operations and management.

Publication Venues for Sub-Theme 1.1

- International Journal of Shipping and Transport Logistics – IF 1.08

- Asian Journal of Shipping and Logistics
- Transportation Research Part E-Logistics and Transportation Review – IF 6.875
- Euro Journal on Transportation and Logistics
- Journal of Transport and Supply Chain Management

1.2 MARITIME ECONOMICS AND BUSINESS MODEL DEVELOPMENT

The scope of Maritime Economics and Business Model Development subtheme includes:

- Maritime economics and business.
- Ocean systems economics.
- Shipping economics.
- Trade and economic development.
- Transportation management.
- Global port management regional studies.
- Environmental management in shipping and trade.
- Global economic and business environments for shipping and ports.
- Shipping market mechanism.
- Financial maritime risk management strategies.
- Optimal maritime investment strategies.
- Efficient and effective port operations and management.
- Shipping and ports as global logistics and supply chain components.
- Optimal ship routing and freight pricing with real-time AIS data.
- The circular economy from a business perspective.

Publication Venues for Sub-Theme 1.2

- Maritime Business Review – Scopus IF 2.2
- Journal of Maritime Economics & Logistics – IF 3.119
- World Trade Review – IF 1.596
- World Journal of Entrepreneurship Management and Sustainable Development

1.3 MARITIME BUSINESS ENVIRONMENT

The scope of Maritime Business Environment covering Maritime Business and Multi-disciplinary approach subtheme includes:

- Shipping market analysis and forecasting.
- Customer services and marketing
- Organizational behavior in maritime business.
- Innovation management.
- Maritime security.
- Safety management.
- Shipping finance.
- Marine insurance.
- Ship chartering.
- Bulk shipping.
- Fleet management.
- Maritime education and training.
- Human resource management in maritime business.
- Knowledge-based policies/education, knowledge transfer in shipping firms.
- Strategic alliance in maritime domain.
- Intermodal transport operations.
- Port management and operations.
- Terminal management.
- Green ports.
- Cruise operations and management.
- Shipping sustainability and social responsibility.
- Technology in maritime business.
- Legal aspects in maritime business.

Publication Venues for Sub-Theme 1.3

- Journal of Business Ethics the Environment & Responsibility

- Maritime Business Review
- Journal of ETA Maritime Science

1.4 FISHERIES AND AQUATIC BUSINESS MANAGEMENT

The scope of Fisheries and Aquatic Business Management subtheme includes:

- Fisheries Economics.
- Fisheries Economics and Marketing.
- Fisheries Engineering and Technology Management.
- All aspects of the management, ecology, and conservation of inland, estuarine and coastal fisheries.
- Foster an understanding of the maintenance, development, and management of the conditions under which fish populations and communities thrive, and how they and their habitat can be conserved and enhanced.
- Promote a thorough understanding of the dual nature of fisheries as valuable resources exploited for food, recreational and commercial purposes and as pivotal indicators of aquatic habitat quality and conservation status.
- Help fisheries managers focus upon policy, management, operational, conservation and ecological issues.
- Assist fisheries ecologists become more aware of the needs of managers for information, techniques, tools and concepts.
- Integrate ecological studies with all aspects of management.
- Ensure that the conservation of fisheries and their environments is a recurring theme in fisheries and aquatic management.

Publication Venues for Sub-Theme 1.4

- Journal of Fisheries International - Indexed in Google Scholar
- Fisheries Management and Ecology Journal – IF 1.894
- Journal of Knowledge and Management of Aquatic Ecosystems – IF 1.677
- Canadian Journal of Fisheries and Aquatic Sciences – IF 2.595
- Journal of Fisheries and Aquatic Sciences
- Journal of Fisheries Management and Ecology – IF 1.894
- Journal of Aquatic Plant Management – IF 1.0

- North American Journal of Fisheries Management – IF 1.436

1.5 OCEAN AND COASTAL MANAGEMENT

The scope of Ocean and Coastal Management subtheme includes:

- Ocean systems/project management.
- Interactions among various ocean and coastal uses and actors in government, the private sector, civil society, local communities, science and Indigenous People.
- Resolution of multiple-use conflicts; alternative management regimes and institutional arrangements for integrated management of ocean and coastal areas (e.g., national coastal management programmes, Regional Seas programmes); and governance of resources, systems and activities from the land-sea interface to territorial waters, Exclusive Economic Zones, high seas and the poles.
- Developments related to the Law of the Sea Convention and to the United Nations Conference on Environment and Development (UNCED), and consideration of legal regimes for the conservation and development of ocean and coastal resources from the shoreline to beyond the limits of national jurisdiction.
- International maritime and shipping regulations, policies and governance under the framework of the United Nations International Maritime Organization (IMO) or local governments of various countries.
- Port and shipping operations, management and governance.
- Assessing and managing environmental impacts due to development of ocean and coastal areas.
- Specific shoreline management issues such as coastal protection policies, responses to accelerated sea level rise, public access, waterfront redevelopment, cultural heritage, public education and participation, port management, estuarine management, and marine protected areas.
- Resource evaluation for such activities as aquaculture, commercial fisheries, offshore mining, shipping and navigation, energy facilities, coast-dependent industries, and tourism, recreational development, and marine conservation and protected areas.
- Physical constraints and natural hazards affecting resource use and development; economic, political, and social constraints; and technological solutions to problems of resource demand and supply.
- Climate change adaptation in coastal and marine settings.
- Ocean and coastal disasters, risk reduction and resilience building.

- Marine spatial planning.
- Marine ecosystem-based management.
- The Blue Economy and marine governance.
- Tackling ocean acidification.
- Addressing marine plastics and pollution.
- Governing coastal urbanization.
- Vulnerability, sustainable livelihoods and maritime communities.
- Bridging the science-policy-practice interfaces in the ocean and coastal context.
- The roles of traditional knowledge, local knowledge and science in ocean and coastal management.
- Politics, democracy, civic engagement and public decision-making for the ocean and coasts.
- Historical, ethical, philosophical and theoretical considerations relevant to ocean and coastal management.

Publication Venues for Sub-Theme 1.5

- Journal of Ocean and Coastal Management – IF 3.284
- Journal of Waterway Port Coastal and Ocean Engineering – IF 2.208
- Journal of Ocean and Coastal Research
- Journal of Coastal Management – IF 1.922
- Academy of Management Annals – IF 16.438
- Academy of Management Discoveries

1.6 MARITIME ENERGY SECTOR MANAGEMENT

The scope of Maritime Energy Sector Management including Offshore Oil & Gas, Gas Hydrates, and Renewable Energy subtheme includes :

- Research on issues relating to supply management of offshore and ashore oil and gas, and gas hydrates and renewable energy sectors (covering the entire supply chain resource finding, extraction, production, treatment, conversion, transportation, distribution, and retail supply), demand and usage management, waste management, customer and other stakeholder management, and solutions.

- Forms of energy supply (centralized or decentralized), ownership patterns (public or private, cooperative, joint, or any other), market structures (formal, informal, integrated, disintegrated, national, international, local, etc.) and degrees of commoditization (e.g., internationally traded, regionally traded, non-traded, etc.).
- Applied, practical-oriented, problem-solving offshore energy management research having wider relevance with following scope:
- Economic analysis of sector management issues (pricing, competition, access, reform, restructuring, regulation)
- Analysis of sector strategies (strategies by governments, industries, consumers, civil society, international bodies)
- Analysis of financial issues (investments, revenue management, viability)
- Project management (appraisal, risk management)
- Organizational and behavioral analysis of sector participants (firms, consumers, others)
- Knowledge management and innovation in the sector
- Issues relating to environment, development, and sustainability of the sector
- Management of scarce resources (economic, financial, human, and natural), projects, activities, and concerns (e.g., regulatory, social, and environmental aspects), technologies and knowledge
- Business strategy, policy and planning as well as decision support systems for energy sector management
- Business organization, structure and environment, and changes thereto
- Globalization and multi-cultural management
- Management of innovation, change and transition

Publication Venues for Sub-Theme 1.6

- The International Journal of Energy Sector Management – IF 2.4
- Journal OF Energy Conversion and Management – IF 9.709
- International Journal of Public Sector Management
- Journal of Maritime Policy & Management – IF 3.778

1.7 SHIPBUILDING AND SHIPBREAKING BUSINESSES AND INDUSTRIAL MANAGEMENT

The scope of Shipbuilding and Shipbreaking Businesses and Industrial Management subtheme includes:

- Improvement of the process of new business of shipbuilding industry.
- Strategy for Ship Production Management with Digital Shipyard.
- Systematization and advancement of shipbuilding production management for flexible and agile response for different offshore platforms.
- Research on a simulation-based ship production support system for middle-sized shipbuilding companies.
- New business opportunities in shipbuilding industry with efficient project and financial management.
- Shipbuilding, shipbreaking and ship repair industries' growth prospects and contribution to Blue Economy.
- Identification of growth segments for investment in shipbuilding, shipbreaking, and ship repair.
- Developing business and industrial growth strategies based on likely future developments in the shipbuilding, shipbreaking, and ship repair arenas.
- Relationship of shipbuilding market to the overall economy, demography and other similar markets and forces that will shape its future.
- Analysis of factors having major impact on the ship building and repairing industry supply chain.
- The major trends shaping the global ship building and repairing market and approaches companies can take to exploit business growth opportunities.
- Global Macro Comparison - The global ship building and repairing market comparison with macro-economic factors.

Publication Venues for Sub-Theme 1.7

- International Journal of Naval Architecture and Ocean Engineering – IF 2.473
- Industrial Management & Data Systems – IF 4.224
- Journal of Industrial Engineering and Management-JIEM
- International Journal of Industrial Engineering and Management

- Journal of Industrial Integration and Management-Innovation and Entrepreneurship

1.8 MARITIME EQUIPMENT BUSINESSES AND INDUSTRIAL MANAGEMENT

The scope of Maritime Equipment Businesses and Industrial Management subtheme includes:

- Improvement of the process of new business of marine electronics and marine engineering industry.
- Strategies for marine equipment development management in 4th industrial revolution.
- Systemic advancement of marine equipment production management for flexible and agile response for different offshore platforms.
- Research on a simulation-based equipment production support system for middle-sized marine electronics, power and other companies.
- New business opportunities in marine equipment industry with efficient project and financial management.
- Marine electronics, power, propulsion and other offshore equipment industries' growth prospects and contribution to global and national Blue Economy.
- Identification of growth segments for investment in marine electronics, power, propulsion, and other offshore equipment.
- Relationship of marine equipment market to the overall economy, demography and other similar markets and forces that will shape its future.
- The major trends shaping the global marine equipment market and approaches national and global companies can take to exploit business growth opportunities.
- Global Macro Comparison - The global, regional and national marine equipment market comparison with macro-economic factors.

Publication Venues for Sub-Theme 1.8

- Journal of Economics Business and Accountancy Ventura.
- International Journal of Ocean Systems Management – Indexed in Elsevier and Google Scholar
- International Journal of Sustainability – IF 3.251.
- Journal of Industrial Management & Data Systems – IF 4.224

A large, deep blue aquarium tank filled with various fish, including several large silver fish and smaller ones. In the foreground, the silhouettes of several people are visible as they look into the tank. The scene is dimly lit, with the primary light source being the blue glow from the water and the fish.

MARITIME SOCIAL SCIENCES

2. MARITIME SOCIAL SCIENCES

The human element is at the core of this research area that seeks to better understand organizational behavior and promote decent working and living conditions in the maritime industries. Given that corporations play an essential role in maritime social governance, research on organizational behavior focuses on corporation decision-making processes by examining dynamics of corporate interaction, in particular in global networks and supply-chains, and with humans. The research excellence area also seeks to interrogate issues related to individuals and organizations and their development through education, training and organizational learning. It aims to create a better understanding of the interactions between humans and organizations in order to optimize well-being and overall performance and in particular the role of education (as mediated by such factors as the social norms and the evolution of technology) in this regard. The application of behavioral sciences to maritime industries seeks to shed light on the hidden power and educational structures behind corporations with a view to providing tools for achieving a fair maritime social governance paradigm and sustainable economic growth. Such development goals cannot be fully achieved without strengthening the labor and social rights of seafarers and other maritime professionals. The Maritime Labor Convention, 2006, represents a huge step forward in the right direction. Nevertheless, the implementation and application of this international legal framework pose significant challenges and raise empirical and analytical questions across the globe. They do not only concern seafarers, but also other workers, in particular as technological advances and new business models expand the economic uses of the seas, and with them the concept of “the maritime professional”. The research approach to such pressing issues is intended to be socio-legal, dealing with issues of diversity in the labor force, in particular gender issues, corporate governance and labor matters, standard implementation and compliance, public and private enforcement of maritime labor law, and policy development. The scope of maritime social sciences includes:

- Marine governance and management
- Blue growth (including fisheries)
- Social justice and equity
- Health and wellbeing
- Coastal Communities
- Aquaculture, Fisheries
- Coral Reefs & Mangroves
- Fish Processing

- Cruise & Coastal Tourism
- Offshore Oil & Gas, Gas Hydrates and Minerals
- Ship Building and Shipbreaking
- Maritime Equipment
- Offshore Renewable Energy

Publication Venues for Theme 2

- Estuarine, coastal and shelf science
- Journal of experimental marine biology and ecology
- Limnology and oceanography
- Marine ecology progress series
- Marine pollution bulletin
- Marine Fisheries-Journal of Marine Fisheries Technology and Management
- Journal of Aquatic Plant Management – IF 1.000
- Journal of Knowledge and Management of Aquatic Ecosystems – IF 1.677
- TRANSNV-International Journal on Marine Navigation and Safety Of Sea Transportation
- Journal of Coastal Marine Science
- Journal of Coastal Life Medicine
- Journal of Coastal Research – IF 0.854
- International Journal of Marine and Coastal Law – IF 0.656
- Journal of Coastal Conservation – IF 1.839
- Journal of Waterway Port Coastal and Ocean Engineering – IF 2.208
- Journal of Marine and Coastal Fisheries – IF 1.568
- International Journal of E-Navigation and Maritime Economy
- International Journal of Maritime Engineering – IF 0.521
- International Journal of Maritime History
- Journal of Maritime Policy & Management – IF 3.778



MARITIME PSYCHOLOGY

3. MARITIME PSYCHOLOGY

Maritime psychology can be broadly defined as the study and practice of the interplay between human behavior and the maritime environment. Mostly research and practice to date has been concerned with human behavior aboard seagoing vessels, with the major focus being on maritime transport – the merchant navy or merchant marine. However, as noted, this scope can certainly be expanded. On the one hand a walk along the seashore can be an enriching and inspiring experience, for old and young alike, and the aim is to analyze away the existential value, or everyday pleasure, of such experience. On the other hand the movement of ship through busy lanes, in confined and dangerous waters, can be very cognitively demanding require extensive teamwork, astute judgement and considerable manual skill. is defined as the study of the interaction between seafarers' behavior and the working environment.

The scope of maritime psychology includes:

- Development of many and varied ways in which the interface between human behavior and the maritime environment can be developed into a much broader maritime psychology.
- Psychological and psychiatric impact of piracy on seafarers.
- The relationship between psychological capital, job satisfaction, and safety perceptions in the maritime industry.
- Resilience and well-being requirements for seafarers from psychological management perspective.
- Understanding submarine's crew psychological strength of coping with the extreme environmental conditions.
- Maritime psychological perspective of developing the human competitive edge.
- Psychosocial and organizational aspects of work at sea and their implications for health and performance.
- Psychological, social, and cultural perspectives having effects on economic growth in the coastal regions of Pakistan.
- Improving the interface between human behavior and the maritime environment for a much broader maritime psychology in Pakistan than currently exists.

Publication Venues for Theme 3

- Journal of Pacific Rim Psychology – IF 1.557

A large, ornate metal scale of justice stands on a dark, jagged rock formation. The scale is perfectly balanced, with both pans hanging at the same level. The background shows a calm blue sea meeting a cloudy sky at the horizon. The text "MARITIME LAW" is superimposed over the center of the image, with "MARITIME" on the top line and "LAW" on the bottom line, both in a black, serif, all-caps font.

MARITIME LAW

4. MARITIME LAW

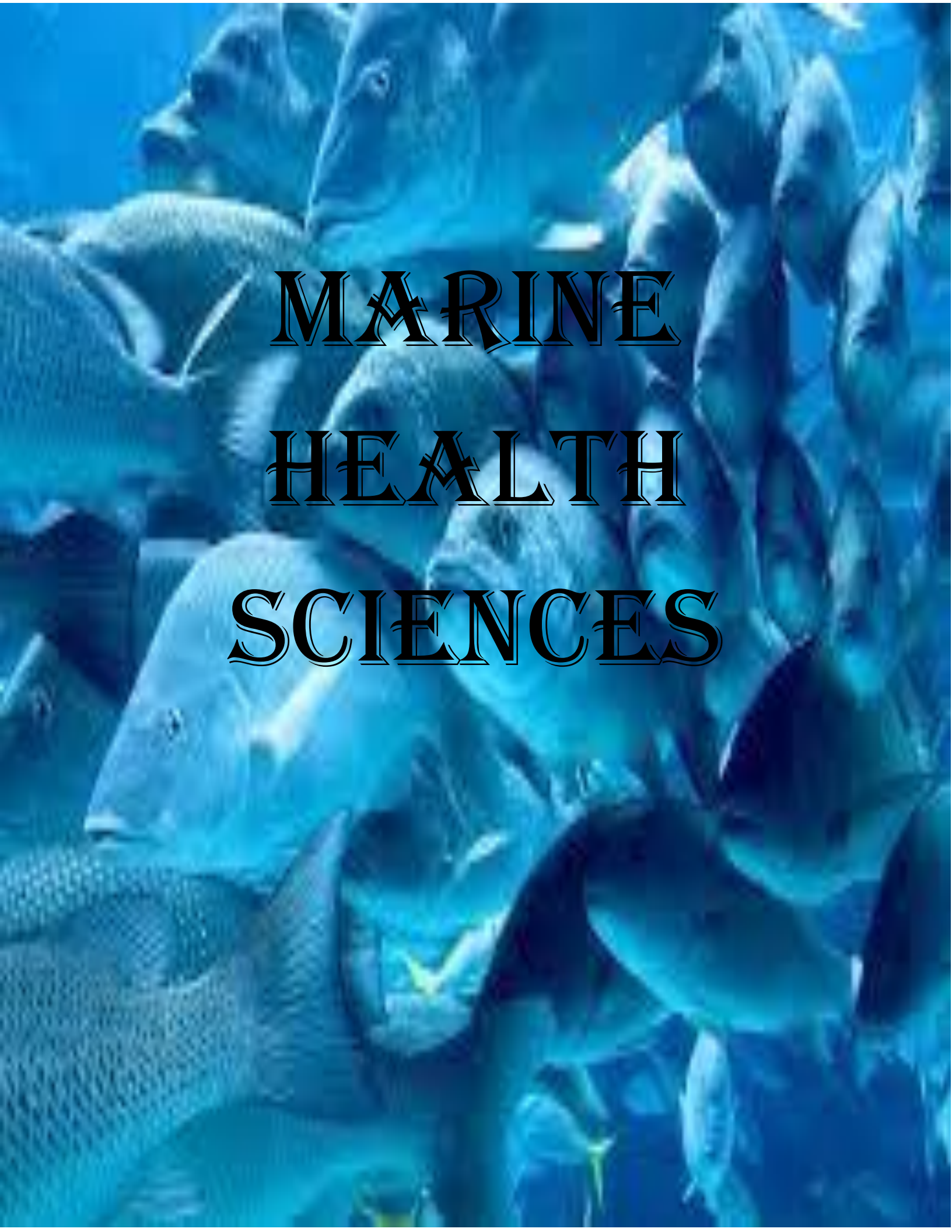
Maritime law - is a complete system of law, both public and private, substantive, and procedural, national, and international, with its own courts and jurisdiction, which goes back to Rhodian law of 800 B.C. and pre-dates both the civil and common laws. Maritime law was subsequently greatly influenced and formed by the English Admiralty Court and then later by the common law itself. That maritime law is a complete legal system can be seen from its component parts. For centuries maritime law has had its own law of contract.

The scope of maritime law includes:

- Historical versus contemporary development of the international maritime law.
- Legal regime governing marine scientific research addressing the rights and obligations of land-locked and geographically disadvantaged states, Arctic, and Antarctic and the settlements of disputes.
- Development of shipping laws including:
 - Registration and ownership of ships.
 - Ship sale and shipping contracts.
 - Ship management and ship finance.
 - Maritime labor laws.
 - Maritime safety, collisions, and salvage related laws formulation/analysis.
 - Harbors and pilotage related existing and to be carved laws.
 - Laws regarding liability for maritime claims and marine insurance.
 - Laws related to marine piracy, stowaways, human/drug trafficking.
 - Legal aspects of terrorism and military uses of the sea.
 - Laws needed for maritime security wrt environmental protection and illegal, unreported, and unregulated fishing.

Publication Venues for Theme 4

- International Journal of Marine and Coastal Law – IF 0.656
- The Journal of Maritime Law and Commerce
- Ocean Development & International Law – IF 1.541
- The Journal of International Maritime Law

A vibrant underwater scene featuring a large school of fish, possibly snappers or groupers, swimming in clear blue water. The fish are densely packed, with some in the foreground showing detailed scales and fins. The overall color palette is dominated by various shades of blue, from deep navy to bright cyan. Overlaid on this background is the text 'MARINE HEALTH SCIENCES' in a bold, black, serif font with a double-line outline, centered vertically and horizontally.

MARINE HEALTH SCIENCES

5. MARINE HEALTH SCIENCES

The world's ocean belongs to everyone, and its health is critical to our future. The world is increasingly looking toward the ocean to provide food, renewable energy, climate impact mitigation, safe shipping, and commerce, as well as for recreation and spiritual renewal. However, marine habitats are facing new and daunting pressures that threaten their sustainability — from climate change to pollution to dwindling fish stocks. The scope of marine health sciences includes:

- Identification of bioactive compounds from marine microorganisms, invertebrates, fishes, and plants (e.g., algae, seagrasses, mangroves)
- Pharmacological characterization of marine compounds or their derivatives
- Marine natural products with activity against human, animal, and plant diseases
- Marine natural products with insecticidal or herbicidal activities
- Synthesis, Mut synthesis and medicinal chemistry of marine natural products
- Marine proteomics, glycomic, and lipidomic related to drug discovery or bioactivity
- Marine drug development, including pharmaceutical formulation and clinical trials
- Marine chemical ecology research inspiring marine drug discovery
- Innovative sampling and isolation techniques targeting bioactive marine natural products
- Marine biotechnology and molecular biology studies related to drug discovery or production
- Structural and biological characterization of marine toxins
- Biomaterials of marine origin
- Marine-derived ingredients for cosmeceuticals, nutraceuticals, marine-derived functional foods, and nutritional supplements
- Effects of harmful substances on molecular, cellular, sub-organismal, organismal, population, community, and ecosystem level
- Toxic Mechanisms
- Genetic disturbances, transgenerational effects, behavioral and adaptive responses
- Impacts of harmful substances on structure, function of and services provided by aquatic ecosystems
- Mixture toxicity assessment

- Statistical approaches to predict exposure to and hazards of contaminants
- Marine Megafauna
- Marine Molecular Biology and Ecology
- Marine Pollution
- Microbial Symbioses
- Ocean Observation
- Ocean Solutions
- Physical Oceanography
- Numerical modelling of estuarine and coastal marine ecosystems
- Species distribution in relation to varying environments
- Effects of waste disposal
- Groundwater runoff and Chemical processes
- Estuarine and fjord circulation patterns
- Meteorological and oceanic forcing of semi-enclosed and continental shelf water masses
- Sea-surface and sea-bed processes
- Estuarine and coastal sedimentary processes and geochemistry
- Brackish water and lagoon phenomena
- Transitional waters

Publication Venues for Theme 5

- International Journal of Estuarine, Coastal and Shelf Science – IF 2.929
- International Journal of Aquatic Toxicology – IF 4.964
- International Journal of Marine Drugs – IF 5.118
- Journal of Marine Medicine

An underwater photograph featuring a diver on the left and a clownfish on the right. The diver is wearing a black wetsuit, a mask, and a scuba tank, and is holding a white clipboard and a pen. The clownfish is yellow with orange and white stripes. The background is a vibrant, colorful coral reef with various types of coral and sea anemones. The text "MARINE SCIENCES" is overlaid in the center in a stylized, orange, serif font.

MARINE SCIENCES

6. MARINE SCIENCES

In the key thematic area of marine sciences, the subthemes with relevant scope and reputed Journals for publication of research by the BU's FMs are given below:

6.1 MARINE BIODIVERSITY, MARINE GENOMICS, MARINE RESOURCES, MARINE CHEMISTRY, MARINE ENVIRONMENT AND OCEANOGRAPHY

The scope of Marine Biodiversity, Marine Genomics, Marine Resources, Marine Chemistry, Marine Environment and Oceanography subtheme includes:

- Identification of bioactive compounds from marine microorganisms, invertebrates, fishes, and plants (e.g., algae, seagrasses, mangroves).
- Pharmacological characterization of marine compounds or their derivatives.
- Marine natural products with activity against human, animal, and plant diseases.
- Incorporating adaptation and resilience into an integrated watershed and coral reef management plan.
- Scaling up the global reef restoration activity.
- Marine natural products with insecticidal or herbicidal activities.
- Synthesis, Mut synthesis and medicinal chemistry of marine natural products.
- Marine proteomics, glycolic, and lipidomic related to drug discovery or bioactivity.
- Marine drug development, including pharmaceutical formulation and clinical trials.
- Marine chemical ecology research inspiring marine drug discovery.
- Innovative sampling and isolation techniques targeting bioactive marine natural products.
- Marine biotechnology and molecular biology studies related to drug discovery or production.
- Structural and biological characterization of marine toxins.
- Biomaterials of marine origin.
- Marine-derived ingredients for cosmeceuticals, nutraceuticals, marine-derived functional foods and nutritional supplements.
- Persistent innovation in vast array of life forms.
- Uncover ocean nutrient cycles that affect marine life.

- Finding known marine species in deeper waters.
- Discovering oceans mineral resources using smart sensors.
- Linking ocean climate with agricultural productivity.
- Marine biological and chemical investigations.
- Coral reefs sustainable ecosystem.
- Marine biodiversity role in marine resources sustainability.
- Interdependencies of marine genomics. marine resources, marine chemistry, marine biotechnology and marine environment.
- Marine geological and oceanographic investigations.
- Biological Oceanography.
- Chemical Oceanography.
- Geological Oceanography.
- Physical Oceanography.

Publication Venues for Sub-Theme 6.1

- Environment and Natural Resources Journal
- Journal of Frontiers in Marine Science – IF 4.912
- ICES Journal of Marine Science – IF 3.593
- ICES Techniques in Marine Environmental Sciences
- International Journal of Water Resources Development
- Journal of Experimental Marine Biology and Ecology
- Journal of Marine Biology
- Journal of Marine Engineering and Technology – IF 3.192
- Journal of Marine Research
- Journal of Marine Science and Technology – IF 1.800

6.2 AQUACULTURE, FISHERIES, FISH PROCESSING, MARINE ECOLOGY, AND MARINE BIOTECHNOLOGY

The scope of aforementioned subtheme includes:

- Advances in fish genetics.

- Aquaculture.
- Aquaculture and ecosystem management.
- Aquaculture in the ecosystem.
- Aquaculture water reuse systems.
- Aquatic animal health.
- Aquatic environment management.
- Biology and culture of aquatic organisms.
- Biology of Fishes including sharks and shellfishes.
- Climate Change impacts on marine ecosystems.
- Coastal aquaculture.
- Conservation and management of aquatic resources.
- Diseases of aquatic animals.
- Ecology and evolution of the microbes.
- Fish and wildlife toxicology.
- Fish biomechanics.
- Fish biotechnology.
- Fish genetics and breeding.
- Fish nutrition and feed technology.
- Fish physiology and biochemistry.
- Fish processing technology.
- Fisheries ecology and oceanography.
- Fisheries resource management.
- Fishing gear technology.
- Freshwater aquaculture.
- Geomorphology.
- Limnology.
- Management and ecology of river fisheries.

- Marine mammalogy.
- Monitoring vertebrate populations.
- Non-Food Aquaculture
- Periphyton: Ecology, Exploitation and Management.
- Salmonid fisheries.
- Scallop farming.
- Seafood technology.
- Tropical estuarine fishes.
- Urban aquaculture.
- Use of Satellite and In-Situ Data in Aquaculture & Fisheries Water and Society.
- • Wild fisheries.

Publication Venues for Sub-Theme 6.2

- Journal of Marine Drugs – IF 5.0118
- PLOS ONE - Article-Level Metrics (ALMs)
- Journal of Marine Science and Engineering – IF 2.033, Scopus Cite Score – 1.8
- Journal of Fisheries International – Indexed in Google Scholar
- Journal of Oceanography and Marine Research

A high-angle, slightly blurred photograph of a maritime control room. The scene is dominated by two large computer monitors. The left monitor displays a blue interface with white text and graphics, possibly a radar or navigation system. The right monitor shows a map or chart with various colored overlays. In front of the monitors is a desk with a keyboard, a mouse, and a specialized control panel with numerous buttons and knobs. To the left of the desk, there are several racks of electronic equipment and more control panels. The overall atmosphere is technical and professional, representing the intersection of maritime operations and modern engineering technologies.

MARITIME ENGINEERING & TECHNOLOGIES

7. MARITIME ENGINEERING & TECHNOLOGIES

7.1 COASTAL INFRASTRUCTURE AND ABOVE/UNDERWATER PLATFORMS' DESIGN, AND CONSTRUCTION TECHNOLOGIES

Without being limited by the traditional categorization, it is encouraged to present advanced technology development and scientific research, as long as they are aimed for more and better human engagement with ocean environment. Topics include: marine hydrodynamics; structural mechanics; marine propulsion system; design methodology & practice; production technology; system dynamics & control; marine equipment technology; materials science; underwater acoustics; ocean remote sensing; and information technology related to ship and marine systems; ocean energy systems; marine environmental engineering; maritime safety engineering; polar & arctic engineering; coastal & port engineering; subsea engineering; and specialized watercraft engineering.

It covers the entire range of issues and technologies related to the following topics:

7.1.1 Marine Hydromechanics:

- Design of marine structures
- Resistance and propulsion
- Seakeeping and maneuvering
- Experimental and computational fluid dynamics
- Ocean wave mechanics
- Thermodynamics and heat transfer
- Hydraulics and pneumatics

7.1.2 Marine structure-mechanics:

- Structural strength
- Fatigue strength
- Optimization and reliability
- Arctic technology and extreme mechanics
- Noise, vibration, and acoustics
- Plasticity engineering
- Concrete engineering

7.1.3 Coastal civil engineering:

- Coastal structure engineering
- Port and harbor structure engineering
- Soil engineering
- Drilling and exploration
- Hydraulics of estuary
- Seismic engineering
- Coastal disaster prevention engineering

7.1.4 Marine material engineering:

- Metallic material engineering
- Organic material engineering
- Ceramics
- Composite material engineering
- Materials evaluation engineering
- Surface engineering
- Tribology

7.1.5 Information technology and convergence:

- Design for safety
- IT-based design
- IT-based production engineering
- Welding mechanics
- Design of underwater vehicle
- Offshore energy system design
- Environment and system evaluation
- Control engineering; GPS and GIS
- Inspection and sensor
- Port and logistics
- Leisure boat and deep-sea water

- Offshore process systems engineering

Publication Venues for Sub-Theme 7.1

- Marine Georesources & Geotechnology – IF 1.716
- Journal of Ocean Engineering and Technology (JOET)
- Journal of Marine Science and Application (JMSA)
- International Journal of Naval Architecture and Ocean Engineering – IF 2.473

7.2 CUTTING EDGE TECHNOLOGIES DEVELOPMENT FOR NAVAL SENSORS, WEAPONS, SYSTEMS AND EQUIPMENT

Control Engineering Practice strives to meet the needs of industrial practitioners and industrially related academics and researchers.

- Adaptive control
- Aircraft and aerospace control
- Biological and medical systems
- Complex systems with uncertainty
- Control of manufacturing systems
- Control in power electronics
- Control of process systems
- Control theory
- Cyber-physical-systems and control
- Data processing
- Delay systems
- Design of control systems
- Discrete event systems
- Distributed parameter systems
- economic and financial Systems
- Estimation and filtering
- Hybrid systems
- Human interaction

- Identification and observation
- Information-based control
- Intelligent systems
- Iterative learning control
- Model-predictive control
- Multi-agent systems
- Networked control
- Optimal control
- Power & water management
- Quantum control
- Repetitive Control
- Robust control
- Robotics & UAV
- Traffic & automobile control
- Social systems
- System-wide coordination control
- Shipping & marine vessels control

Publication Venues for Sub-Theme 7.2

- IEEE Communication Magazine – IF 9.6
- IEEE Consumer Electronics Magazine – IF 3.789
- IEEE Cloud Computing – IF 4.393
- IEEE Wireless Communications – IF 11.99

7.3 SMART PROPULSION, POWER GENERATION AND AUXILIARY EQUIPMENT FOR ABOVE AND UNDERSEA PLATFORMS

The theme includes advances in marine engineering and technology in the fields of:

- Fuels and onboard fuel systems
- Environmental aspects
- Novel Energy systems including advances in propulsion and power generation

- Auxiliary/ancillary systems and their design
- Energy saving technology and techniques
- Systems in support of autonomous shipping
- Advances in maintenance of marine engineering systems
- Artificial intelligence
- Autonomy, robotics, and automation
- Shipboard control systems
- Sensors and actuation
- Data analytics and tools
- Design and manufacturing methods
- Rules and Regulations for machinery
- Hydrodynamic, structural analysis and control applications of fixed and floating marine systems (including ships, advanced marine vehicles, and multibody interaction)
- Underwater technology (including submarines, robotics, design and operation of diving systems, surveys and maintenance systems, umbilical cables, pipelines, and risers)
- Computational methods in naval architecture, offshore/ocean engineering, coastal engineering, and related areas
- Environmental studies associated with oil spills and leakage prevention and control, safety concepts and risk analysis applied to marine systems, wave-energy extracting devices and sea resources in general
- Ocean and river transportation economics, marine engineering and environmental protection, offshore support bases, offshore logistics
- Ship production engineering, including shipyard techniques, materials, and welding.

Publication Venues for Sub-Theme 7.3

- The Journal of Marine Engineering and Technology
- Marine Systems & Ocean Technology
- Journal of Propulsion and Power Research – IF 3.738
- IEEE Robotics & Automation Magazine – IF 5.143

- IEEE Control systems – IF 11.119
- IEEE Circuit and Systems Magazine – IF 3.071
- IEEE, Industrial Application Magazine – IF 6.625
- IEEE, Technology and Society Magazine – IF 1.554
- IEEE Transactions on Automatic Control – IF 5.792
- IEEE Transactions on Industrial Electronics and Control Instrumentation – IF 8.236

7.4 OCEAN RENEWABLE ENERGY TECHNOLOGIES DEVELOPMENT

- Offshore wind energy technology
- Wave and tidal energy
- Ocean thermal energy conversion
- Oceanographical engineering
- Structural mechanics
- Hydrodynamics
- Linear and nonlinear wave mechanics
- Numerical analysis
- Marine mining
- Pipelines and risers
- Computational fluid dynamics
- Vortex-induced vibrations
- Arctic engineering
- Fluid-structure interaction
- Underwater technology
- Foundation engineering
- Aquacultural engineering
- Instrumentation, full-scale measurements, and ocean observational systems
- Model tests
- Hydroelasticity
- Ocean acoustics

- Global warming and sea level rise
- Ocean space utilization
- Water quality
- Coastal engineering
- Physical oceanography

Publication Venues for Sub-Theme 7.4

- The Journal of Ocean Engineering and Marine Energy
- International Journal of Renewable Energy Development-IJRED
- Journal of Sustainable Development of Energy Water and Environment Systems-JSDEWES
- Journal of Renewable and Sustainable Energy – IF 2.219

7.5 MARITIME INTEGRATED LOGISTICS TECHNOLOGIES

The theme includes fields of:

- Agile, lean, and resilient supply chain
- Banking and Financing
- Best practices and benchmarking
- Business integrity and insurance
- Business process automation and re-engineering
- Business process re-engineering and business process management
- Cloud computing and grid computing
- Collaborative development of innovations
- Collaborative planning and forecasting
- Computational Logistics
- Cultural, organizational, and human resources issues
- Data engineering and decision support systems
- Demand management
- E-business, internet-enabled logistics, and supply chain practices
- Enabling technologies

- Enterprise interoperability, integration, and management
- ERP, CRM, SRM, and WFM
- Facility logistics (warehouse, transportation, and distribution)
- Financial issues in logistics and supply chain management
- Globalization and international issues
- Government
- GPS, GIS, and location-based systems
- Green logistics and supply chains
- Healthcare
- Impact and application domains
- Innovation drivers, metrics, and management
- Innovation management and sustainable development
- Innovation process and methodologies in logistics and supply chains
- Integration of financial and physical flows
- Internet and web technologies
- Inventory and materials management
- Knowledge and information management
- Knowledge discovery and data mining
- Logistics and Supply Chain Management
- Manufacturing
- Marketing and advertisement
- Metrics and performance measurements
- Mobile and ubiquitous computing
- Modeling and optimization methodologies
- Organizational and economic issues
- Organizational innovations in logistics and supply chains
- Partnership formation, strategic alliances, and entrepreneurship
- Project Management

- Public and communications
- Retail, distribution, and transportation
- Reverse logistics and returns management
- RFID and automation
- Security, vulnerability, and risk management
- Sensors and wireless sensor networks
- Service-science and service-oriented computing
- Social and environmental responsibility
- Sourcing and procurement management
- Sustainable supply chain networks
- Technology adoption and risk management
- Tourism
- Waste management, avoidance, and reduction
- Inbound and outbound logistics including distribution, transport, warehousing, 3PL and 4PL
- Materials Management MRP, DRP, ERP and Vendor or Co-Managed Inventories (VMI)
- Modelling and simulation of logistics and supply systems and processes
- Decision support tools, methods, and systems such as Value Stream Mapping
- Intra and inter-enterprise communication tools and methods such as EDI, Internet, Extranet, RFID
- Approaches and methods for Collaborative, Planning, Forecasting and Replenishment (CPFR)
- Customer Relationship Management (CRM), Efficient Consumer Response (ECR)
- Procurement, e-Commerce, e-auctions
- Mass Customization, Order Postponement, Responsiveness
- Supplier Development
- Supply chain performance management
- Collaboration and relationship management approaches in supply chains including supplier networks

- Environmental and sustainability issues in logistics and supply chain including Reverse Logistics
- Managing international logistical operations including outsourcing
- Training and Education issues in Logistics and Supply Chain Management
- Research Methodologies
- Case studies

Publication Venues for Sub-Theme 7.5

- The International Journal of Applied Logistics (IJAL)
- International Journal of Logistics: Research & Applications – IF 4.381
- International Journal of Research and Development – IF 3.795
- Journal of Maritime Economics & Logistics – IF 3.119
- Euro Journal on Transportation and Logistics

7.6 EMBEDDED SYSTEMS FOR MARITIME

The theme includes fields of:

- Maritime industrial use-cases and applications of real-time embedded systems: design, implementation and performance evaluation
- Modeling, formal methods, simulation and development tools for real-time and networked embedded systems
- Real-time embedded systems design: energy management, dynamic reconfiguration, QoS, heterogeneity and interoperability
- Hardware/software co-design, synthesis, reconfigurable hardware, real-time network- and system on chip for marine systems
- RFID and time-sensitive components and applications for maritime domain
- Real-time networks, network management and time synchronization in maritime vessels and systems
- Real-time embedded operating systems (RTOS) and middleware, resource management, resource usage optimization
- Real-time virtualization and hypervisors, real-time Java and Linux for embedded systems

- Security, dependability and fault tolerance of real-time and distributed maritime embedded systems

Publication Venues for Sub-Theme 7.6

- Journal of Marine Science and Engineering, MDPI – IF 2.458
- IEEE Journal of Oceanic Engineering – IF 3.554
- IEEE Embedded Systems Letters – IF 2.169
- IEEE Communication Magazine – IF 9.6
- IEEE Consumer Electronics Magazine – IF 3.789
- IEEE, Industrial Application Magazine – IF 6.625
- IEEE, Technology and Society Magazine – IF 1.554

7.7 MARINE ROBOTICS

- Robotic Vessels
- Anti-Piracy Robots
- Robot Ship Inspectors
- Hull Cleaning Robots
- Fire Fighter Robots
- Actuation and Sensing Systems
- Communication
- Manipulation
- Interaction
- Guidance, Navigation and Control
- Mission Control Systems
- Localization
- Multi-Vehicle Coordination
- Networked Vehicles
- Outreach and Engagement
- Grand Challenges
- Planning

- Persistent Monitoring

Publication Venues for Sub-Theme 7.7

- Journal of Marine Science and Engineering, MDPI – IF 2.458
- Journal of Propulsion and Power Research – IF 3.738
- IEEE Robotics & Automation Magazine – IF 5.143
- IEEE Control systems – IF 11.119
- IEEE Circuit and Systems Magazine – IF 3.071
- IEEE, Industrial Application Magazine – IF 6.625
- IEEE, Technology and Society Magazine – IF 1.554
- IEEE Transactions on Automatic Control – IF 5.792
- IEEE Transactions on Industrial Electronics and Control Instrumentation – IF 8.236

7.8 MARITIME SATELLITE COMMUNICATION

The theme includes fields of:

- Satellite services for future e-Navigation
- Arctic communications
- Autonomous Ships
- Evolution of GMDSS: The Global Maritime Distress and Safety System (GMDSS)
- Tracking/Monitoring of vessels but also goods/oil/persons on-board the vessel.
- On Route information update including destination updates, waypoint and route optimization, maps update, weather information, ice information, or currents information.
- Remote Control of vessels includes scenario of unmanned vessels, but also as a help to the crew for monitoring and decision making.
- Safety and Security system/alerts include voice and data communication, alerting, positioning information.
- Worldwide available communication for vessels
- Crew/Entertainment communication
- Communication for under building sea platforms/ sea power plants include applications relevant to wind, underwater turbines, others.)

Publication Venues for Sub-Theme 7.8

- Journal of Marine Science and Engineering, MDPI – IF 2.458
- IEEE Aerospace and Electronic Systems Magazine – IF 1.594
- International Journal of satellite communications and Networking – IF 1.617
- Space Research, Today, Elsevier
- Remote Sensing, MDPI – IF 4.48
- IEEE Communication Magazine – IF 9.6
- IEEE, Industrial Application Magazine – IF 6.62

7.9 ARTIFICIAL INTELLIGENCE FOR MARITIME

The theme includes fields of:

- Using AI to improve shipping network operations
- Cut fuel consumption
- Advanced analytics
- Automated equipment
- Safety and improved security
- Route optimization
- Performance forecasting
- Optimize Maintenance

Publication Venues Sub-Theme 7.8

- Journal of Marine Science and Engineering, MDPI – IF 2.458
- IEEE Computational Intelligence Magazine – IF 11.356
- IEEE Intelligent Systems – IF 3.405
- IEEE Transactions on Neural Networks – IF 8.79
- IEEE Transactions on Fuzzy Systems – IF 12.03

7.10 MARITIME SECURITY

The theme includes fields of:

- Port and Maritime Security

- Supply Chain Security
- Threats and vulnerabilities in global supply chains
- Costs and benefits of supply chain security
- Systems for improving supply chain security
- Modelling supply chain security and risk
- Risk and reliability in transport systems
- Piracy and security in marine transport systems
- Resilience and security in port systems

Publication Venues for Sub-Theme 7.8

- Journal of Marine Science and Engineering, MDPI – IF 2.458
- IEEE Security and Privacy – IF 3.573
- IEEE Systems, Man, and Cybernetics Magazine – IF 8.82
- IEEE Intelligent Systems – IF 3.405
- IEEE Transactions on Neural Networks – IF 8.79
- IEEE Transactions on Fuzzy Systems – IF 12.03

7.11 MARITIME INFORMATICS

The theme includes fields of:

- Design of an information sharing system for the shipping industry that enhances coordination and planning
- Design of an information sharing system for an ecosystem constrained by a culture of limited cooperation
- Design of an information sharing system for the shipping industry that enhances efficiency, safety, and ecological sustainability
- Appropriate standards for data sharing within the shipping ecosystems
- The role of real-time digital data streams in enhancing shipping efficiency
- The role of information systems in increasing the efficiency of episodic tight coupling
- The digitization by the shipping industry of its natural, human, and economic capital to improve efficiency, safety, and ecological sustainability
- The contribution of information systems to effective sea traffic management

- Theoretical basis for informing Maritime Informatics
- Prior research for accelerating the development of Maritime Informatics
- Application of information systems in other domains for inspiring the adoption of digitization in the maritime sector
- Intelligent processing of marine Automatic Identification System (AIS) data
- Intelligent processing of environmental monitoring data from sensors (on buoys or UAVs)
- Intelligent processing of data related to the automatic tracking of cargo, machinery, and people in a smart port environment
- Extracting value and combining marine related data streams to create additional value
- Ensuring the integrity of the marine related data
- Data cleaning, validation, and reconstruction of faulty/missing marine related data
- Fusion of all the information coming from the various marine related sources
- Dealing with uncertainty and conflicting information from marine related sources
- Extracting useful information out of the marine related data based on user requirements
- Services that support organizational decision-making marine related activities (e.g., scheduling allocation of ships to port services, stowage planning)

Publication Venues for Sub-Theme 7.11

- Journal of Marine Science and Engineering, MDPI – IF 2.458
- IEEE Cloud Computing – IF 4.393
- IEEE Internet of Things – IF 9.9
- IEEE Communication Magazine – IF 9.6
- IEEE Consumer Electronics Magazine – IF 3.789

7.12 INTERNET OF UNDERWATER THINGS (IOUT) AND BIG MARINE DATA

The theme includes fields of:

- Underwater Sensors and Devices for Data Collection
- IoUT Communications Improving IoUT Link Reliability
- Underwater Channel Modeling

- IoUT Network Architecture
- IoUT Network Topologies Underwater Network Simulation Tools
- IoUT Network Security
- Software-Defined Networks in IoUT
- Edge computing in IoUT
- Machine Learning Techniques
- Deep Learning Frameworks and Libraries Marine Data Cleaning for Machine Learning
- Feature Extraction for Marine Data Analytics
- Hardware Platforms for ML in IoUT
- ML Techniques in BMD Applications

Publication Venues for Sub-Theme 7.12

- Journal of Marine Science and Engineering, MDPI – IF 2.458

7.13 MARITIME SIGNAL PROCESSING

The theme includes fields of:

- Underwater channel modeling and data processing
- Underwater communication/localization via SONAR/AUV
- Ocean remote sensing techniques
- Specific signal processing algorithms dedicated to marine systems
- Novel model-based signal processing algorithms for implementations in the area of marine engineering
- Unconventional hardware, software, and mixed realizations
- New architectures for known algorithms that take into account the specificity of marine systems
- Signal processing for mobile applications for on-shore and off-shore usage
- Signal processing for marine science and its development as well as implementations
- Signal processing applications in marine communication systems

Publication Venues for Sub-Theme 7.13

- IEEE Internet of Things Journal – IF 9.9

- IEEE Journal of Oceanic Engineering
- The Computer Journal
- IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
- Journal of Lightwave Technology

7.14 MARITIME NANOTECHNOLOGIES

The scope of maritime nanotechnologies includes:

- Maritime Nanotechnologies research is to include the ability to individually address, control, and modify structures, materials and devices with nanometer precision, and the synthesis of such structures into systems of micro- and macroscopic dimensions for diverse such as MEMS based devices for maritime applications.
- Quantum phenomena and technology including experimental and theoretical aspects of maritime related materials, devices and systems where quantum physics plays an essential role. Examples include quantum materials, characterization and synthesis (quantum wells, wires, dots, and 2D materials demonstrating quantum phenomena); optoelectronics, photonics and electromechanical devices at the nanoscale where quantum physics is clearly demonstrated (spin, quantum confinement, entanglement, quantum statistics, quantum coherence); and quantum systems (qubits, quantum communication, teleportation, quantum computing, quantum information processing, quantum metrology) for maritime sensors and systems applications.
- Developments in nanotechnologies based marine natural products for tissue engineering, nanodevices for sensing and triggering tissue function, and drugs.
- Maritime nanoscale materials and fabrication technologies for nanodevices, novel electronic and photonic phenomena and systems in the mesoscopic and nanoscale regimes, as well as applications of these devices and structures.
- Quantum science and technology, such as semiconducting and magnetic nanostructures, quantum optics and computing, spintronics and information processing in solid state maritime systems.
- All aspects of nanoscale science and technology that are applied in developing maritime energy resources, including photovoltaics, batteries, fuel cells, hydrogen generation and storage, super- capacitors, photo-electrochemical cells and thermoelectric.
- Patterning and nanolithography techniques including the assembly of inorganic and organic nanomaterials, electron and ion beam induced nano-patterning,

modifications of nanomaterial properties and new maritime applications based on these materials.

- Diverse range of detection methods sensitive to the nanoscale and able to enhance and convey information to the macroscopic level for maritime sensors and systems applications.
- Fabrication and growth of maritime related materials with nanoscale precision and control.
- Computer based prediction and experimental measurement of properties intrinsic to the nanoscale, and those techniques devised to characterize maritime materials at this scale for diverse applications.

Publication Venues for Sub-Theme 7.14

- Journal of Nanotechnology – IF 3.874
- Journal of International Maritime Health
- Journal of Transactions on Maritime Science-TOMS
- Scientific Journal of Maritime Research
- Journal of ETA Maritime Science

7.15 MARITIME ABOVE AND UNDERWATER PLATFORMS, SYSTEMS & SENSOR TECHNOLOGIES

The theme includes following sub themes:

7.15.1 Naval Architecture

- Marine hydrodynamics
- Structural mechanics
- Design methodology & practice
- Ship resistance and propulsion
- Safety and reliability
- Marine equipment technology

7.15.2 Ocean Engineering

- Coastal engineering
- Offshore engineering

- Marine drilling
- Pipelines and risers
- Cable, mooring, buoy technology

7.15.3 Marine Renewable Energy

- Offshore wind energy utilization
- Ocean wave energy utilization
- Ocean current energy utilization

7.15.4 Underwater Technology

- Underwater vehicles
- Underwater explosion
- Ocean resources & mining
- Marine sensors

7.15.5 Marine Engineering

- Marine engines and fuels
- Marine power engineering
- Vibration and noise control
- Heat transfer and fluid flow

7.15.6 Ocean Acoustics

- Sonar and transducers
- Sound propagation and scattering
- Acoustical oceanography
- Signal coherence and fluctuation

7.15.7 Polar and Arctic Engineering

- Design of ice-going ships
- Arctic structures
- Ice loads and simulation of ice

7.15.8 Marine Environmental Engineering

- Oil spill prevention

- Marine pollution modeling

7.15.9 Marine Corrosion and Protection

- Corrosion and deterioration modeling
- Ship corrosion protection
- Pipeline corrosion protection

7.15.10 Automatic Navigation

- Ship navigation system
- Marine navigation equipment
- System dynamics & control

7.15.11 Marine Science

- Marine meteorology
- Ocean internal waves
- Extreme offshore environments

Publication Venues for Sub-Theme 7.15

- Journal of Nanotechnology - IF 3.874
- International Journal of Naval Architecture and Ocean Engineering – IF 2.473
- Journal of Naval Architecture and Marine Engineering
- Journal of Ocean Engineering and Marine Energy
- Journal of Ocean Engineering and Science – IF 3.408
- Journal of Waterway Port Coastal and Ocean Engineering – IF 2.208
- Ocean Systems Engineering-An International Journal
- Coastal Engineering Journal – IF 3.216
- International Journal of Offshore and Polar Engineering – IF 0.670
- Journal of Marine Science and Engineering – IF 2.458
- Journal of Offshore Mechanics and Arctic Engineering-Transactions of the ASME – IF 1.355
- Journal of Applied Ocean Research – IF 2.979
- Journal of Atmospheric and Oceanic Technology

- Journal of Arctic Science – IF 1.638
- International Journal of Corrosion and Scale Inhibition
- African Journal of Marine Science – IF 1.183
- Journal of Aquatic Conservation-Marine and Freshwater Ecosystems – IF 2.771

7.16 ADVANCED MATERIALS FOR MARITIME APPLICATIONS

It includes Research results on, or techniques for, studying the relationship between structure, properties, and uses of materials. Materials include metals, ceramics, glasses, polymers, energy materials, electrical materials, composite materials, fibers, nanostructured materials, nanocomposites, and biological and biomedical materials.

7.16.1 Materials Informatics and Materials Genomics

- Materials for 3D printing and additive manufacturing
- Nanostructured/nanoscale materials and nanodevices
- Bio-inspired, biomedical, and biological materials; nanomedicine, and novel technologies for clinical and medical applications
- Materials for energy and environment, next-generation photovoltaics, and green technologies
- Advanced structural materials, materials for extreme conditions

7.16.2 Materials Science and Engineering:

The theme includes fields of:

- Bioinspired and biomimetic materials for medical applications
- Materials of biological origin for medical applications
- Materials for "active" medical applications
- Self-assembling and self-healing materials for medical applications
- "Smart" (i.e., stimulus-response) materials for medical applications
- Ceramic, metallic, polymeric, and composite materials for medical applications
- Materials for in vivo sensing
- Materials for in vivo imaging
- Materials for delivery of pharmacologic agents and vaccines

- Novel approaches for characterizing and modeling materials for medical applications
- Novel processing methods such as additive manufacturing, friction welding, severe plastic deformation, phase transformations.
- Advanced materials including metals, alloys, intermetallic, composites, ceramics, polymers, biomaterials, and bioinspired materials
- Advanced characterization, analysis, and modelling of material behavior
- Materials for energy

Publication Venues for Sub-Theme 7.16

- Science and Technology of Advanced Materials (STAM) – IF 6.963
- Journal of Materials – IF 3.636
- Advanced Materials Technologies has a 2020 Journal – IF 7.848
- The Journal of Materials Research and Technology – IF 7.991
- Journal of Science: Advanced Materials and Devices – IF 5.469
- Superconductor Science and Technology – IF 3.16
- Mechanics of Advanced Materials and Structures (MAMS) – IF 4.030

7.17 OCEANIC ENGINEERING

The sub theme includes fields of:

7.17.1 Ocean Engineering

- Fixed and floating offshore platforms
- Pipelines and risers
- Cables and mooring
- Buoy technology
- Foundation engineering
- Ocean mining
- Marine and offshore renewable energy
- Aquaculture engineering; and subsea engineering

7.17.2 Naval Architecture

- Ship and special marine vehicle design
- Intact and damaged stability
- Technology for energy efficiency and green shipping
- ship production technology
- Decommissioning and recycling.

7.17.3 Polar and Arctic Engineering

- Ice mechanics
- Ice-structure interaction
- Polar operations
- Polar design
- Environmental protection

7.17.4 Automatic Control of Marine Systems

- Automatic control
- Automation and autonomy for marine vehicles and systems

7.17.5 Underwater Technology

- AUV/ROV design
- AUV/ROV hydrodynamics
- Maneuvering and control; and underwater-specific communicating and sensing systems for AUV/ROVs

7.17.6 Technical Specialized Areas

- Hydrodynamics: CFD; vortex induced vibrations; fluid-structure interaction; hydroelasticity; linear and non-linear wave mechanics; buoyancy and stability; ship resistance and propulsion; seakeeping and controls; ship maneuvering, radiated noise.
- Structural mechanics: materials; limit state prediction; fatigue; fracture; structural health monitoring; collision and crash worthiness, degradation.
- Stochastic calculations: stochastic processes; safety and reliability; risk and limit state design.
- Experimental approaches: instrumentation; full-scale measurements; model tests.

- Marine equipment: risers; pipelines; ballast water treatment; air emissions treatment; underwater noise mitigation; and associated components or equipment.
- Ocean environmental predictions- only for ocean structures and vessel operation and design: extreme event predictions; extreme statistics; wave groups; short-term environment predictions; impact of climate change.
- Automatic Control of Marine Systems
- Aquacultural Engineering
- Linear and Nonlinear Water Wave
- Ocean Acoustics
- Polar and Arctic Engineering
- Buoyancy and Stability (Static and Dynamic)
- Marine Environmental Engineering
- Ocean Engineering
- Polar and Arctic Sciences and Technology
- Cable, Mooring, Buoy Technology
- Marine Structural Mechanics
- Ocean Mining
- Safety and Reliability
- CFD and VIV
- Ocean Renewable Energy
- instrumentation and Full-Scale
- Coastal Engineering
- Seakeeping and Control Systems Measurements
- Ocean Space Utilization
- Ship Resistance and Propulsion
- Dynamic Positioning
- Naval Architecture
- Oceanographical Engineering

- Underwater Technology
- Fluid-Structure Interaction
- Physical oceanography
- Hydroelasticity
- Biological oceanography
- Offshore Technology
- Marine Chemistry
- Hydrodynamics
- Oceano physics
- Pipeline and Riser Technology
- Stochastic Processes

Publication Venues for Sub-Theme 7.16

- Mechanics of Advanced Materials and Structures (MAMS) – IF 4.030
- An International Journal of Research and Development – IF 3.795
- Journal of Ocean Engineering and Science (JOES) – IF 2.73

7.18 MARITIME ELECTRONICS AND SYSTEM OF SYSTEMS ENGINEERING (SOSE)

The scope includes systems engineering, military systems, electronic technology, defense, electronic technology, control theory and practice, software algorithm and simulation, reliability, computer development and application and other topics in all related fields.

- Two-Stage Offloading Optimization for Energy–Latency Tradeoff With Mobile Edge Computing in Maritime Internet of Things
- An Airborne Radar Sensor for Maritime and Ground Surveillance and Reconnaissance—Algorithmic Issues and Exemplary Results
- Integrated Flexible Maritime Crane Architecture for the Offshore Simulation Centre AS (OSC): A Flexible Framework for Alternative Maritime Crane Control Algorithms
- Multivessel Computation Offloading in Maritime Mobile Edge Computing Network
- Infrared Small Maritime Target Detection Based on Integrated Target Saliency Measure

- A Comparative Study of Operational Vessel Detectors for Maritime Surveillance Using Satellite-Borne Synthetic Aperture Radar
- First Comparison of Sentinel-1 and TerraSAR-X Data in the Framework of Maritime Targets Detection: South Italy Case
- Maritime Object Segmentation Using Dynamic Background Modeling and Shadow Suppression
- EEG-Based Maritime Object Detection for IoT-Driven Surveillance Systems in Smart Ocean
- Hybrid Satellite-Terrestrial Communication Networks for the Maritime Internet of Things: Key Technologies, Opportunities, and Challenges
- Maritime Search and Rescue Networking Based on Multi-Agent Cooperative Communication
- Application of RADAR Corner Reflectors for the Detection of Small Vessels in Synthetic Aperture Radar
- Cellular Communications in Ocean Waves for Maritime Internet of Things
- A General Orthogonal Transform Aided MIMO Design for Reliable Maritime Visible Light Communications
- A Service-Oriented Approach for Network-Centric Data Integration and Its Application to Maritime Surveillance
- Toward the Generation of Mission Plans for Operation of Autonomous Marine Vehicles in Confined Areas
- Multichannel SAR-GMTI in Maritime Scenarios With F-SAR and TerraSAR-X Sensors
- GPU-Accelerated Compression and Visualization of Large-Scale Vessel Trajectories in Maritime IoT Industries
- Internet of Ships: A Survey on Architectures, Emerging Applications, and Challenges
- Impact of Measurement Model Mismatch on Nonlinear Track-Before-Detect Performance for Maritime RADAR Surveillance

Publication Venues for Sub-Theme 7.18

- IEEE Internet of Things Journal
- IEEE Journal of Oceanic Engineering
- The Computer Journal

- IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
- Journal of Lightwave Technology

7.19 GEOTECH, SEAFLOOR MAPPING AND DRILLING

The research applied to the scientific and engineering aspects, and the management and utilization, of seafloor sediments and rocks. It seeks solutions to problems in marine mineral resources and civil engineering. Areas covered range from marine minerals exploration and recovery to anchoring and mooring systems, bottom installations, and coastal engineering structures. The theme includes the study of acoustical, biological, chemical, mechanical, and physical properties affecting the geological system of the seafloor and response of this system to applied static and dynamic loads. Special emphasis is placed on the environmental aspects of seafloor exploration and development.

The broad topics are:

- Shipboard mining systems
- Seafloor lodes
- Nodules
- Phosphates
- Crusts and placers
- Pipelines
- Platforms
- Processing and transportation
- Analytic techniques related to marine mining

Publication Venues for Sub-Theme 7.19

- Marine Georesources & Geotechnology – IF 1.716
- Journal of Marine Science and Engineering – IF 2.458
- Journal of Aquatic Conservation-Marine and Freshwater Ecosystems – IF 2.771
- Journal of Advances in Water Resources – IF 4.510
- Journal of Aquatic Living Resources – IF 1.885
- Australasian Journal of Water Resources
- Canadian Water Resources Journal – IF 1.851

- COMU Journal of Marine Sciences and Fisheries
- Environment and Natural Resources Journal
- Journal of Frontiers in Marine Science – IF 4.912
- ICES Journal of Marine Science – IF 3.593
- ICES Techniques in Marine Environmental Sciences
- International Journal of Water Resources Development
- Journal of Marine Biology
- Journal of Marine Engineering and Technology – IF 3.192
- Journal of Marine Research
- Journal of Marine Science and Technology – IF 1.800
- Journal of The American Water Resources Association – IF 0.805
- Journal of The Marine Biological Association of the United Kingdom – IF 1.394
- Journal of Water Resources Planning and Management – IF 3.054
- Journal of Marine and Freshwater Behavior and Physiology – IF 0.891
- Journal of Marine and Freshwater Research – IF 2.070
- Journal of Marine Biodiversity – IF 1.533
- Marine Biological Journal
- Journal of Marine Biotechnology – IF 3.619
- Journal of Marine Ecology-An Evolutionary Perspective – IF 1.639
- Marine Fisheries-Journal of Marine Fisheries Technology and Management
- Journal of Marine Genomics – IF 1.710
- Journal of Marine Georesources & Geotechnology – IF 2.673
- Journal of Marine Intellectual Technologies
- Journal of Marine Life Science & Technology
- Marine Technology Society Journal – IF 0.708
- Journal of Mediterranean Marine Science – IF 2.319
- New Zealand Journal of Marine and Freshwater Research – IF 1.842

FACULTY OF PROFESSIONAL PSYCHOLOGY				
POOL OF FOREIGN EXTERNAL EXAMINERS				
S.No.	Name	Affiliation	Area of Specialization	QS/THE Ranking
1.	Dr. Micheal E. Hyland	Plymouth Marjon University, UK	Clinical Psychology	101-150
2.	Dr. Sylvia Terbeck	John Moore University, Liverpool, UK	Psychology	401–500
3.	Dr. Panos Vostanis	University of Leicester, UK	Clinical Psychology	236
4.	Dr. Lydia Stone	Newcastle University, UK	Psychology	134
5.	Dr. Steven shimozaki	University of Leicester, UK	Psychology	236
6.	Dr. David Rowland	University of Valparaiso, Indiana	Psychology	751-800
7.	Dr. Lorraine Swords	Child and Adolescent Psychology, Trinity College, Dublin, Ireland	Psychology	101
8.	Dr. Claire V. Hutchinson	University of Leicester, UK	Psychology	236
9.	Dr. John Maltby	University of Leicester, UK	Differential Psychology	236
10.	Dr. Stephen Nowicki	Emory University, Atlanta, USA	Clinical Psychology	160
11.	Dr. Rachel Roberts	University of Adelaide, Australia	Clinical Psychology	108
12.	Dr. Brian Bailey	Adolescent Childhood Education, Nazareth College, Rochester, USA	Clinical Psychology	150
13.	Dr. Irene Hanson Frieze	University of Pittsburgh, USA	Clinical Psychology	163
14.	Dr. Liliana Lengua	University of Washington, USA	Psychology	72
15.	Dr. Rich Carlson	Pennsylvania State University, USA	Psychology	96
16.	Dr. Ritsuko Kakuma	Global Mental Health, University of London, UK	Psychology	330

17.	Dr. Anastasia Efklides	Aristotle University of Thessaloniki, Greece	Clinical Psychology	336
18.	Dr. Silivia Sara Canetto	Applied Social and Health Psychology, Colorado State University, USA	Clinical Psychology	443
19.	Dr. Cheryl A. King	University of Michigan, USA	Psychology	23
20.	Dr. Jane M. Simoni	University of Washington, USA	Psychology	85
21.	Dr. David A. Moscovitch	University of Waterloo, Canada	Psychology	149
22.	Dr. Vicki J. Magley	University of Connecticut, USA	Psychology	401–500t
23.	Dr. Judith Sixsmith	School of Health Sciences, University of Dundee, Scotland	Psychology	322
24.	Dr. Josefina Alvarez	Adler University, USA	Clinical Psychology	QS Ranking unavailable Country Rank by PsyColleges Top 15%

FACULTY OF HUMANITIES & SOCIAL SCIENCES				
POOL OF FOREIGN EXTERNAL EXAMINERS				
S.No.	Name	Affiliation	Area of Specialization	QS/THE Ranking
1.	Dr. Shahira Fahmey	Arizona State University USA	Media effects, Conflict & visual communication	216
2.	Dr. Yahya R. Kamalipour	North Carolina A&T State University USA	Media effects, International Communication	16
3.	Dr. James Kelly	Indiana university USA	Journalism Studies, media effects	311
4.	Dr. Itir Erhart	Istanbul Bilge University Turkey	Social Media research, media	401–600
5.	Dr. Deb Aikat	University of North Carolina at Chapel Hill USA	Media Culture and Communication, New Media	100

FACULTY OF ENGINEERING SCIENCES				
POOL OF FOREIGN EXTERNAL EXAMINERS				
S.No.	Name	Affiliation	Area of Specialization	QS/THE Ranking
1.	Prof. Dr. Wang Zhigong	Southeast University, P. R. China	Circuits & Systems, Biomedical Devices and Systems	101-125
2.	Dr. Fabrizio Granelli	Associate Professor/ DISI, Trento, Italy	Telecommunication	301-350
3.	Dr. Raj Kumar Buyya	The University of Melbourne, Australia	Cloud Computing and Distributed Systems	43
4.	Prof. Dr. Feipeng Wang	Chongqing University, China	Electrical Engineering, Power Systems	251-300
5.	Prof. Dr. Yin Zhang	Sichuan University, Chengdu, China	Energy Systems	401-500
6.	Prof. Dr. Kyung Sup Kwak	Inha University, South Korea	Communication Systems	401-500
7.	Prof. Dr. Shaorong Wang	Huazhong University of Science and Technology, China	Power Systems	81
8.	Dr. Jaime Lloret	Polytechnic University of Valencia, Spain	Communication & Networks	401-450
9.	Prof. Angelo Marcelli	University of Salerno, Italy	Electronic and Computer Engineering	301-400
10.	Prof. Hossam Gaber	University of Oshawa Ontario, Canada	Smart Grid, Renewable Energy, Micro Energy Grids Planning	301-400
11.	Dr. Shuzheng XU	Tsinghua University, China	Digital Radio of AM/FM, Electronics Circuits	13
12.	Nicole Vincent	Paris Descartes University, France	Computer Vision & Image Analysis with special focus on Document Images, Video Analysis, Medical Image Analysis	250-300
13.	Guray Erus	University of Pennsylvania, USA	Medical Image Processing, Machine Learning, Clinical Applications	31
14.	Dr. Gregory G. Slabaugh	University of London, London	Image Processing	99
15.	Dr. Constantino Carlos Reyes Aldasoro	University of London, London	Image Processing, Texture Segmentation Techniques	301-400

16	Dr.Yasushi Watanabe	Hokkaido University, Japan	Mineral Resources, Georesources and environment	101-150
17	Dr.Naveen Chilamkurti Smiee	La Trobe University, Melbourne, Australia	Computer Networks; Wireless Sensor Networks; Network applications	301-400
18	Dr.Malek Mouhoub	Univ. of Regina, Canada	Constraint Solving and Optimization, Spatio-Temporal Reasoning, Metaheuristics, Reasoning under Preferences and Uncertainty, Artificial Intelligence	251-300
19	Dr.Ju Wook Jang	Sogang University, South Korea	Traffic Engineering, Wireless Communication Protocols, Mobile Networks, Sensor Networks	401-450
20	Dr.Kyung-Geun Lee	Sejong University, South Korea	Network Design, Cognitive Radio, Next Generation Networks, Traffic Engineering, Smart(Ubiquitous) Network Management System, Smart Devices and Applications, Communication Protocols, Mobile Networks, Energy Harvesting	126-150
21	Dr.Sarah Emma Younie	De Montfort University, Leicester, UK	E-Learning, Education and ICT Technologies	301-400
22	Dr.Richard Procter	Education Division, De Montfort University, UK	E-Learning, Education and Technology	301-400
23	Dr.Kim Stansfield	Warwick Manufacturing Group, Warwick University, UK	Systems Engineering, QFDs and Agile Development, IoTs	126-150
24	Dr. Marilyn Leask	Institute for Education Futures, De Monfort University, UK	E-Learning	301-400

25	Dr. Saad Mikhalef	University of Malaya, Malaysia	Power Systems	45
26	Dr. Cem Evrendilek	Izmir University of Economics, Turkey	Computer Engineering	251-300
27	Prof. Fumiyuki Adachi	Tohoku University, Sendaj Japan	Communications	81
28	Prof. Nandana Rajatheva	CWC Oulu University, Oulu Finland	Mobile Communications	251-300
29	Prof. Nordin B. Zakaria	University Technology Petronas, Malaysia	Computer Systems	401-500
30	Prof. Abbas Jamalipour	University of Sydney, Sydney Australia	Telecommunications	45
31	Dr. Poompat Saengudomlart	Bangkok University, Thailand	Optical Networks	451-500
32	Prof. Manukid	Asian Institute of Technology, Thailand	Digital Control Systems	101-200
33	Dr. Amer Bhagdadi	Professor, Department of Electronique, Telecom Bretagne, France	Electrical Engineering, Embedded Systems	151-175
34	Dr. Ludovic Apvrille	Associate Professor, Telecom ParisTech, France	Electrical Engineering, Computer Science, Embedded Systems, Information Security	201-250
35	Dr. Naima Kaabouch	Associate Professor/ University of North Dakota, USA	Embedded Systems, Bioinformatics	301-350
36	Dr. Gennaro Vessio	University of Bari, Italy	Machine Learning, Computer Vision, E-health, Biometrics	301-400
37	Dr. Neil Walkinshaw	Sheffield University, UK	Software Testing, Search based software testing	91
38	Dr. Erich Schikuta	University of Vienna, Austria	Utility Computing, Parallel and Distributed Computing, Cloud Computing, Computational Intelligence, IOT Systems, Workflow management, SLA based systems	151-200

39	Dr. Reiko Heckel	Leicester University, UK	Model based testing Modeling and Simulations Software Engineering	176-200
40	Dr. Oriol Gomis-Bellmunt	Technical University of Catalonia, Spain	Renewable power and power systems, power electronics (HVDC, FACTS, renewables), smart grid, grid integration of renewables	60
41	Dr. Ana Karina Cabrera-Tobar	University of Trieste, Italy	Power systems and Electronic Engineer, Transmission and Distribution, Power Electronics, Smart grids	401-500
42	Dr. Mònica Aragüés- Peñalba	Technical University of Catalonia, Spain	Energy Management System for hybrid PV plants, power systems, renewable energy, smart grid,	60
43	Dr. Nicolaos Cutululis	DTU Wind Energy Department of Wind Energy Technical University of Denmark, Roskilde, Denmark	Wind power technology, Offshore wind, Integration and Grid Connection, Control and Operation low inertia power systems, Offshore grids	126-150
44	Dr. Edwin Gnos	Mineralogisch- Petrographisches Institut, Baltzerstrasse, Bern, Switzerland	Geo-Physics	101
45	Dr. Rodolfo Console	National Institute of Geophysics and Volcanology Italy	Geo-Physics	From Research Institute
46	Dr. Junji Ren	National Institute of Natural Hazards, China	Geo-Physics	From Research Institute
47	Dr. Min Xu	South China Sea Institute of Oceanology, China	Geo-Physics	From Research Institute
48	Dr. Elefthria Papdimitriou	University of Thessaloniki, Greece	Geo-Physics	222
49	Dr. Kyung Jin CHA	Hanyang University (South Korea)	Information System, digital transformation, Machine learning and AI.	106

50	Dr. Harith Al Sahaf	Victoria University of Wellington (New Zealand)	Evolutionary computation, genetic programming, computer vision, pattern recognition, evolutionary cybersecurity, machine learning	201-250
51	Prof. J. M. Floryan	University of Western Ontario London, Canada	Computational Fluid Dynamics	201-250
52	Prof. Ran Zhang	Jilin University, Changchun China	Computational Mathematics	377
53	Dr. M. Reza Safaei	Florida International University (FIU), USA	Computational Mathematics	351-400
54	Prof. Dr. Ishak Hashim	Universiti Kebangsaan Malaysia	Applied Mathematics	301-350
55	Dr. Noor Fadiya Mohd Noor	Universiti Malaya, Malaysia	Computational Fluid Dynamics	76
56	Prof. Grecov Dana	University of British Columbia, Canada	Computational Fluid Dynamics	36
57	Prof. O. D. Makinde	Stellenbosch University, South Africa	Computational Fluid Dynamics	401-500
58	Prof. Hakan F. ÖZTOP	Firat University, Dept. Mech.Eng., Elazığ, Turkey	Computational Fluid Dynamics	221-230
59	Prof. Sharidan Bin Shafie	UTM JB, Malaysia	Computational Fluid Dynamics	74
60	Dr. Mohammad Rahimi-Gorji	Ghent University, Ghent, Belgium	Computational Fluid Dynamics	151-175
61	Prof. Jae Dong Chung	Sejong University, South Korea	Computational Fluid Dynamics	126-150
62	Dr. Chengxi Liu	Wuhan University, China	Power system stability and control, Power system simulation and optimization	101-125
63	Dr. Kimmo Tapio Kauhaniemi	University of Vaasa, School of Technology and Innovations, Finland	Power systems, Relay protection, Distributed generation, Microgrids	301-400
64	Dr. Adwoa Donyina	University of New Haven, West Haven	Socio-technical Systems, Stochastic simulation, Graph Transformation	251-300

		Connecticut, United States	Systems, Rule- based approaches, Role-based access control	
65	Dr. Lei Zhang	School of Engineering, University of Glasgow, UK	Distributed Consensus, Distributed Ledger, Technology (DLT) and Blockchain	140
66	Dr. Heekwan Lee	Incheon National University, South Korea	Atmospheric environment, Indoor air quality, Climate change	451-500
67	Dr Nordiana Mohd Muztaza	School Physics, Universiti Sains, Malaysia.	2-D electrical resistivity, seismic refraction, geotechnical investigations	167
68	Prof. Mathew Dailey	SET/ICT Asian Institute of Technology Thailand	Machine Learning Artificial Intelligence, Computer Vision, Software Engineering	401-450
69	Prof. Guoying Zhao	University of Oulu/ Finland	Machine Vision and Signal Analysis,	251-300
70	Dr. Yiming Deng	Michigan State University, USA	Electromagnetic & Acoustic Research Imaging and Sensing;	144
71	Prof. Ekram Hossain	Professor, University of Manitoba, Canada	Cellular wireless networks, Smart Grid Networks	201-250
72	Prof. Baher bdulhai	University of Toronto, Canada	Cellular wireless networks, Smart Grid Networks	19
73	Dr. Nordiana Mohd Muztaza	School of GeoPhysics Universiti Sains Malaysia 11800 USM, Pulau Pinang Malaysia	Geo Physics	201-250
74	Dr. Luis Carlos Belalcazar Ceron	Universidad Nacional de Colombia, campus Bogotá, Colombia	Chemical and Environmental Engineering	101-150
75	Dr. Sun Jichao Associate	China University of Geosciences, China	Hydrology, Hydraulic engineering, Geotechnical engineering.	428

FACULTY OF MANAGEMENT SCIENCES				
POOL OF FOREIGN EXTERNAL EXAMINERS				
S.No.	Name	Affiliation	Area of Specialization	QS/THE Ranking
1	Dr. Glen Perce	University of Western Sydney Australia	Marketing	494
2	Geoge Rossier	University of Western Sydney Australia	Management	494
3	Trevor Spedding	University of Wollongong Australia	Commerce, Management Tourism and Services	193
4	Michael Hogg	University of Wollongong Australia	Social Psychology	193
5	John Sae	University of Swinburn Australia	International Business, Corporate Strategy and Management	321
6	Michael Gaffikin	University of Wollongong Australia	Accounting & Finance	193
7	A.B. Sin	University of Wollongong Australia	Management	193
8	Andrew Sense	University of Wollongong Australia	Management	193
9	Mary Barrett	University of Wollongong Australia	Management	193
10	Michael Gross	University of Wollongong Australia	Management & Marketing	193
11	Dr. Daing Ibrahim	University of Sains Malaysia	Accounting & Business	147
12	Dr. Yusary	University of Sains Malaysia	Management	147
13	Dr.Judith Chapman	University of Western Sydney Australia	Psychology	494
14	Dr.Albert Boonstra	University of Groningen, Netherlands	Information Management	128
15	Dr.Simon Philbin	Imperial College London	Research and Technology Management, Project Management	7
16	Dr.Tarba Shlomo Yedidia	University of Birmingham, UK	Strategic Management, International Business, Cross Border Mergers and Acquisitions, Global Strategic Alliance, Born	90

			Global Firms, Cross Cultural Management	
17	Dr. Sarel Jacobus Gronum	The University of Queensland Business School,	Strategic, focusing on innovation innovation and Entrepreneurship	47
18	Dr. Tudorel Andrei	Academy of Economic Studies, Piata Romana, Bucharest University of Economic Studies	Economics	401-450
19	Dr. Zakir Hussain	Sultan Qaboos University in Oman	Economics	368
20	James Dow	State University of New York, USA	Business in General Business	378
21	Dr. Howard Gitlow	School of Business Administration University of Miami, USA	TO & Management	311
22	Dr. Suman Banerjee	Nanyang Business School, NTU Singapore	Finance	29
23	Dr. Heide Ashton	University of Leicester, UK	Social Psychology of work & HRM & Management	236
24	Simon Lilly	University of Leicester, UK	HOD of Management; Professor of Information and Organization	236
25	Steve Brown	University of Leicester, UK	Social and Organizational Psychology	236
26	Dr. Meryem Duygun	University of Leicester, UK	Finance	236
27	Dr. William Green	University of Leicester, UK	Operations and Knowledge Management	236
28	Dr. Mathew Higgins	University of Leicester, UK	Marketing and Consumption	236
29	Peter Jackson	University of Leicester, UK	Economics and Strategy	236
30	Dr. Brendan Lambe	University of Leicester, UK	Finance	236
31	Dr. Geoff Lightfoot	University of Leicester, UK	Senior Lecturer on Entrepreneurship and Accounting	236
32	Dr. Georgios Patsiaouras	University of Leicester, UK	Lecturer in Marketing and Consumption	236

33	Dr. Mohammad Shaban (Egyptian)	University of Leicester, UK	Finance	236
34	Dr. Christine Mortimer	York St John Business School, York St John University, York, UK	Head of Program for the MBA and MA suite	45
35	Dr. Md. Khasro Miah	Career Professional Development Services Dept. and Coordinator, HRM, Business Policy and Strategy; School of Business North South University	Human Resource Management	215
36	Joseph Cheng	University of New South Wales, Australia	International Business Management	43
37	Catherine Collins	University of New South Wales, Australia	Strategic Management	43
38	David Grant	University of New South Wales, Australia	Organizational Change and Management	43
39	Jeffrey Cunningham	W. P. Carey, School of Business, Arizona State University	Management	215
40	Suzanne Peterson	W.P, Carey, School of Business, Arizona State University	Management	215
41	Gary Dushnitsky	London Business School	Strategy and Entrepreneurship	49
42	Simona Botti	London Business School	Marketing	49
43	James Dow	London Business School	Finance	49
44	Victor DE Miguel	London Business School	Management Science and Operations	49
45	CHEN, Vincent Yu Shen	Notional University of Singapore	Accounting	11
46	CHOU, Mabel	National University of Singapore	Decision Sciences	11
47	Brad Potter	University of Melbourne, Australia	Accounting	37
48	Carlin Dowling	University of Melbourne, Australia	Accounting	37
49	Leisa Sargent	University of Melbourne, Australia	Management	37

50	Simon Bell	University of Melbourne, Australia	Marketing	37
51	Peter Gahan	University of Melbourne Australia	Management (HRM)	37
52	Cynthia Hardy	University of Melbourne, Australia	Management and Marketing	37
53	Gautam Ahuja	University of Michigan's Ross School of Business	Business Administration (Strategy)	17
54	Peter Adriaens	University of Michigan's Ross School of Business	Entrepreneurship	17
55	David Brophy	University of Michigan's Ross School of Business	Finance	17
56	Fred Feinberg	University of Michigan's Ross School of Business	Statistics and Marketing	17
57	Geoff Meeks	University of Cambridge, Cambridge, UK	Financial Accounting	3
58	Dr. Alf Crossman	Pat time (International) Programs School of Management University of Surrey Guilford, UK	Human Resource and Management	272
59	Peter Williamson	University of Cambridge, Cambridge, UK	International Management	3
60	Sharon Belenzon	Duke University; the Fuqua School of Business, UK	Strategy	52
61	John Coleman	Duke University; The Fuqua School of Business, UK	Economics	52
62	Daley, Brendan	Duke University; The Fuqua School of Business, UK	Economics	52
63	Josh Gunn	Katz Graduate School of Business University of Pittsburgh, PA	Accounting	163

64	Richard Barker	Saïd Business School University of Oxford Park End Street Oxford	Accounting and Economics	17
65	Owen Darbshire	Saïd Business School University of Oxford Park End Street Oxford	Organizational Behavior	17
66	Greg Distelhorst	Saïd Business School University of Oxford Park End Street Oxford	International Business	17
67	Robert S. Atkin	Katz Graduate School of Business University of Pittsburgh, PA	Business Administration Organization and Entrepreneurship	156
68	Dr. Julie A. Edell	Fuqua School of Business Duke University, UK	Marketing	52
69	Dr. Manuel Adelino	Fuqua School of Business Duke University, UK	Financial Economics	52
70	Theodore Wright Jr	Rockefeller College of Public Affairs & Policy, University Albany, State University of New York	Policy Development	21

BUORIC-P12 – Publishing of Journals at BU

Policy Number: BUORIC-P12
Policy Title: Publishing of Journals at BU
Approval Authority: Higher Education Research Committee (HERC)
Status: ACTIVE

1. Responsible Party:

- 1.1 Higher Education & Research Committee (HERC)
- 1.2 Office of Research, Innovation & Commercialization (ORIC)

2. Purpose:

To develop standard operating procedures for the publication and recognition of journals published by Bahria University.

3. Scope:

This policy is applicable on all the present and prospective journals published by Bahria University.

4. Policy Statement:

The policy guidelines have been devised for the implementation of standard template along with the procedure of publication and recognition of journals published by Bahria University.

5. Policy:

- 5.1 All the editors should comply with the rules and regulations devised for the publication of journals by the Higher Education Commission and other Statutory/Regulatory Bodies.
- 5.2 All journals should have diverse Editorial Board
- 5.3 The credentials of the Board Members should be taken into consideration with respect to the area of concern.
- 5.4 Fifty percent of the Board Members should be from outside BU.
- 5.5 All the papers should be Peer Reviewed
- 5.6 The policy of blind review should be followed and mentioned clearly in the Call for Papers announcement
- 5.7 Peer Reviewed at least by two reviewers (including one international reviewer i.e. from industrially/academically advanced country in respective discipline)
- 5.8 For the purpose of getting indexed and acquire the higher category, each journal published by BU should be abstracted and indexed with the renowned international indexing agencies of the world (List available at <http://beta.hec.gov.pk/InsideHEC/Divisions/QALI/QADivision/Pages/HECRecognizedJournals.aspx>)
- 5.9 The editors of BU journals recognized by HEC should apply to HEC for acquiring annual financial grant for publishing.

5.10 Journals published by BU should have separate dedicated websites under the domain of the parent website of BU. The writing guidelines shall be developed, circulated and uploaded on the official website of each journal. A web link should be available in case the journal is located within an electronic database (e.g. Springer, EBSCO etc).

5.11 The research journal articles should be made available in the digital format either through its own website or through existing electronic databases

5.12 All the research papers published by the faculty/researchers of BU will be rewarded as per the Cash Award Policy (*Policy No BUORIC-P01*).

5.13 One Course will be reduced from Standard Course Load of the faculty member designated as the 'Editor' of the journal.

5.14 Honorarium of Rs. 2,000/- and up to USD 50 per article can be paid to local and foreign reviewers respectively from the funds generated by BU Journals through HEC or any other sources without any financial liability on BU.

~~**5.15** The research papers published by BU faculty in BU journals will also be considered towards promotion and award of annual increments.~~

5.16 Dynamic advertisement campaign should be launched for the promotion of research journals of BU

6. Procedure:

6.1 The application for the publication of new journal by the head of department/editor shall be submitted on the prescribed application form to the office of ORIC through respective Director Campus/Principal for initial scrutiny which will be processed further for the approval of the Competent Authority.

6.2 All the editors of the present and prospective research journals of BU will follow the guidelines and should keep in loop the Directorate of R&D/ORIC and Directorate of Quality Assurance in the official correspondence with HEC/PMDC/HEC or any other external organization.

Ratification of Award of PhD Degrees

<u>S.#</u>	<u>Student Enr #</u>	<u>Student Reg #</u>	<u>Student Name</u>	<u>Date of Enrollment</u>	<u>Date of Final Defense</u>	<u>Date of Notification/ Completion</u>	<u>Department</u>	<u>Campus</u>
1.	02-283161-002	31405	Muhammad Jahangir Khan	01-FEB-2016	21-DEC-2021	14-FEB-2022	Earth & Environmental Sciences	BUKC
2.	02-281141-001	37188	Hina Shakir	27-JAN-2014	23-NOV-2021	04-JAN-2022	Electrical Engineering	BUKC
3.	01-280112-015	29105	Adeel Saqib	12-SEP-2011	16-JUN-2021	11-AUG-2021	Management Sciences	BUIC
4.	01-280142-002	36980	Chaudry Bilal Ahmad Khan	01-SEP-2014	16-NOV-2021	17-DEC-2021	Management Sciences	BUIC
5.	01-280112-004	26236	Asma Fazal	12-SEP-2011	26-OCT-2021	30-DEC-2021	Management Sciences	BUIC
6.	01-280162-006	26248	Muhammad Naveed	05-SEP-2016	09-DEC-2021	10-JAN-2022	Management Sciences	BUIC
7.	01-280132-006	37185	Nouman Malik	02-SEP-2013	14-OCT-2021	19-JAN-2022	Management Sciences	BUIC
8.	01-281152-004	43134	Syed Rashid Aziz	07-SEP-2015	18-NOV-2021	25-JAN-2022	Software Engineering	BUIC
9.	01-281142-001	18781	Samina Rafique	01-SEP-2014	01-DEC-2021	02-FEB-2022	Electrical Engineering	BUIC
10	01-281141-002	38329	Shahid Ismail	27-JAN-2014	03-NOV-2021	11-JAN 2022	Electrical Engineering	BUIC
11	01-280162-012	1883	Hasan Daud Butt	05-SEP-2016	02-DEC-2021	11-JAN 2022	Management Sciences	BUIC
12	01-281182-002	59658	Syed Muhammad Usman	10-SEP-2018	25-NOV-2021	06-JAN 2022	Computer Engineering	BUIC
13	05-274152-001	7843	Erum Kausar	07-SEP-2015	15 MARCH 2022	10 MAY 2022	IPP	BUKC
14	02-280161-005	43961	Syeda Qurat ul Ain Rizvi	01 FEB 2016	03 FEB 2022	10 MAY 2022	Management Sciences	BUKC
15	01-280131-001	16792	Khalid Mumtaz	04-FEB-2013	17 MARCH 2022	27 APRIL 2022	Management Sciences	BUIC
16	01-280142-003	36981	Imran Khan	01-SEP-2014	15 MARCH 2021	10 MAY 2022	Management Sciences	BUIC
17	01-280162-010	13317	Kashif Abrar	05-SEP-2016	05 APRIL 2022	11 MAY 2022	Management Sciences	BUIC
18	01-280152-004	43123	Kamran Iqbal	07-SEP-2015	13 APRIL 2022	16 MAY 2022	Management Sciences	BUIC
19	01-280122-005	32440	Ayesha Saba	03 Sep 2012	14 OCT 2020	16 MAY 2022	Management Sciences	BUIC
20	01-280172-001	44852	Altamash Khan	07-SEP-2015	20 APRIL 2022	01 JUNE 2022	Management Sciences	BUIC
21	01-280171-002	50190	Muhammad Iftikhar Ali	06-FEB-2017	02 JUNE 2022	21 JUNE 2022	Management Sciences	BUIC

3008 – A Department of Management Sciences – BUIC				
Foreign External Examiners (THREE)				
Sr. #	Name	Affiliation	Area of Specialization	QS/THE Ranking
i.	Dr. S. Mostafa Rasoolimanesh	Faculty of Social Sciences and Leisure Management; Taylor's University; Malaysia	Sustainable Tourism Heritage Tourism Community Participation Tourism Development and Management	332
ii.	Dr. Shahryar Sorooshian	Associate Professor University of Gothenburg Sweden	Engineering Management, Industrial Management, Business Engineering	185
iii.	Prof. Dr Maizeitul Aidawati MD Husin	Universiti Teknologi Malaysia	Islamic banking and Finance	501-600
Local External Examiners (TEN)				
Sr. #	Name	Affiliation	Area of Specialization	Experience
i.	Dr. Ashfaq Ahmad	University of Punjab Lahore	Finance, Account & Finance and Banking & Finance	12 Years
ii.	Dr. Muhammad Majid Khan	Comsats Islamabad	Educational Management and Leadership	12 Years
iii.	Prof. Dr. Syed Muhammad Amir Shah	Allama Iqbal Open University	Finance	11 Years
iv.	Dr. Lakhi Muhammad	Capital University of Science and Technology (CUST)	Marketing Management	04 Years
v.	Dr. Muhammad Awais	Foundation University Islamabad	Finance	03 Years
vi.	Dr. Muhammad Sarmad	Riphah International University	Human Resource	05 Years
vii.	Dr Muhammad Khushnood	Kohat University of Science and Technology	Management (Quality & Risk: Supply Chain), Human Resource	07 Years
viii.	Dr. Iffat Rasool	Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology Islamabad	Management	04 Years
ix.	Dr. Shahid Ali	Institute Of Management Sciences, Peshawar	Management Business Entrepreneurship Leadership	09 Years
x.	Dr. Faid Gul	National University of Modern Languages (NUML)	Behavioral Finance, Capital Markets, Asset Pricing	07 Years

3008 – B Institute of Professional Psychology – KC				
Foreign External Examiners (TWO)				
Sr. #	Name	Affiliation	Area of Specialization	QS/THE Ranking
i.	Dr. Carrie M. York	<ul style="list-style-type: none"> • Founder and President AlKaram Institute • APA Member 	Clinical Psychology, Islamic Psychology, Spirituality Integrated Psychotherapy	N/A
ii.	Dr. Venus Mahmoodi	Presbyterian Hospital Columbia University, USA	Clinical Psychology	11
Local External Examiners (TWO)				
Sr. #	Name	Affiliation	Area of Specialization	Experience
i.	Dr Salman Shahzad	Associate Professor, Clinical In-charge University of Karachi	Clinical Psychology, Specialization in Substance Abuse	11 years
ii.	Dr. Nasreen Bano	Assistant Professor, Institute of Clinical Psychology, University of Karachi	Clinical Psychology	7 years
iii.	Dr. Tahir Khalili	Dean Social Science, Shifa Tameer Millat Uni, Islamabad	Clinical Psychology	30 Years+

3008 – C Faculty of Engineering Sciences – IC, KC & LC				
Foreign External Examiners (TEN)				
Sr. #	Name	Affiliation	Area of Specialization	QS/THE Ranking
i.	Dr. Lihao Zhao	Tsinghua University, Beijing, China.	Fluid Mechanics	17
ii.	Dr. Guoqian Chen	Peking University, Beijing, China	Fluid Dynamics	24
iii.	Dr. Haito Qi	School of Mathematics and Statistics Shandong University, China	Fractional Calculus: Models & Applications, Non-Newtonian Fluid Mechanics, Microflow, Heat and Mass Transfer	403
iv.	Prof. Kristian Etienne	Department of Materials Science and Engineering, Berg, 306 B, Gløshaugen, NTNU, Norway	Aluminum reduction cell flow	201-250

v.	Dr. Mithulan Nadarajah	University of Queensland, Brisbane, Australia	Power System Stability and Dynamics, Stability Challenges in Renewable Energy	47
vi.	Dr. Kamaldeen Olakunle Leif, Omosanya	Norwegian University of Science and Technology (NTNU), Norway	Geologic and geophysical interpretation of varied structural and stratigraphic domains	110
vii.	Dr. You Liang Ji	China University of Petroleum, Beijing	Sequence Stratigraphy, Reservoir Geology Reservoir Sedimentology	101-150
viii.	Dr. Nordiana Mohd Muztaza	School of GeoPhysics Universiti Sains Malaysia Malaysia	Engineering and environmental problem Groundwater Mineral Exploration Landslide Geo-archaeology	142
ix.	Dr. Luis Carlos Belalcazar Ceron	Universidad Nacional de Colombia, campus Bogotá	Environmental Engineering	51-100
x.	Dr. Haylay Tsegab	Universiti Teknologi PETRONAS, Malaysia	Geosciences	351-400

Proposed Amendments in PHD RULES 2017		
Clause #	For	Read
8.2 (c)	Meet biannually to assess progress of the scholar and submit report to PGP Directorate through HOD, and Dean.	Meet biannually to assess progress of the scholar and submit report to PGP Directorate through HOD, Principal and Dean.
11.1	PGP Coordinator for each Department, whose appointment based on the recommendations of the HOD shall be notified by the Registrar after due approval of the Rector. Each PGP Coordinator must hold a PhD degree.	PGP Coordinator for each Department, whose appointment based on the recommendations of the HOD, and Principal shall be notified by the Registrar after due approval of the Rector. Each PGP Coordinator must hold a PhD degree.
27.1	The Principal Supervisor shall submit quarterly research work progress report on the prescribed format (PhD-14) of the scholars to the PGP Coordinator for onward submission to the HOD. Likewise, the Advisory Committee of the scholar shall also submit biannual report to the HOD. The HOD, in turn, shall submit a consolidated progress report of all PhD scholars to the Dean, Principal and PGP Directorate on quarterly basis.	The Principal Supervisor shall submit quarterly research work progress report on the prescribed format (PhD-14) of the scholars to the PGP Coordinator for onward submission to the HOD. Likewise, the Advisory Committee of the scholar shall also submit biannual report to the HOD. The HOD, in turn, shall submit a consolidated progress report of all PhD scholars to the Dean, Principal and PGP Directorate on quarterly basis.
31.1	The evaluation reports shall be received by the PGP Directorate, and after hiding the name or other identity of the Evaluators, shall be passed over to the HOD/PGP Coordinator with information to Faculty Dean. The HOD/PGP Coordinator shall then handover the evaluation reports to the scholar and supervisor.	The evaluation reports shall be received by the PGP Directorate, and after hiding the name or other identity of the Evaluators, shall be passed over to the HOD/PGP Coordinator with information to Principal & Faculty Dean. The HOD/PGP Coordinator shall then handover the evaluation reports to the scholar and supervisor.
33.1	PGP Directorate shall announce and circulate the schedule of the thesis defence with consultation of the HOD/PGP Coordinator. HOD shall ensure necessary arrangements to conduct the thesis defence. Copy of the schedule shall also be sent to the Faculty Dean.	PGP Directorate shall announce and circulate the schedule of the thesis defence with consultation of the HOD/PGP Coordinator. HOD shall ensure necessary arrangements to conduct the thesis defence. Copy of the schedule shall also be sent to the Principal & Faculty Dean.

Proposed Amendments in MS/MPHIL RULES 2017		
Clause #	For	Read
6.4 (h)	Undertake any other research related responsibility assigned by the Dean / HOD.	Undertake any other research related responsibility assigned by the Dean / Principal / HOD.
12.4	Names of the candidates recommended by the Admission Committee for admission to the MS/MPhil programme shall be forwarded by the HOD to the Directorate of Admissions through the Director Campus , which shall process the case for approval of the Rector.	Names of the candidates recommended by the Admission Committee for admission to the MS/MPhil programme shall be forwarded by the HOD to the Directorate of Admissions through the Principal , which shall process the case for approval of the Rector.
12.5	Admission letters to the selected candidates shall be issued by the Head of Department on the prescribed format (MS-1B) with copy to the Director PGP, Director Admission, Dean and Director Campus . The selected candidates shall be required to register on or before the date given in the offer letter, the failure to do so shall result in cancellation of admission.	Admission letters to the selected candidates shall be issued by the Head of Department on the prescribed format (MS-1B) with copy to the Director PGP, Director Admission, Dean and Principal . The selected candidates shall be required to register on or before the date given in the offer letter, the failure to do so shall result in cancellation of admission.
23.1	The Principal Supervisor and Co-Supervisor (if needed) shall be appointed by the HOD on the consent of supervisor for each MS/MPhil research student. The Principal Supervisor shall be a faculty member or a professional in the relevant field holding a degree not lower than that of the programme applied for. In case the Principal Supervisor's highest qualification is MS/MPhil, he or she must have minimum four years post qualification research experience including Co-Supervisor of atleast two MS/MPhil or equivalent level thesis and minimum two research papers published in the HEC recognized journals. The HOD shall issue letter of appointment to the Principal Supervisor and the Co-Supervisor on the prescribed format (MS-7 and MS-8) respectively.	The Principal Supervisor and Co-Supervisor (if needed) shall be appointed by the BASR on the consent of supervisor for each MS/MPhil research student. The Principal Supervisor shall be a faculty member or a professional in the relevant field holding a degree not lower than that of the programme applied for. In case the Principal Supervisor's highest qualification is MS/MPhil, he or she must have minimum four years post qualification research experience including Co-Supervisor of at least two MS/MPhil or equivalent level thesis and minimum two research papers published in the HEC recognized journals. The HOD shall issue letter of appointment to the Principal Supervisor and the Co-Supervisor on the prescribed format (MS-7 and MS-8) respectively.
24.5	PGP Coordinator with the consent of HOD shall announce and circulate the schedule of the thesis proposal defence and make necessary arrangements. Copy of the schedule shall also be sent to the Faculty Dean and the PGP Directorate.	PGP Coordinator with the consent of HOD shall announce and circulate the schedule of the thesis proposal defence and make necessary arrangements. Copy of the schedule shall also be sent to the Principal , Faculty Dean and the PGP Directorate.

25.1	The first progress report of students, starting their research work in Spring semester, shall be submitted from March-May quarter. The PGP Coordinator shall maintain complete record of the student's progress and shall submit a consolidated progress report to the Faculty Dean and the PGP Directorate, through the HOD.	The first progress report of students, starting their research work in Spring semester, shall be submitted from March-May quarter. The PGP Coordinator shall maintain complete record of the student's progress and shall submit a consolidated progress report to the Principal , Faculty Dean and the PGP Directorate, through the HOD.
29.1	The evaluation reports shall be received by the PGP Directorate which, after hiding the name/identity of the Evaluators, shall send them to the HOD/PGP Coordinator with information to the Dean. The HOD/ PGP Coordinator shall handover the reports to the student.	The evaluation reports shall be received by the PGP Directorate which, after hiding the name/identity of the Evaluators, shall send them to the HOD/PGP Coordinator with information to the Principal and Dean. The HOD/ PGP Coordinator shall handover the reports to the student.
31.1	PGP Coordinator shall announce and circulate the schedule of the thesis defence with consultation of the HOD and shall ensure necessary arrangements to conduct the thesis defence. Copy of the schedule shall also be sent to the Faculty Dean and the PGP Directorate.	PGP Coordinator shall announce and circulate the schedule of the thesis defence with consultation of the HOD and shall ensure necessary arrangements to conduct the thesis defence. Copy of the schedule shall also be sent to the Principal , Faculty Dean and the PGP Directorate.
31.3	The Principal Supervisor/Co-Supervisor shall remain present throughout the thesis defence. The presentation part of the thesis defence shall be open to all those interested, but the Viva voce Examination shall be conducted by the panel of Examiners in the presence of the Principal/Co-supervisor. Head of the FRC or the HOD may also remain present if necessary.	The Principal Supervisor/Co-Supervisor shall remain present throughout the thesis defence. The presentation part of the thesis defence shall be open to all those interested, but the Viva voce Examination shall be conducted by the panel of Examiners in the presence of the Principal/Co-supervisor. Head of the FRC, Principal and the HOD may also remain present if necessary.
31.7	The thesis defence evaluation reports shall be received by the HOD who shall pass them over, alongwith consolidated report on prescribed Form (MS-18B) to the PGP Directorate for onward submission to the Examination Department under information and copy to the Faculty Dean.	The thesis defence evaluation reports shall be received by the HOD who shall pass them over, alongwith consolidated report on prescribed Form (MS-18B) to the PGP Directorate for onward submission to the Examination Department under information and copy to the Principal & Faculty Dean.

BAHRIA UNIVERSITY ISLAMABAD CAMPUS			
Department of Computer Engineering (06)			
SNO.	Name	Research Area	Affiliation
1	Dr. Amanullah Yasin	Learning, Knowledge Discovery from Data	Center for Advanced Studies in Engineering (CASE), Islamabad
2	Dr. Mohammad Haroon Yousaf	Processing	University of Engineering & Technology
3	Dr. Ayyaz Hussain	Image Processing	International Islamic University
4	Dr. Syed Aun Irtaza	Computer Vision	University of Engineering & Technology
5	Hafiz Adnan Habib	Image Processing	University of Engineering & Technology
6	Dr. Syed Hashim Raza Bukhari	Wireless Sensor Networks, Cognitive Networks, Wireless Networks	COMSATS University Attock, Pakistan
Department of Electrical Engineering (57)			
SNO.	Name	Research Area	Affiliation
1	Dr. Rizwan Ahmed	Wireless Communication & Networking	School of Electrical Engineering and Computer Science (SEECs-NUST)
2	Dr. Amir Habeeb	Wireless Communication	Institute of Space Technology (IST), Islamabad
3	Dr. M. Khurram Bhatti	Embedded System	ITU Lahore
4	Dr. Salman Amin	High Voltage And Energy	UET-Taxila
5	Dr. Ali Imran Najam	RF and Microwave	National Engineering and Scientific Commission (NESCOM-PIEAS)
6	Dr. Usman Zabit	DSP, Embadded System Design	Ripah University, Islamabad
7	Dr. Ahmed Salman	Machine learning, Speech Information Processing	School of Electrical Engineering and Computer Science (SEECs-NUST), Islamabad
8	Dr. Yasar Amin	RFID and Microwave Engineering	UET Taxila
9	Dr. Mohammad Nauman	Machine Learning in Security and Privacy	National University of Computer & Emerging Scinces (FAST), Peshawar
10	Dr. Naveed Mufti	Propagation Modelling, Radio Meteorology	UET Peshawar (Mardan Campus)
11	Dr. Nouman Azam	Computer Science, Computer Networks	National University of Computer & Emerging Scinces (FAST)
12	Dr. Muhammad Awais Azam	Sensing and Communication	UET Taxila
13	Dr. Tassadaq Hussain	Computer Architecture	University of Sialkot
14	Dr. Hassan Abdullah Khalid	Power Electronics, Electrical Machines	NUST Energy center
15	Dr. Ashfaq Ahmed	Applied Optimization in Telecommunication and Smart Systems	COMSATS Institute of Information Technology (CIIT), Wah Cantt
16	Dr. Azhar ul-haq	Simulation, Modeling and Control of Power Electronics Based Power Systems Photovoltaic Powered	NUST College of E&ME
17	Dr. Muhammad Shoaib Khalid	Smart Grid Architecture, Transient Voltage Stability, Network Expansion Planning	FAST, Faisalabad

18	Dr. Syed Hayder Abbas	Power Electronics and Close loop Power Management, Analog Integrated Circuit Design	NESCOM
19	Engr. Dr. Noman Naseer	Brain-Computer Interface (BCI)/Interface (BRI), Artificial Intelligence Spectroscopy	Air University
20	Dr. Adnan Masood	Microwave Resonators for Highly Sensitive Compositional, Analysis of Solvents in Microcapillary Systems	College of E&ME , NUST
21	Dr. Arsalan Ansari	DC-DC converters for electric vehicles, Multi-level inverters for Photovoltaics and fuel cells.	Dawood University of Engineering and Technology , Karachi
22	Dr. Syed Sabir Hussain Bukhari	Power Electronics,Electrical Machines Design.	IBA University Sukkur
23	Dr. Dost Muhammad Saqib	Wireless Communication, Digital Signal Processing and Digital Communication	Dawood University of Engineering and Technology , Karachi
24	Dr. Engr. Umer Javeed	Digital image processing,linformation and Coding theory, Error correcting codes , image encoding and data compression	International Islamic University
25	Dr. Khurram Javed	Power Electronics, VLSI, Power management IC design, Circuit Analysis	Pakistan Institute of Engineering and Applied Sciences (PIEAS)
26	Dr. Wajahat Ullah Khan Tareen	Power quality, Power conversion techniques, UPS systems, Power inverters	International Islamic University
27	Dr. Shaikh Saaqib Haroon	Power System Operation & Control, Power System Analysis	UET-Taxila
28	Dr. Ammar Hasan	Control Systems	NUST-Islamabad
29	Dr. Muhammad Zahid	Power System operation and Control, Power system stability analysis	Ripah University, Lahore
30	Dr. Intisar Ali Sajjad	Smart (mini) Grids, Demand Side Management, Smart Buildings, Modeling and Simulation of Power System Components,	University of Engineering and Technology, Taxila, Pakistan.
31	Dr. Ihsan Ullah	Multisensor-multitarget tracking, estimation theory, multi-source information fusion	COMSATS IIT, Abbottabad, Pakistan.
32	Dr. Naveed Riaz	Multisensor-multitarget tracking, estimation theory, multi-source information fusion	Pakistan Atomic Energy Commission, Pakistan.
33	Dr. Abdul Rauf Bhatti	Electrical Energy Management, Electric Vehicle Charging, Solar Photovoltaic, Artificial Intelligence	Government College University Faisalabad
34	Dr. Abraiz Khattak	High Voltage Engineering, Special Topics in Dielectrics and Insulators, Power System Operation Control and Optimization.	National University of Sciences and Technology (NUST), Islamabad, Pakistan
35	Dr. Fahad Bin Muslim	Electronic design automation and methodology with special emphasis	Iqra University Islamabad

		on low-power and high performance computing system architectures	
36	Dr. Arbab Waheed Ahmad	Mobile Communication, Wireless Communication, 5G communication, 4G LTE-Advanced, Small Cells	CECOS University of IT & Emerging Sciences Peshawar, Pakistan
37	Dr. Syed Safdar Raza	Islanding detection techniques for distribution system using Minimum power System parameters	NFC IET, Multan.
38	Dr. Zeeshan Kaleem	Wireless/Mobile Communications o UAV Communications	COMSATS Wah Campus
39	Dr. Ali Hassan	Cloud Connect NeuroRehab, Posture Recognition	Department of Computer Engineering, College of E&ME, NUST
40	Dr. Abdul Wakeel	Signals and Systems, Digital Signal Processing, Analog Communication Systems	MCS, NUST
41	Dr. Khalil	Information and Communication Engineering	Department of Computer Science COMSATS University Islamabad, Wah, Pakistan
42	Dr. Mian Ashfaq Ali	System Modelling, Vehicle Dynamics and Control, Microcontroller based Sensor Fusions	NUST
43	Dr. Ali Ahmed	Real time embedded systems, IoT and CoTs	Usman Institute of Technology, Karachi
44	DR. KHURRAM JAVED	Microelectronics, CMOS tech, and MEMS	IST, Islamabad
45	Dr. QASIM ALI	ANSYS Maxwell (machine design simulation tool), AutoCAD	CUI Abbottabad
46	Dr. Shahid Atiq	Electrical Machines and drives	Khawaja Fareed University of Engineering & Information Technology, Rahim Yar Khan
47	Dr. ABID IMRAN	Design, modeling and applications of serial, parallel	GKI
48	Dr. Abdul Qayyum Khan	Fault Diagnosis and Process Monitoring, Linear/Nonlinear Observer Design	PIEAS
49	Dr. Ing. Mukhtar Ullah	Systems Engineering, Statistical Modeling	FAST NUCES Islamabad
50	Dr. Muhammad Awais	VLSI, FPGA	CUI Wah Campus
51	Dr. Syed Rameez Naqvi	VLSI, FPGA, Computer Architecture, Network on Chip	CUI Wah Campus
52	Dr. Osman Hasan	ASIC Design, SOC etc	SEECs NUST
53	Dr. Muhammad Aamir	Power Electronics, Smart grids, Power Systems Control	PAF-IAST
54	Dr. Ahsan Ali	Linear systems, LPV control and identification, Robust control	UET Taxila
55	Dr. Muwahida Liaquat	Control Systems, AI and Automation	CEME, NUST
56	Dr. Hamid Jabbar	Mechatronics System Design, Low-power Energy Harvesting	CEME, NUST
57	Dr. AMMAR HASAN	Control Systems, Electronic Converters	CEME, NUST

Department of Earth & Environmental Sciences (110)			
SNO.	Name	Research Area	Affiliation
1	Dr. Muhammad Mujtaba	Geology (Petroleum Geology, Basin Analysis, Sedimentology)	Retired
2	Dr. Aamir Ali	Petroleum Geosciences	Quaid-e-Azam University
3	Dr. Shahid Nadeem Qureshi	Geophysics	Quaid-e-Azam University
4	Dr. Suleman Khan	Geology (Sequence and Biostratigraphy)	Peshawar University
5	Dr. Mirza Naseer Ahmad	Geophysics	Abdus Salam School Of Sciences, Nusrat Jahan College
6	Dr. Zulfiqar Ahmad	Hydrogeology/Geophysics	Quaid-e-Azam University
7	Dr. Irshad Ahmad	Geology	Peshawar University
8	Dr. Birkez Aslam Shami	Geology	Dewan Petroleum
9	Dr. Shazia Asim	Geophysics (Seismic Stratigraphy)	Quaid-e-Azam University
10	DR. Mohammad Tahir Shah	Geology	FATA University
11	Dr. Muhammad Gulraiz Akhter	Hydrogeology/Geophysics	Quaid-e-Azam University
12	Dr. Nadeem Ahmed	Sequence Stratigraphy	MOL Pakistan
13	Dr. Anwar Qadir	Hydrogeology	Department of Earth sciences, Quaid-e-Azam University
14	Dr. Abbas Ali Naseem	Geochemistry	Quaid-e-Azam University
15	Dr. Lamuail Bashir	Geophysics	LMKR
16	Dr. Muhammad Jawad Butt	Petroleum Eng. Geosciences	Bahria University
17	Dr. Irfan U. Jan	Geology	National Centre of Excellence (NCE) in Geology, University of Peshawar
18	Dr. Muhammad Hanif	Geology	NCE in Geology, University of Peshawar
19	Dr. Nimat Ullah Khattak	Geology	NCE in Geology, University of Peshawar
20	Mr. Mustafa Yar	Geology	FATA University, Darra Adam Khel, F.R Kohat
21	Mr. Mujtaba Mehmood Mongat	Geophysics	AEPL
22	Dr. Muhammad Iqbal Hajana	Geophysics	Weatherford
23	Dr. Hidayat Ullah	Synthetic and Catalytic Organic Chemistry	Pakistan Environmental Protection Agency, Islamabad
24	Dr. Said Muhammad	Water and Soil Chemistry	COMSATS Institute of Information Technology (CIIT), Abbottabad
25	Dr. Tahir Hayat	Environmental pollution	Department of Earth & Environmental Sciences, COMSATS
26	Dr. Anwar Zaib Khan	Heavy metal contamination	COMSATS Institute of Information Technology (CIIT)
27	Dr. Muhammad Asad Ghufraan	Environmental Sciences	International Islamic University, Islamabad
28	Aniqa Batool	Environmental Sciences	PMAS-Arid Agriculture University Rawalpindi

29	Dr. Samina Jehandad	Geochemistry	HDIP
30	Dr. Rashid Saeed	Environmental Management	University of Gujrat
31	Dr. Abid Ahmad	Geology	PIEAS, Nilore, Islamabad
32	Dr. Mumtaz Muhammad Shah	Geology	Quaid e Azam University
33	Dr. Waqas Ahmed	Geotechnical Engineering	University of Peshawar
34	Dr. Asghar Ali	Geology	University of Peshawar
35	Dr. Muhammad Toqeer	Geophysics (Seismic Processing, Interpretation)	Earth Sciences Department, Quaid-e Azam University
36	Dr. Sajjad Ahmad	Geology (Sequence and Biostratigraphy)	Department of Geology, University of Peshawar
37	Dr. Mona Lisa	Geophysics (Seismology)	Earth Sciences Department, Quaid-e-Azam University
38	Dr. Muhammad Zahid Afzal Durrani	Geophysics (Seismic Reservoir Characterization)	PPL
39	Dr. Mohammad Amjad Sabir	Geology (Engineering Geology)	Department of Earth Sciences, COMSATS, Abbottabad
40	Dr. Muhammad Umar	Geology (Sedimentology)	Department of Earth Sciences, COMSATS, Abbottabad
41	Dr. Rahmat Ali Gakkhar	Geology	Oil & Gas Development Company Limited, Islamabad
42	Dr. Shamshad Akhtar	Geology	Oil & Gas Development Company Limited, Islamabad
43	Dr. Muhammad Sajid	Geology	Department of Geology, University of Peshawar
44	Dr. Gohar Ali Mahar	Geography, GIS and Remote sensing	Department of Geography, Federal Urdu University of Arts, Sciences and Technology, Karachi
45	Dr Anees Ahmed Bangash	Geophysics	Quaid e Azam University, Islamabad
46	Dr. Pervez Khalid	Geophysics	Punjab University Lahore
47	Dr. Muhammad Irfan Ehsan	Geophysics	University of the Punjab Lahore Pakistan
48	Dr. Qazi Adnan Ahmed	Geophysics	Department of Geology, Bacha Khan University Charsadda, Charsadda
49	Dr. Tahir Azeem	Geophysics	Department of Earth sciences Quaid-i-Azam University, Islamabad
50	Dr. Muhammad Bashir	Hydrology, GIS, Remote Sensing	NARC
51	Dr. Anwar Baig	Water Resources, Solid Waste	IESE, NUST
52	Dr. Sher Jamal	Water Treatment, Membrane Bioreactors	AIT Thailand
53	Dr. Arshad Ashraf	Hydrology, GIS, Remote Sensing	NARC
54	Dr. Zahid ud Din Khan	Water treatment	SAAF PANI Projects, Punjab

55	Dr. Azeem Kahlid	Plant microbe interactions under stress environment Bioremediation of industrial	PMAS Arid Agriculture, Rawalpindi
56	Professor Dr. Shaukat Iqbal	Environmental Science/Bio Technology, Bio Informatics	CUST
57	Dr. Waqas Qazi	Remote sensing, Synthetic Aperture Radar (SAR) imagery and interferometric	IST
58	Dr. Sheikh Saeed	Air Pollution, GIS, RS, Environment Modeeling,	FJWU
59	Dr. Imran Shahid	Atmospheric Aerosols, Air pollution, GHG Emissions	IST
60	Dr. Rizwan Bulbul	Spatial data modeling, Dimension independent geometric modeling for GIS.	IST
61	Dr. Tariq Sultan	Soil Sciences, Soil Microbiology	PMAS Arid Agriculture, Rawalpindi
62	Dr. Ashiq Mohammad	Environmental Sciences, Bio-Remediation,	NARC
63	Dr. Hamid Iqbal	Storm water Management, Vados zone Hydrology	Rawalpindi Waste Company
64	Dr. Muhammad Fahim Khokhar	Climatology/ Remote Sensing	IESE, NUST
65	Dr. Shahid Mahmood	Environmental Remediation	PMAS Arid Agriculture, Rawalpindi
66	Dr. Waqar un Nisa	Phytoremediation	PMAS Arid Agriculture, Rawalpindi
67	Dr. Nazneen Bangash	Environmental Microbiology	PMAS Arid Agriculture, Rawalpindi
68	Dr. Abida Farooqi	Environmental Hydro geochemistry	QAU
69	Dr. Mazhar Iqbal	Environmental Biology and Ecotoxicology	QAU
70	Dr. Sajjad Sarwar	Experimental Nuclear Fusion Plasma Physics	IST
71	Dr. Javed Nawab	Environmental Sciences	Environmental Science Department, University of Swat
72	Dr. Kifayatullah Khan	Environmental Sciences	Quaid-e Azam University
73	Dr. Sajida Rasheed	Environmental Engineering	Section Head at Emalah Foundation School and College (EFS & C) (F.G affiliated), Rawalpindi.
74	Dr. Iqbal Hussain Hashmi	Chemistry	Jamshoro University, Karachi
75	Dr. Afzal Farooq	Environmental Sciences	Federal Urdu University, Karachi
76	Dr. Ahmad Hussain	Energy & Environment	Energy & Environment Hamdard University, Karachi
77	Dr. Mohmmad Shafiq	Glacier Hydrology & Hazards	SUPARCO Karachi
78	Dr. Hussain. H. Rizvi	Soil Sciences	SUPARCO Karachi
79	Dr. Muhammad Mansha	Chemical Engineering	SUPARCO Karachi
80	Dr. Arshad Javed Rizvi	Sociologist	Sir Syed University, Karachi
81	Dr. Gul-e-Rana	Chemical Engineering	PCSIR, Karachi

82	Dr. Zafer Shams	Environmental Sciences	Karachi of University
83	Dr. Hina Baig	Marine Sciences	NIO, Karachi
84	Dr. Jabir H. Syed	Environmental Monitoring	CIIT
85	Dr. Wasim Sajjad	Environmental Microbiology	Department of Multidisciplinary Studies, National University of Medical Sciences, Rawalpindi
86	Dr. Rukhsanda Aziz	Environmental Sciences	International Islamic University, Islamabad
87	Dr. Muhammad Tariq Rafiq	Environmental Sciences	International Islamic University, Islamabad
88	Dr. Muhammad Ishtiaq	Environmental Health/Public Health	Nowshera Medical College, Nowshera
89	Dr. Syed Aziz ur Rehman	Environmental Sciences	COMSATS University Islamabad, Pakistan
90	Mr. Abdul Shakoore Khan	Environmental Sciences	Zeeruk International Pvt Ltd
91	Mr. Abdul Hadi	Environmental Policy and Management	National Development Consultants (Pvt.) Ltd. (NDC)
92	Dr. Sadiqullah Khan	Environmental Sciences	Elan Partner (Pvt) Limited Islamabad
93	Dr. Jawad Ali	Environmental Sciences	Department of Environmental Science FLS&I BUIITEMS Quetta
94	Dr. Khalid Iqbal	Environmental Engineering	Office of Research, Innovation and Commercialization (ORIC), University of Gujrat
95	Prof. Dr. Shaukat Iqbal Malik	Biochemistry and Molecular Biology	Capital University of Science & Technology
96	Dr. Muhammad Saqib Nawaz	Environmental Engineering	Infrastructure Development Authority Government of the Punjab
97	Dr. Muhammed Khurshid	Environmental Sciences	University of Haripur
98	Dr. Sohail Yousaf	Soil and Life Sciences, Environmental Microbiology	Quaid-i-Azam University, Islamabad
99	Dr. M. Abdullah Khan	Nanotechnology, Inorganic Chemistry	Quaid-i-Azam University, Islamabad
100	Dr. Mahtab Ahmad	Environmental chemistry, Production and application of biochar, Wastewater treatment	Quaid-i-Azam University, Islamabad
101	Dr. Khaista Rehman	Seismology, Geophysics	NCE in Geology, University of Peshawar
102	Dr. Usman Ali	Environmental Sciences, Air Pollution	Petro Waste Busters
103	Dr. Zaigham Abbas	Environmental Sciences	Ministry of Climate Change, Government of Pakistan, Islamabad
104	Dr. Muhammad Afzaal	Meteorology	Pakistan Meteorological Department
105	Dr. Muhammad Azmat	Water Resources	School of civil and environmental engineering, NUST
106	Dr. Athar Hussain	Climate Change	COMSATS, Islamabad
107	Dr. Amjad Masood	Hydrology and water resources management	Global Change Impact Studies Centre, Islamabad

108	Dr. Abdul Waheed	Sustainable Urban Development	School of civil and environmental engineering, NUST
109	Dr. Tahir Sarwar	Water Resources	University of Agriculture, Peshawar
110	Dr. Zia ur Rahman Hashmi	Water Resources	Water Resources and Glaciology-GCISC, Islamabad
Department of Software Engineering (46)			
SNO.	Name	Research Area	Affiliation
1	Dr Rashid Ahmad	Web Engineering, Software Engineering	NUST College of E&ME
2	Dr. Malik Ahmad Kamran	Collaborative Systems, Social Network Analysis, Information privacy, and Access Control.	COMSATS Institute of Information Technology (CIIT)
3	Dr. Farooque Azam	Process Modelling, Web Engineering	NUST College of E&ME, Rawalpindi
4	Dr. Muhammad Mukaram Khan	Cloud Computing, virtualisation, Artificial Intelligence, ANN, HPC	C4I Directorate General Headquarters Rawalpindi
5	Dr Fahim Arif	Software Quality Engineering, Image Processing	C&IT Branch GHQ, RWP
6	Dr Hammad Afzal	Data Mining, NLP, Semantic Web, Machine Learning	MCS-NUST
7	Dr Muaz A Niazi	Agent based Modelling	COMSATS Institute of Information Technology (CIIT), Islamabad
8	Dr Usman Qamar	Pattern Recognition, Text Mining, Data Mining	NUST College of E&ME
9	Dr Muhammad Asim Noor	Software Engineering, Software Product Lines	COMSATS Institute of Information Technology (CIIT), Islamabad
10	Dr Mukhtar Ullah	Agent Based Modelling	NUCES, FAST
11	Dr Irfan ul Haq	Cloud Computing, Software Engineering	PIEAS, Islamabad
12	Dr. Muhammad Imran Babar	Software Engineering, Software Requirements Engineering	APCOMS
13	Dr. Shoail Asghar	Data Mining, Knowledge Management	COMSATS Institute of Information Technology (CIIT)
14	Dr Syed Jawad Hussain	Computer Networks, Internet and Web Technologies	HITEC University Taxila
15	Dr Irum Inayat	Agile Methods, Requirements Engineering, Software Engineering	FAST-NUCES
16	Dr. Sajjad Ahmed Madani	Cloud Computing, Wireless Sensor Networks	COMSATS Institute of Information Technology (CIIT), Islamabad
17	Dr. Iftikhar Azim Niaz	Software Engineering, Software Modelling Techniques	COMSATS Institute of Information Technology (CIIT)
18	Dr Khalid Salim	Information Systems, Data Management, Green Computing	Quaid-i-Azam University, Islamabad
19	Dr. Ahmad R.Shahid	Language and Text Processing, Machine Learning, Semantic Analysis	COMSATS Institute of Information Technology (CIIT), Islamabad
20	Prof Dr Mureed Hussain	Information , Network , Computer Networks	National Engineering and Scientific Commission (NESCOM-PIEAS)
21	Dr. Muddassar Azam Sindhu	Software Validation and Verification, Learning Based Software Testing Techniques	Quaid-i-Azam University, Islamabad

22	Dr. Onaiza Maqbool	Software Re-Engineering, Software Engineering	Quaid-i-Azam University, Islamabad
23	Dr. Rabeeh Ayaz Abbasi	Social Media Analysis, Content Analysis	Quaid-i-Azam University, Islamabad
24	Dr. Khurram Khurshid	Image Processing & Computer Vision	Institute of Space Technology (IST), Islamabad
25	Dr. Khawar Khurshid	Bio-Medical Imaging, Image Processing	NUST School of Electrical Engineering and Computer Science (SEECS-NUST), Islamabad
26	Dr. Naveed Ikram	Software Engineering	Ripah University, Islamabad
27	Dr. Seemab Latif	E-Learning Tools, Text and Data Mining	MCS-NUST
28	Professor Nabi Buksh Jumani	Learning and Education	International Islamic University
29	Dr. Faheem Qaisar Jamal	Organizational Behaviour, Organizational Change, Organizational Psychology	NUST College of E&ME
30	Dr. Sabeen Hussain Bhatti	Project Quality Management, Engineering Management	SZABIST
31	Dr. Muhammad Tahir Nawaz	Practical Engineering Management, Logistics Management	NUST College of E&ME
32	Dr. Engr. Ansir A. Rajput	Entrepreneurship, Venture Creation, Entrepreneurial Marketing	CUST
33	Dr. Yasir Ahmad	Engineering management, strategic management	NUST College of E&ME
34	Dr. Syed Muhammad Ali	Employees Behavior, Knowledge Management & HRM	NUST College of E&ME
35	Dr. Khurram Shehzad	HRM	Riphah International University
36	Dr. Murtaza Mir	Engineering Management	CASE
37	Dr. Mansoor Ahmed	Semantic Web	COMSATS Institute of Information Technology (CIIT)
38	Dr. Inayat ur Rehman	E-Learning / Mobile based learning	COMSATS Institute of Information Technology (CIIT)
39	Dr. Mohammad Anwar	Medical Image Processing	UET Taxila
40	Dr. Sheraz Akram	Medical Image Processing	Foundation University
41	Dr. Farhan Hussain	Neural Networks, Deep Learning, Machine Learning	EME NUST
42	Dr. Arshad Awan	Human activity recognition using Smartphone sensors	Allama Iqbal Open University
43	Dr. Basit Shahzad	Software Engineering Block chain	National University of Modern Languages, Islamabad
44	Dr. Noman Malik	Software Engineering Management Information System (MIS) Human Resource Management (Technology Management)	National University of Modern Languages (NUML), Islamabad Campus
45	Dr. Rizwan Bin Faiz	Artificial Neural Networks (ANN) Goal Centric Model Base Test Engineering	Faculty of Computing, RIPHAH International University
46	Dr. Huma Hayat Khan	Situational Requirement Engineering model for Global Software Development (GSD)	National University of Modern Languages, Islamabad

Department of Computer Sciences (55)			
SNO.	Name	Research Area	Affiliation
1	Dr. Abdul Basit	Image Processing, Learning	PINSTECH
2	Dr. Khalil Afzal	learning	NUST College of E&ME
3	Dr. Abid Khan	Cryptography, Information Security, Security & Privacy Issues in Distributed Computing	COMSATS Institute of Information Technology (CIIT), Islamabad
4	Dr. Arslan Shaukat	Learning Speech and Image Processing	NUST, Rawalpindi, Pakistan.
5	Dr.Hammad A. Qureshi	Data Mining	SEECs, NUST, Pakistan
6	Dr.Mansoor Ahmed	Information Security and Privacy, Semantic Web Technologies	COMSATS Institute of Information Technology (CIIT), Islamabad
7	Dr.Rizwan Bulbul	Data Mining, Data Bases	Institute of Space Technology (IST),Islamabad, Pakistan
8	Dr. M.Usman Akram	Image Processing, Medical Imaging, Pattern Recognition, Biometrics	College of E&ME, NUST.
9	Dr.Farhan Riaz	Image Processing	College of E&ME, NUST.
10	Dr.Shaikh Saaqib Haroon	Computer Networks	UET, Taxila
11	Dr.Sheikh Ziauddin	Image Processing, Computer Vision, Information Security	COMSATS Institute of Information Technology (CIIT), Islamabad
12	Dr. Muazzam A. Khan Khattak	Computer Network	NUST Islamabad.
13	Dr.Jawad Ashraf	Data Mining, Cloud Computing, Semantic Web	Kohat University of Science and Technology
14	Dr. Zahid Halim	Learning, Data Mining	GIKI
15	Dr. Zahoor Jan	Medical Imaging Segmentation, Pattern Mining, Learning	Islamia College University Peshawar, Khyber Pukhtunkhwa
16	Dr.Rashid Ahmad	Machine Learning, Data Mining, Mobile Computing	COMSATS (CIIT), Attock Campus
17	Dr. Waseem Shahzad	Machine Learning, Information Systems and Data mining	FAST (NU)Islamabad.
18	Dr. Faisal Shafait	Machine Learning, Computer Vision, Document Image Analysis, OCR.	NUST
19	Dr.Sajid Anwar	Software Engineering, Software Architecture	Institute of Management Sciences, Peshawar
20	Dr. Farman Ali	E-Learning / Technology Enhanced Learning, Adaptivity	COMSATS (CIIT) Attock
21	Dr. Ahmad R.Shahid	Information Retrieval	COMSATS Institute of Information Technology (CIIT), Islamabad
22	Dr. Asifullah Khan	Pattern Recognition, Digital Watermarking, Bioinformatics, Image Processing	Pakistan Institute of Engineering and Applied Sciences (PIEAS), Islamabad
23	Dr. Hammad Majeed	Evolutionary Computing, Artificial Intelligence, Image Processing	FAST-NU, ISB
24	Dr. M. Imran Malik	Machine Learning, Forensic Analysis, Document Image Processing	SEECs-NUST
25	Dr. Sibte-ul-Hussain	Machine Learning, Computer Vision, Image Processing	NUCES –FAST
26	Dr. Syed Rameez Naqvi	Embedded Systems	COMSATS Institute of Information Technology (CIIT), Wah
27	Dr. Majid Iqbal Khan	Wireless Sensor Networks	COMSATS Institute of Information Technology (CIIT), Islamabad

28	Dr. Sohail Jabbar	Wireless Communication & Networking	National Textile University, Faisalabad
29	Dr. Khalid Mehmood Awan	WiMAX, Wireless Communication, Cellular Communication, MAC	COMSATS (CIIT), Attock
30	Dr. Saleem Iqbal	Wireless Networks, Mesh networks, MAC	PMAS-AAUR, Rawalpindi
31	Dr. Fawad Hussain	Big Data, Machine Learning, Data Mining, Artificial Intelligence, Bioinformatics, Information Retrieval	GIK Institute, Pakistan
32	Dr. Rashid Hussain	Image Processing, Computer Vision, Machine Learning, ERP	Fauji Foundation
33	Dr. Naveed Ejaz	Digital Contents, Visual attention modeling, Image processing	Iqra University, Pakistan
34	Dr. Tassawar Iqbal	Data Analysis, ELearning, HCI and Semantics	COMSATS University Wah Cantt Campus, Pakistan.
35	Dr Muhammad Ikram ullah	Formal Design and Verifications, Machine Learning, Social Network Analysis	University of Gujrat, Pakistan.
36	Dr. Tariq Umer	Vehicular Ad-hoc Networks, Internet of Things, Intelligent Transport system	COMSATS University Islamabad, Wah Campus, Pakistan
37	Dr. Muhammad Tanvir Afzal	Data Science, Information Retrieval, Information Visualization, Scientometrics,	Capital University of Science and Technology(CUST), Islamabad
38	Dr. Nazir Ahmed Malik	Information Security, Intrusion Detection Systems, Cyber warfare	Pak. Navy
39	Dr. Kashif Kifayat	Information Security, intrusion detection, prediction and evasion, system-of-systems security	Air University, Islamabad
40	Dr. Muhammad Shiraz	Telecommunication systems, cloud computing	Federal Urdu University of Arts, Science and Technology, Islamabad
41	Dr. Muhammad Khalil Afzal	Wireless Sensor Networks	Comsats University, Wah Campus
42	Dr. Muhammad Nadeem	Image Processing, Vision	IIUI
43	Dr Asim Munir	Image Processing, Vision	IIUI
44	Dr Humaira Ashraf	Network Security, Information	IIUI
45	Dr. Kifayat Ullah Khan	Data Science, Business Intelligence, Artificial Intelligence	FAST NUCES Islamabad
46	Dr. Fahad Tahir	Image Processing, Pattern Recognition	Air University, Islamabad
47	Dr. Tehmina Amjad	Scientometrics, Bibliometrics, Information Retrieval, Data Mining, Social	Dept of Computer Science and SE IIUI
48	Dr. Bushra Bashir	Wireless Communications	FJWU
49	Dr. Sadaf Abdul Rauf	NLP, Machine Learning	FJWU
50	Dr. Muhammad Zahid Khan	Wireless Sensor Networks	Malakand University
51	Dr. Akhtar Jamil	Deep learning, Machine Learning, Computer vision, Data Science	FAST NUCES Islamabad
52	Dr. Sajjad Khan	IoT, Radio Resource Management, Machine Learning, Edge/Fog	IIUI

53	Dr. Wasi Haider Butt	Application of Artificial Intelligence on Software Engineering	CEME NUST
54	Dr. Mian Muhammad Waseem Iqbal	Information Security, Computer Forensics	MCS NUST
55	Dr. Usman Qayyum	Artificial Intelligence, Computer Vision	NECOP
Department of Mathematics (75)			
SNO.	Name	Research Area	Affiliation
1	Dr. Shamsul Qamar	Computational Fluid Dynamics	Comsats, Islamabad.
2	Dr. Shams Ul Islam	Computational Fluid Dynamics	Comsats, Islamabad.
3	Dr. Muhammad Qasim	Fluid mechanics	Comsats, Islamabad.
4	Dr. Umer Farooq	Fluid mechanics	Comsats, Islamabad.
5	Dr. Salman Amin Malik	Fractional differential equations	Comsats, Islamabad.
6	Dr. Manshoor Ahmed	Computational Fluid Dynamics	Comsats, Islamabad.
7	Dr. Saqib Zia	Computational Fluid Dynamics	Comsats, Islamabad.
8	Dr Akbar Azam	Fuzzy set theory	Comsats, Islamabad.
9	Dr. Saqlain Raza	Statistics	Comsats, Islamabad.
10	Dr. Fahad Munir Abbasi	Fluid Mechanics	Comsats, Islamabad
11	Dr. Muhammad Suleman	Computational Mathematics	Comsats, Islamabad
12	Dr. Rab Nawaz	Wave Mechanics	Comsats, Islamabad
13	Dr. Sabir Ali Shahzad	Fluid Mechanics	Comsats, Sahiwal
14	Dr. Muhammad Bilal Ashraf	Fluid Mechanics	Comsats, Wah.
15	Dr. Babar Ahmad	Computational Fluid Dynamics	Comsats, Wah.
16	Dr. Adnan Jahangir	Wave Propagation	Comsats, Wah.
17	Dr. Muhammad Sabeel Khan	Computational Fluid Dynamics	IST, Islamabad
18	Dr. Danish Ali Sunny	Nonlinear Partial Differential Equations	IST, Islamabad
19	Dr. Muhammad Nawaz	Applied Mathematics	IST, Islamabad
20	Dr. Waqas Sarwar Abbasi	Computational Fluid Dynamics	AIR, Islamabad.
21	Dr. Farman Ullah Khan	Computational Mathematics	HITEC, Wah
22	Dr. Ehnber Naheed	Fluid Mechanics	HITEC, Wah
23	Dr. Rashid Mehmood	Numerical and series solution	HITEC, Wah
24	Dr. Shagufta Ijaz	Fluid Mechanics	HITEC, Wah
25	Dr. Naveed Ahmed	Fluid Mechanics, Numerical	HITEC, Wah
26	Dr. M Asad Zaighum	Functional Analysis	RIPHAH,
27	Dr. Muhammad Yaqub Khan	Applied Mathematics	RIPHAH, Islamabad.
28	Dr. Muhammad Sajid	Applied Mathematics	IIU, Islamabad.
29	Dr. Khadija Maqbool	Fluid Mechanics	IIU, Islamabad.
30	Dr. Muhammad Kamran	Fluid Mechanics	Comsats, Wah.
31	Dr. Azad Akhter Siddiqui	Mathematical Physics	NUST (SNS), Islamabad.
32	Dr. Rashid Farooq	Combinatorial Optimization, Spectral Graph Theory	NUST (SNS), Islamabad.
33	Dr. Tooba Siddiqui	Mathematics	NUST (SNS), Islamabad.
34	Dr. Mubasher Jamil	Mathematical Physics	NUST (SNS), Islamabad.
35	Dr. Muhammad Asif Farooq	Computational Mathematics	NUST (SNS), Islamabad.
36	Dr. Mujeeb-ur- Rehman	Differential Equations	NUST (SNS), Islamabad.
37	Dr. Asim Aziz	Applied Mathematics, Fluid Mechanics	NUST (EME), Islamabad
38	Dr. Noreen Sher Akbar	Fluid Dynamics	NUST (EME), Islamabad
39	Dr. Ahmad Zeeshan	Fluid Mechanics	IIU, Islamabad.
40	Dr. Maliha Rashid	Functional Analysis, Topology	IIU, Islamabad.

41	Dr. Nasir Ali	Fluid Mechanics	IIU, Islamabad.
42	Dr. Tariq Javed	Applied Mathematics	IIU, Islamabad.
43	Dr. Muhammad Naveed	Fluid Mechanics	KFUEIT, Rahim Yar Khan
44	Dr. Abdul Ghaffar	Computational Mathematics	BUIITEMS, Quetta
45	Dr. Masood Khan	Fluid Mechanics	QAU, Islamabad
46	Dr. Tasawar Hayat	Fluid Mechanics	QAU, Islamabad
47	Dr. Muhammad Shabir	Pure Mathematics	QAU, Islamabad
48	Dr. Asif Ali	Group Theory	QAU, Islamabad
49	Dr. Tariq Shah	Cryptography	QAU, Islamabad
50	Dr. Sohail Nadeem	Applied Mathematics	QAU, Islamabad
51	Dr. Muhammad Ayub	Wave motion	QAU, Islamabad
52	Dr. Tayyab Kamran	Pure Mathematics	QAU, Islamabad
53	Dr. Umar Hayat	Algebraic Geometry	QAU, Islamabad
54	Dr. Amjad Hussain	Harmonic Analysis	QAU, Islamabad
55	Dr. Zaheer Abbas	Fluid Mechanics	IUB, Bahawalpur
56	Dr. Syed Tayyab Hussain	Fluid Mechanics	Nust(EME), Islamabad
57	Dr. Irfan Mustafa	Fluid Mechanics	AIOU, Islamabad
58	Dr. Nasir Rehman	Financial Mathematics	AIOU, Islamabad
59	Dr. Abdul Qayyum	Fluid Mechanics	Urdu University, Islamabad
60	Dr. Amer Bilal Mann	Fluid Mechanics	Urdu University, Islamabad
61	Dr. Mariam Sheikh	Fluid Mechanics	University of Sialkot
62	Dr. Taseer Muhammad	Fluid Mechanics	GCWUS, Sialkot
63	Dr. Abuzar Ghaffari	Fluid Mechanics	U o E, Attock Campus
64	Dr. Muhammad Mushtaq	Computational Fluid Dynamics	Comsats, Islamabad.
65	Dr. Muhammad Aslam Noor	Variational Inequalities	Comsats, Islamabad.
66	Dr. Muhammad Bilal	Fluid Mechanics	U o L, Chenab Campus
67	Dr. Aftab Khan	Wave Motion	Comsats, Islamabad.
68	Dr. Rashid Farooq	Game Theory	NUST, Islamabad
69	Dr. Umar Khan	Fluid Mechanics	Comsats, Islamabad.
70	Dr. Yasir Ali	Combinatorial Optimization	NUST, Islamabad
71	Dr. Abdullah Shoaib	Pure Mathematics	RIPHAH, Islamabad.
72	DR. MERAJ MUSTAFA HASHMI	Fluid Mechanics	NUST
73	Dr. Sadia Hina	Fluid Mechanics	FJWU
74	Dr. ZAHID IQBAL	Fluid Mechanics	HITEC University Taxila
75	Dr. Rashid Mahmood	Computational Mathematics	Air University Islamabad

BAHRIA UNIVERSITY KARACHI CAMPUS			
Department of Computer Sciences (28)			
SNO.	Name	Research Area	Affiliation
1	Dr. Waqas Khan	Data Mining and Machine Learning	Centegy Technologies Pvt Ltd
2	Dr. Hammad Raza	Computer Vision, Machine Learning	PNEC, NUST
3	Dr. Taha Jilani	Telecommunication and Networking	PAF-KIET
4	Dr. Hameedullah Kazi	ICT in education, Semantic web and ontologies	ISRA University
5	Dr. Najeed Ahmed Khan	Artificial Intelligence & Computer Vision	NED University of Engineering & Technology, Karachi
6	Dr. Humera Tariq	Biomedical Imaging & Applications	Karachi University
7	Dr. Noman Islam	Cloud Computing, Machine Learning, Deep Learning	Iqra University
8	Dr. Aqeel ur Rehman	ICT , Ontology Engineering,	Hamdard University
9	Dr. Syed Abbas Ali	Machine Learning, Telecommunication and Networking	NED University of Engineering & Technology, Karachi
10	Dr. Yawar Rehman	Computer vision; Feature extraction; Object detection; Occlusion handling; Machine learning; Pattern Recognition	NED University of Engineering & Technology, Karachi
11	Dr Ayaz	Algebra, Stochastics modeling, Fractional Derivatives, Artificial Neural Networks	University of Karachi
12	Dr Faqiha Sultan	Numerical Analysis, Fluid Mechanics, Numerical Computing, Differential Equation	NED University of Engineering & Technology, Karachi
13	Dr Fatima Riaz	Fluid Dynamics, Numerical Analysis, Fractional Differential Equation	Institute of Business Management (IoBM) Karachi
14	Dr Muhammad Malook Rind	Data Networks, Cloud Computing, Pervasive Computing, IoT, Software Defined Network	Sindh Madressatul Islam university (SMIU)
15	Dr. Aftab Ahmed	Artificial Intelligence, Automata, Machine Learning	Sindh Madressatul Islam university (SMIU)
16	Dr Yousuf Tufail	Applied Mathematics, Statistical modelling	NED University of Engineering & Technology, Karachi
17	Dr Muhammad Jamil	Applied Mathematics, Fluid Mechanics with distinction	NED University of Engineering & Technology, Karachi
18	Dr Kamran Zakaria	Applied Mathematics, Statistical modelling	NED University of Engineering & Technology, Karachi
19	Dr Fahim Raees	Applied Mathematics, Statistical modelling	NED University of Engineering & Technology, Karachi
20	Dr Mushtaq Hussain	Applied Mathematics, Statistical modelling	NED University of Engineering & Technology, Karachi
21	DR Murtaza Hussain	Machinery Health Prognostics, Non-linear Stochastics Modelling, Machine Learning	PNEC-NUST Karachi
22	Dr. Rizwan Tirmizi	Applied and Computational Mathematical & Statistical Modelling	Iqra University, DHA, Campus Karachi

23	Dr. Asif Shaikh	Applied and Computational mathematics	Mehran University of Engineering and Technology, Jamshoro
24	Dr. Muhammad Ayaz	Artificial neural network, Stochastic modeling, Fractional derivatives.	University of Karachi
25	Dr Aurang Zaib	Newtonian & non-Newtonian Fluid, Porous media, Heat and Mass Transfer, Boundary layer flow, Nanofluid	The Begum Nusrat Bhutto Women University, Sukkur
26	Dr Syed Muhammad Murshid Raza	Applied & Computational Mathematical & Statistical Modelling	Federal Urdu University of Arts Sciences & Technology Karachi
27	Dr Saima Gul	Applied Mathematics, Statistical modelling	NED University of Engineering & Technology, Karachi
28	Dr Azam Khan	Applied Mathematics, Statistical modelling	NED University of Engineering & Technology, Karachi
Department of Earth & Environmental Sciences (15)			
SNO.	Name	Research Area	Affiliation
1	Dr.Ahmad Hussain	Energy & Environment	Energy & Environment Hamdard University,
2	Dr.Mohammad Shafiq	Glacier Hydrology & Hazards	Space and Upper Atmosphere Research Commission (SUPARCO), Karachi
3	Dr. Hussain. H. Rizvi	Soil Sciences	Space and Upper Atmosphere Research Commission (SUPARCO), Karachi
4	Dr. Muhammad Mansha	Chemical Engineering	Space and Upper Atmosphere Research Commission (SUPARCO), Karachi
5	Dr. Arshad Javed Rizvi	Sociologist	Sir Syed University, Karachi
6	Dr.Gul-e-Rana	Chemical Engineering	Pakistan Council of Scientific and Industrial Research (PCSIR), Karachi
7	Dr.Zafer Shams	Environmental Sciences	University of Karachi
8	Dr.Hina Baig	Marine Sciences	National Institute of Oceanography (NIO), Karachi
9	Dr. Surraya Jabeen	Environ. Sci.	IES, Karachi University
10	Dr. Shah Ali ul' Qadri	Biochemistry	Dept. of Biochemistry Karachi University
11	Dr. Akhtar Muhammad Kasi	Geology	University of Balochistan, Quetta
12	Dr. Abdul Salam Khan	Geology/ Tectonic	University of Balochistan Quetta
13	Dr. Din Muhammad Kakar	Geology/ Seismology	University of Balochistan Quetta
14	Dr. Erum Bashir	Geology	University of Karachi
15	Dr. Moazzam Ali Khan	Wastewater Treatment Technology, Environmental Economics, Climate Change	University of Karachi
16	Dr. Noushaba Hisam	Hydro geophysics, petrology, ground water exploration	Pakistan Petroleum Limited (PPL)
17	Dr. Adnan Khan	Geology , Environmental Geology	University of Karachi
18	Dr. Muhammad Hassan Agheem	Environmental Geology, Hydrology	Centre for Pure & Applied Geology, University of Sindh

19	Dr. Ghulam Murtaza	Hydrology	PCRWR
20	Dr. Faizan-ur-Rehman Qaisar	Hydro-geological Analysis	COMSATS Institute of Information Technology, Abbotabad
21	Dr. Akhtar Hussian Markhand	Geology, Geochemistry	Centre for Pure & Applied Geology, University of Sindh
22	Dr. Nusrat Begum Jalbani	Environmental Sciences, Analytical Chemistry	PCSIR
23	Dr. Aamir Alamgir	Environmental Sciences	Institute of Environmental Studies, University of Karachi
24	Dr. Muhammad Murtaza	Geology	Pakistan Science Foundation
Department of Electrical Engineering (31)			
SNO.	Name	Research Area	Affiliation
1	Prof.Dr. Talat Altaf	Electrical Power systems	Sir Syed University of Engineering and Technology
2	Dr. Mohsin Aman	Electrical Power Systems	NED University of Engineering and Technology
3	Dr. Lubna Moin	Control and Automation	PNEC-NUST
4	Dr.Hashim Raza Khan	VLSI Design and High Speed Semi Conductor for Hetrogenous Networks	NED University of Engineering and Technology
5	Dr. Ghous B Narejo	Renewable Energy	NED University of Engineering and Technology
6	Dr. Bilal Muhammad Khan	Wireless communication	PNEC-NUST
7	Prof. Dr. Zeeshan Ali	Mechatronics	Dawood University of Engineering and Technology
8	Prof.Dr. Engr. Vali Uddin	Control Systems	Hamdarad University, Karachi
9	Dr. Imran Naseem	Pattern Classification and Recognition	PAF-KIET
10	Dr. Shahid Shaikh	Hybrid Systems, Information Theory and Coding	Habib University
11	Dr. Farah Haroon	Control and Communicationb	IIEE
12	Dr. Ghazanfar Monir	Image Processing	MAJU
13	Dr. Sajjad Zaidi	Power Systems	PNEC-NUST
14	Dr. Rehan Qureshi	Communication Networks	SSUET
15	Dr. Pervez Akhter	Electromagnetic Waves	NUST
16	Dr. Arshad Aziz	Network Security	PNEC-NUST
17	Dr. Asim Khwaja	Software Engineering	NUST
18	Dr. Tariq Mairaj	Digital Signal Processing	NUST
19	Dr. Faisal Amir	Telecommunications	NUST
20	Dr. Riaz Jafri	Mechatronics	NED-UET
21	Dr. Faisal Bokhari	Computer Engineering	SSUET
22	Dr. B. S. Chowdhry	Telecommunications	MUET
23	Dr. Mohiuddin Ahmed	Digital Systems	PAF-KIET
24	Dr. Irfan Hyder	Digital Systems	IoBM
25	Dr. Arif Iqbal	Satellite Communications	SUPARCO
26	Dr. Ali Ahmed	Digital Circuit Design, Information Security	Usman Institute of Technology, Karachi
27	Dr. Muhammad Ali	Power Systems	NED
28	Dr. Ishtiaq Makda	Power Electronics	Habib University
29	Dr. Atiq Ur Rehman	Smart Grid, Renewable Energy, HVDC, Power system	BUIITEMS, Quetta

30	Dr. Ali Asghar Memon	Power systems, Switched Reluctance Machine and Inverters	Mehran University of Engineering and Technology, Jamshoro, Sind, Pakistan
31	Dr. Raja Masood Larik	Power systems, Smart Grid, Power System Optimization	NED University of Engineering & Technology, Karachi
Department of Software Engineering (10)			
SNO.	Name	Research Area	Affiliation
1	Dr. Kamran Ahsan	Knowledge Management, and Mobile Computing	Federal Urdu University of Science & Technology
2	Dr. Syed Akhter Raza	Data Science, Data Mining, and Statistical Analysis	Federal Urdu University of Science & Technology
3	Dr. Muhammad Sarim	Digital Image Processing, Computer Vision, and Machine Learning	Federal Urdu University of Science & Technology
4	Dr Jawwad A. Shamsi	Cloud Computing, Software Defined Networks, Mobile	FAST-NU, Karachi
5	Dr. Sufian Hameed	Networking and Information	FAST-NU, Karachi
6	Dr Nadeem Mehmood	Database Systems, Artificial Intelligence, Health-care Information Systems	University of Karachi, Karachi
7	Dr. Syed Saood Zia	Big Data Computing, Artificial Intelligence, Knowledge-based Systems	SSUET
8	Dr Tahir Syed	Machine Learning, Deep Learning	FAST-NU
9	Dr Muhammad Khaliq-ur-Rehman Razi Syed	Internet Security, Vehicular Ad-hoc Networks, Ubiquitous Health Care	MAJU
10	Dr Syed Muhammad Noman Hasany	Natural Language Processing, Semantic Web,	SSUET

BAHRIA UNIVERSITY LAHORE CAMPUS

Department of Computer Sciences (44)

SNO.	Name	Research Area	Affiliation
1	Dr Sagheer Abbas	Integrating Intelligent System design with IoT enabled Framework Adaptive Control Systems	NCBA&E, Lahore, Pakistan
2	Dr Shahid Naseem	Artificial Intelligence Fuzzy Logic	University of Sargodha, Lahore Campus, Lahore
3	Dr Zeeshan Bhatti	Multimedia Animation and Graphics	Associate Professor University of Sindh, Jamshoro
4	Dr Aamir Shahzad	Teleportation and Telecontrol	The University of Lahore, Lahore.
5	Dr Adnan Abid	Information Retrieval, Semantic Analysis, Computer Science Education	University of Management and Technology, Lahore
6	Dr Farooq Ahmad	Algorithms Formal methods for Software Engineering, Formal modeling and simulation	COMSATS Institute of Information Technology, Lahore
7	Dr Amjad Farooq	Software Engineering, Semantic Web Engineering, Bioinformatics	University of Engineering & Technology, Lahore
8	Dr Ansar Siddique	Software engineering	University of Gujrat
9	Dr Abid Sohail	Databases and Operational, Intelligence Data Warehousing, Business Process Management	COMSATS Institute of Information Technology, Lahore, Pakistan
10	Dr Syed Muhammad Ali	Computer Vision, Machine Learning	Punjab University College of Information Technology
11	Dr Muhammad Kamran Malik	Natural Language Processing, Machine Learning, Deep Learning	Punjab University College of Information Technology (PUCIT), Lahore
12	Dr Muhammad khurram Shahzad	Databases, Data Warehousing	Punjab University College of Information Technology (PUCIT), Lahore
13	Dr Muhammad Shahid Farid	Information Fusion, Blur Segmentation, Gait Biometrics	University of the Punjab, Samsani Road, Lahore
14	Dr Shoaib Farooq	Programming Language Design and Evaluation Pedagogical Issues	University of management and Technology Computer Science Department
15	Dr Yaser Daaniyal	Computer Security, Pattern Recognition, Image Processing	University of management and Technology Computer Science Department
16	Khawaja Muhammad Fahd	Theoretical Computer Science	Riphah International University
17	Dr. Amjad Iqbal	Artificial intelligence Pattern Recognition Theoretical Computer Science	Associate Professor University of Central Punjab Lahore
18	Dr M.Hasanain Chaudary	Broadband Wireless Networks & Signal Processing, Cognitive Radio	COMSATS Institute of Information Technology Lahore
19	Madiha Khalid	Parallel algorithms Frameworks for heterogeneous systems Pattern Matching	Lecturer Punjab University College of Information Technology, Lahore
20	Mehwish Kayani	Data Science, Data Analytics Recommender systems	University of Punjab, Lahore Pakistan
21	Muhammad Shahzad	Natural Language Processing, Machine Learning	University of the Punjab, Lahore, Pakistan
22	Muddassira Arshad	Human Computer Interaction, Natural Language Processing	Punjab University, Lahore

23	Saadia Shahzad	High Performance Computing and Computer Vision	University of the Punjab, Lahore - Pakistan
24	Abdul Karim	Management Information Systems	University of Central Punjab
25	Ali Saeed	Web Programming, Data Mining	Lecturer CS & IT
26	Dr. Muhammad Naveed Yasir	Data Decomposition Techniques, Signal, Processing and Decomposition	University of Lahore, Lahore
27	Dr. Tayyaba Anees	Communication Systems, SOA, Distributed and Parallel Systems	University of Management and Technology, Lahore
28	Dr. Furkh Zeshan	Service-Oriented Computing Embedded and Real-Time Computing	COMSATS University, Lahore Campus
29	Dr. Amna Khan	Robotics, Image Processing, Computer Vision	Comsats University
30	Dr. Sheraz Naseer	Networks, Information Security, Network Anomaly Detection	University of Management and Technology, Lahore
31	Dr. Muzammil Hussain	Networks	University of Management and Technology, Lahore
32	Dr. Shahzad Sarwar	Internet of Things (IoT) Machine-to-Machine (M2M) Communications	Punjab University College of Information Technology
33	Dr. Faisal Aslam	Cryptography, Network protection	Punjab University College of Information Technology
34	Dr. Adnan Nabeel Qureshi	Machine Learning and Medical Image Processing	Faculty of IT, University of Central Punjab
35	Dr. Arfan Ali Nagra	Intelligent computing and intelligent information processing	Lahore Garrison University`
36	Dr. Muhammad Khurshid Asghar	Machine Vision, Machine Learning,	Head Deptt of Computer Science/ Director QEC University of Okara
37	Dr. Fatima Sabir	Software Engineering, Web Programming , Data Mining	Sharif College of Engineering and Technology
38	Dr. Faiza Iqbal	Trust Models for IoT, Routing Protocols for Wireless Networks and IoT,	University of Lahore, Defense Road Campus
39	Dr. Muhammad Khawar Bahir	Image Processing , Animal Sciences	University if Vetenary and animal Science Lahore
40	Dr. Allah Buksh	Image Processing, Computer Vision, Machine Learning	The University of Lahore
41	Dr. Hafiz Mahfooz Ul Haque	Context-Aware System, Multi-Agent System, Semantic Web,	The University of Lahore
42	Dr. Bilal Shoaib Khan	Statistical Modeling, Artificial Intelligence	Assistant Professor Minhaj University, Lahore
43	Dr. Kashif Zafar	Robotics, Data Mining, Machine Learning	Professor NU-Fast, Lahore
44	Dr. Nosheen Sabahat	Software engineering, Quality Assurance	Forman Christian College university
45	Dr. Tariq Umer	Computer Network, Communication systems	Department of Computer Science, Comsats

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