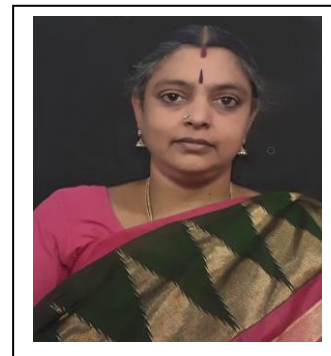


Curriculum Vitae of Dr.B.NALINI



Present Designation : Assistant Professor of Physics

Present Address : Avinashilingam Institute for Home Science and Higher Education for Women (Deemed University), Coimbatore 641 043

Residence: 2/6, 10th Cross Main Road
Vadavalli, Coimbatore- 46

Date of Birth : 01.03.1969

Mobile No. : 9486243092

E mail : ijyothsnalalin99@gmail.com;
alin99@rediffmail.com

Area of Specialisation : Defect Solid State Physics –Solid State Ionics,
Lithium Batteries, Supercapacitors, Nanotechnology,
Energy Storage Devices , White LEDs

Educational Qualification

S.No.	Qualifications/ Examination Passed (with main Subject)	University/ Institution	Year of Passing	% of Marks / Grade Class/Rank	Remarks
1	Ph.D (PHYSICS)	Bharathiar University	1997	--	
2	M.Sc., (PHYSICS)	Bharathiar University	1991	First class (72.70 %)	
3	B.Sc., (PHYSICS)	PSGR Krishnammal College for Women, Coimbatore (Affl to Bharathiar University)	1989	First class with Distinction (77.09 %)	Sixth Rank in Bharathiar University
4	H.Sc.,	St. Aloysius Higher Secondary School, Dharapuram	1986	First class with Distinction (89.90%)	
5	S.S.L.C	Government Higher Secondary School, Dharapuram	1984	First class (68.00%)	
6	M.S Education Management	Alagappa University	2010	Second class 57.70%	Distant Edn. mode

Post Doctoral Work :

(i) **STA Fellow**, Japan - Jan. 2000 – Jan. 2002 – National Institute for Advanced Industrial Research and Technology – Kansai Centre, Ikeda (Formerly called as Osaka National Research Institute)

(ii) **AIST Fellow** – Apr. 2004 – May 2006 – Nanotechnology Research Institute, National Institute for Advanced Industrial Research and Technology- Tsukuba central V, Tsukuba.

Experience: (19Y1M28D)

S.No	Level	Name of institution	Position/ Designation	Duration		Years of experience
				From	To	
1.	UG & PG	Avinashilingam Institute for Home Science and Higher Education for Women University, Coimbatore	Assistant Professor	07 December 2011	Till date (16.11. 2021)	9 years 10 month 9 days
2.	UG & PG	Karunya University	Professor and Head, Centre for Research in Nanotechnology	12 Nov.2009	06 Dec 2011	2 Yrs 25 days
3.	UG & PG	Karunya University	Professor of Physics	01 June 2008	11 Nov.2009	1 Yr 5 Months 10 days
4.	UG & PG	Karunya University	Associate Professor of Physics	12.Jun 2006	31 May 2008	1 Yr 11 Months 19 days
5.	Research	Nanotechnology Research Institute (NRI) , Tsukuba, Japan	AIST Fellow	1 st Apr 2004	31 May 2006	2 Yrs 2 Months
6.	UG	Dr.Mahalingam College of Engineering and Technology, Pollachi	Lecturer	24 July 2002	14 May 2003	10 Months 10 days
7.	Research	AIST, Kansai Centre Ikeda Osaka Japan	STA Postdoctoral Fellow	10 Jan 2000	9 Jan 2002	2 Yrs
8.	Research	Department of Physics Bharathiar University	Research Associate	1 Mar 1999	6Jan 2000	10 Months 5 days

9.	UG	Sri Nehru Maha Vidhyalaya College of Arts and Science, Coimbatore	Lecturer	7 Sep 1998	1Mar 1999	6 Months
10.	UG	Maharaja College of Arts and Science for Women, Perundurai	Lecturer	24 Jul 1997	3 Sep 1998	1 Year 1 Months 10 days

Research Supervision :

S.No	Name of the Institutions	Research Guidance (Degree Awarded) No.of Candidates				
		M.Tech.	M.Phil		Ph.D	
			Completed	Ongoing	Completed	Ongoing
1	Karunya University	8	1	-	2	-
2.	Avinashilingam Institute for Home science and Higher Education for Women (Deemed University)	1	4	-	1 + 1 (Co-Guide)	4 (1 Synopsis Submitted)

Experience (Administration): --

Sl. No.	Position held	Name of the Institution	Duration		Years of experience		
			From	To	Y	M	D
1)	Professor and Head, Centre for Research in Nanotechnology	Karunya University, Coimbatore	12.11.2009	06.12.2011	2	0	19
2)	Member, Research Management Policy Committee	Karunya University, Coimbatore	10.01.2007	09.01.2008	1	0	0
3)	Member, Admission Committee	Avinashilingam University, Coimbatore	May 2012	June 2012	0	2	0
4)	Member, Admission Committee	Avinashilingam University, Coimbatore	May 2017	June 2017	0	2	0
5)	Member, Examination Committee	Avinashilingam University, Coimbatore	15.11.2012	05.12.2012	0	0	20
6)	Member, Examination Committee	Avinashilingam University, Coimbatore	22.04.2013	11.05.2013	0	0	20
7)	Teacher Incharge	Avinashilingam University, Coimbatore	10.12.2011	Till date (30.10.2018)	6	10	20

Other Academic services:

S.No	Nature of Service	Institution/ University	Duration		Total Years of experience
			From	To	
1.	Chairman Board of Studies	Karunya University, Physics	15.02.2007	14.02.2008	1 Year
2.	Member Board of Studies	Karunya University, Physics	30.01.2010	29.01.2010	1 Year
3.	Member Board of Studies	Karunya University Nanotechnology	30.01.2010	29.01.2010	1 Year
4.	Member Board of Studies	PSGR Krishnammal College for Women	24.01.2011	23.01.2013	2 Years
5.	Organizing member – Research convention	Avinashilingam Institute for Home Science and Higher Education for Women	Dec.2011	May 2015	3 years
6.	Member Question Paper setting Board	Anna University of Technology, Tiruchirapalli	02.09.2011		
7.	Member Question Paper setting Board	Kalasalingam University	17.08.2011		
8.	Member Question Paper setting Board	Karunya University	2006	2010	4 Years
9.	Selection Committee	-	-	-	-
10.	Member – Doctoral committee	Karunya University for			
11.	Experts Committee	K. Prabhu	2011	2017	6 years
12.		J.Grace Jency Gnanammal	2010	2011	1 year
13.		Parameswari	2006	2010	4 years
14.		Anna University- A. Leggins	2015	2017	2 year
15.	Purchase committee – Technical Expert	XRD, FTIR, UV-Vis spectro photometer, TNAU	2011	2013	2 years

16.	Member- Research Policy Committee	Karunya University	2007	2007	1 Year
17.	TNPSC Chief Examiner	Avinashilingam Institute for Home Science and Higher Education for Women	2017	2018	2 times

Other Experiences:

S.No	Positions held	Name of the Institutions	Period		Years of experience
			From	To	
1	NSS Assistant Programme Officer	Avinashilingam Institute for Home Science and Higher Education for Women Deemed University	Dec 2011	May 2015	3 Yrs 3 Months
2.	NSS Programme Officer	Avinashilingam Institute for Home Science and Higher Education for Women Deemed University	2018	June 2021	3 Yrs

Reviewer: Journal of Alloys and Compounds
Ceramics International
Journal of Applied Electrochemistry
Journal of Electronic Materials
Sustainable Energy and Fuels
Journal of Solid State Electrochemistry
Emerging Materials Research
Materials Letters

Projects undertaken

S.No	Title of the Projects	Sanctioning Authority	Funds allotted
1.	Concerted Approach to Diagnose and Manage Anemia through Development of Cost- Effective Point of Care Devices Team Member – Co-PI in Workgroup Impedance Sensing kit – Hookworm DNA biosensor - FecAsmart	DST-BDTD	Rs. 585.23 (Sanctioned Rs.125 Lakhs for 1 year – funds to be received)
2.	Development of ZnCo2O4 based Electrochromic Battery – Minor Research Grant -PI	Avinashilingam Educational Trust	Rs. 1 Lakh
3.	Novel Nanogranular film for solid state white light BRNS/2012/ /2292	BRNS	Rs.24.9 Lakhs
4.	A project titled 'Multidisciplinary Research on Micro Batteries for Information Technology' submitted under India-Japan Strategic Co-operation programme (DST-IST) -2007 has been approved by, New Delhi, Vide letter No. INT/JAP/JST/COP/2007, dated 4.7.2008. P.I. : Prof.Kawamura Junichi, Tohoku University, Sendai	DST- Indo-Japan Cooperative Scheme	Rs.1 Cr.
5.	PG Programme on Nanotechnology (M.Tech Nanotechnology) -- SR/NM/PG—4/2008 dated 25-02-2009	DST- Nanomission	Rs. 3.02 crores

Patent – Project outcomes	Details
Carbon Nanotube containing Thin film, method for manufacturing the thin film and photoelectric conversion material, photoelectric transducer, electroluminescent material and electroluminescent device equipped with thin film <i>S.Kazoui, N.Minami, Y.Kim and B.Nalini</i>	Patent Publication no. JP2006265035(A) publication date 2006 – 10-05 Classification - international: C01B31/02; H01L31/09; H01L33/02; C01B31/00; H01L31/08; H01L33/00 - European: Application number: JP20050085282 20050324 Priority number(s): JP20050085282 20050324
A Method of Making Symmetric/ Asymmetric Supercapacitor devie using Porous Carbon Derived from Prosopis juliflora and Product thereof Dr.B.Nalini and Mrs.G.G.Soundarya	Patent Published – App.No. 202241007161 on 04.03.2022

Publications : (Books)

S.No	Title of the Books	Publisher
1.	Proceeding of the National Workshop on Solid State Ionics and its Applications	Bharathiar University, 2002
2.	Solid State Ionics and its Applications	Macmillan India Ltd. (2006) ISBN – 10: 1403-93023-6 (Vol.I)
3.	Proceedings of National Seminar on Nanoscience and Technology	Karunya University, 2007
4.	Proceedings of 11 th Asian Solid State Ionics : New materials for Pollution free energy devices,	Macmillan India Ltd (2008) ISBN : 10: 0230-63567-9 ISBN 13: 978-0230-63567-8
Chapters in Book		
1.	Proceedings of Conference on Electrical Insulation and Dielectric Phenomena: Transport properties of a ternary system AgI-PbI ₂ -CuI	IEEE, 654-657, 1995 ISBN: 0-7803-2931-7
2.	Proceedings of Conference on Electrical Insulation and Dielectric Phenomena: Dielectric properties of superionic conductor CsZnBr ₃	IEEE, 650-653 1995 ISBN: 0-7803-2931-7
3.	Proceedings of 5 th International Conference on Properties and Applications of Dielectric Materials: Dielectric properties of the system AgI-CuI-CsI	IEEE, 62-65, May 1997 ISBN: 0-7803-2651-2

4.	Proceedings of 5 th International Conference on Properties and Applications of Dielectric Materials:Electrical properties of the substitutional compounds based on silver iodide	IEEE, 526 – 529, May 1997 ISBN: 0-7803-2651-2
5.	Proceedings of 14 th Asian Conference on Solid State Ionics Investigations on pure and Cu doped nanocrystalline LLTO for Lithium Ion Batteries	Research Publishing, Singapore ISBN: 13- 978-981-09-1137-9 ISBN: 10-981-09—1137-8 ,2014
6.	Proceedings of National Conference on Packaging Techniques to Hasten Emergency Food Relief: Synthesis of Eco- friendly Plant mediated Nanoparticles from <i>Leucas aspera</i> (Thumbai) and its Antimicrobial Properties	Pack 4 Relief-Packaging Techniques to hasten Emergency Food Relief, Elsevier Publications, 168-169, 2014 ISBN 9789351073017
7.	International Conference on Fascinating Advancements in Mechanical Engineering (FAME2016): Analysis of Tribological Properties of Lubricating Gear oil with Nanosilica Particles	MepCo Schlenk Engineering College, 497 – 502, March 2016
8.	AIP Conference Proceedings Accomplishment of highly porous-lithium lanthanum titanate through microwave treatment	DAE SOLID STATE PHYSICS SYMPOSIUM 1731 (1), 050079, 2016 http://dx.doi.org/10.1063/1.4947733 ISBN 978-0-7354-1378-8
9.	Proceedings of ICMR Sponsored Issues and Technological approaches in Medicine, CITAM 2016, <i>Glycyrrhiza glabra</i> - a natural panacea against diarrhoea and cancer	Department of Science and Humanities, Faculty of Engineering, Avinashilingam Institute for Home Science and Higher Education for Women 123-128, 2016
10.	AIP Conference Proceedings Sn _{1.5} Sb ₃ Ce _{0.5} as effective anode material for Li ion batteries: electrochemical and electrical analyses	AIP Publishing , 1942, 140073, 2018 ISBN: 978-0-7354-1634-5
11.	Materials Today: Proceedings:Investigations on The Effect Of Sm ³⁺ Doping on The Electrochemical Performance of The Li ₂ FeSiO ₄ /C Nanocomposite Cathode Material for Lithium Ion Batteries	Elsevier, 8, 346-351, 2019 ISSN: 2214-7853

12.	A correlative study on electrochemical and optical properties of LLZO ($\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$) garnet electrolyte	Materials Today: Proceedings, 2020, ISSN: 2214-7853
13.	Book entitled "Research methodology" Impedance Spectroscopy – A Tool for Understanding Material towards Application	Akinik Publishers, pg.no.276- 295, 2021 ISBN: 978-93-90420-52-0

Research Papers / Publication of the Articles: with ISSN Numbers

S.No	Title of the Article	Journal in which published	Month & year of publication	ISSN No.	IF Thomson Reuter (if not mentioned)
1.	Influence of reducing agents in nanoparticle synthesis: SnO_2 -ZnO composite anode	Applied Organometallic Chemistry	doi.org/10.1002/aoc.6714 2022	1099-0739	4.105
2.	Striking Performance of Plasma Synthesized Carbon from Prosopis Juliflora in Supercapacitor application	Journal of Physics D: Applied Physics	55,8, 085501, 2022	0022-3727 (print) 1361-6463 (web)	3.169
3.	Fine-tuning of stannic oxide anodes' material properties through calcination	Journal of Materials Science: Materials in Electronics	32,23, 27384 - 27397, 2021	1573-482X (electronic) 0957-4522 (Print)	2.478
4.	Fine-tuning of stannic oxide anodes' material properties through calcination	Journal of Materials Science: Materials in Electronics	32, 27384–27397, 2021	0957-4522 (print) 1573-482X (electronic)	2.478
5.	Structural rearrangement by Ni, Cr doping in zinc cobaltite and its influence on supercapacitance	Ceramics International	47 (13), 18635-18645, 2021	0272-8842	4.527
6.	Free-standing, high Li-ion conducting hybrid PAN/PVdF/ $\text{LiClO}_4/\text{Li}_{0.5}\text{La}_{0.5}\text{TiO}_3$ nanocomposite solid polymer electrolytes for all-solid-state batteries	Journal of Solid State Electrochemistry	25 (3), 905-917, 2021	1433-0768 (electronic) 1432-8488 (Print)	2.647
7.	Synthesis and optimization of silver nanoparticles	Journal of Food, Agriculture & Environment	Vol.19 (1):59-64, 2021	1459-0255 (Print) 1459-0263 (electronic)	-

8.	Effects of bi-dopants Ni and Fe on tin antimonide alloy anodes: physico and electrochemical studies	Journal of Physics D: Applied Physics	54 (10), 105503, 2020	0022-3727 (print) 1361-6463 (electronic)	3.169
9.	Performance enhancement of PVDF/LiClO ₄ based nanocomposite solid polymer electrolytes via incorporation of Li _{0.5} La _{0.5} TiO ₃ nano filler for all-solid-state batteries	Macromolecular Research	28 (8), 739-750, 2020	2092-7673 (Electronic) 1598-5032 (Print)	2.227
10.	Compound semiconducting SnSb alloy anodes for Li ion batteries: effect of elemental composition of Sn-Sb	Semiconductor Science and Technology	35 (4), 045008, 2020	1361-6641 (Electronic) 0268-1242 (Print)	2.654
11.	Insight into cations substitution on structural and electrochemical properties of nanostructured Li ₂ FeSiO ₄ /C cathodes	Journal of the American Ceramic Society	103 (3), 1685-1697, 2020	0002-7820 (Print) ; 1551-2916 (Electronic)	3.094
12.	Augmented conductivity in Li _{3x} La _{2/3-x} TiO ₃ nanoparticles: All-solid-state Li-ion battery applications	Journal of Materials Science: Materials in Electronics	31 (2), 1343-1354, 2020	0957-4522 (print) 1573-482X (Electronic)	2.478
13.	Correlation study on temperature dependent conductivity and line profile along the LLTO/LFP-C cross section for all solid-state lithium-ion batteries	Solid State Ionics	341, 115032, 2019	ISSN: 0167-2738	3.785
14.	Electrochemical Analysis of the Carbon-Encapsulated Lithium Iron Phosphate Nanochains and Their High-Temperature Conductivity Profiles	ACS Omega	3 (6), 6446-6455, 2018	ISSN: 2470-1343	3.512
15.	Structure, dielectric, and temperature-dependent conductivity studies of the Li ₂ FeSiO ₄ /C nano cathode material for lithium-ion batteries	Ionics	1-16, 2018	0947-7047	2.347
16.	A novel method for generating tricolor emission for white LED application	Journal of Materials Science: Materials in Electronics	Vol.29, Iss.14, pg. 12288–12299, July 2018	ISSN: 0957-4522	2.019
17.	Study on the influences of calcination temperature on structure and its electrochemical performance of Li ₀ FeSiO ₄ /C nano cathode for Lithium Ion Batteries	Journal of Alloys and Compounds	740, 1116-1124, 2018	0925-8388 (Print) 1873-4669 (Electronic)	3.133
18.	Electro analytical studies on indium incorporated SnSb alloy anode for Li-ion batteries	Journal of Electroanalytical Chemistry	801, 459-465 2017	1572-6657	2.822

19.	Investigations on the influence of Sm ³⁺ ion on the nano TiO ₂ matrix as the anode material for lithium ion batteries	Journal of Alloys and Compounds	Vol 710, 205-215, 2017	0925-8388 (Print) 1873-4669 (Electronic)	3.133
20.	Performance of SnSb:Ce, Co alloy as anode for lithium-ion batteries	Journal of Solid State Electrochemistry	Vol 21 Issue 4, pg 1027 – 1034 Apr 2017	1432-8488 (Print) 1433-0768 (Electronic)	2.316
21.	Spark plasma-sintered Sn-based intermetallic alloys and their Li-storage studies	Journal of Solid State Electrochemistry	20(6) (2016) 1743 -1751	1432-8488 (Print) 1433-0768 (Electronic)	2.327
22.	Study of temperature dependent transport properties in nanocrystalline lithium lanthanum titanate for lithium ion batteries	Journal of Physics and Chemistry of Solids	91 (2016) 114-121	0022-3697	1.853
23.	Investigation on spin coated LLTO thin film nano-electrolytes for rechargeable lithium ion batteries	Ceramics International	41 (2015) 13823–13829	0272-8842	2.758
24.	Synthesis and characterization of thermally evaporated (Bi,Sb) ₂ S ₃ thin films	Journal of Optoelectronics and Advanced Materials	Vol. 17, No. 1-2, January – February 2015, p. 145 - 150	1454- 4164	0.429
25.	Electrochemical studies of CNT/Si–SnSb nanoparticles for lithium ion batteries	Materials Research Bulletin;	70 (2015) 478–485	0025-5408	2.435
26.	Electrochemical investigation of SnSb nano particles for lithium-ion batteries	Materials Letters	150, 18580 (2015) pg. 24 - 27	0167-577X	2.437
27.	Study on nanocoated pet bottles of tomato puree against Enteropathogenic bacteria	Integrated Food Nutrition Metabolism – Open Access text , London, UK	2:DOI: 10.15761/IFNM.1000124 2015	2056-8339 (Electronic)	
28.	Analysis of conventional and microwave synthesized tin antimony nano particles	Journal of Chemical and Pharmaceutical Sciences Special Issue	11: October 2015 Page 99	0974-2115	
29.	Sn based Intermetallic Alloy Anode Materials for the application of Lithium Ion batteries	Electrochimica Acta	161(2015) 261-268 Feb 2015	0013-4686	4.803
30.	Electrical and Magnetic effect of transition metals in SnSb nanoalloy	Applied Surface Science	Vol. 311 (May 2014) PP 503-507	0169-4332	3.150
31.	Tribological study of lubricating gear oil with nanosized Al ₂ O ₃ additives	Technology Letters	March:2014 Volume:01 Number:03	2348- 8131	

32.	Shelf –life Study of Nanocoated Zip & Lock Covers with Tomato Puree (<i>Solanum lycopersicum</i>) against Enteropathogenic Bacteria	International Journal of Green and Herbal Chemistry	2014 – 2015; Sec. B; Vol.4, No.1, 110-117	2278-3229 (Electronic)	2.205 (ISI)
33.	Structural and Optical Properties of Pure and Me Doped CdS Nanocrystalline Thin Films Prepared by Chemical Bath	Asian Journal of Chemistry	25, S179 – S184, 2013	0975-427X (Electronic) 0970-7077 (Print)	UGC Approved Jour, No, 8774
34.	Carbothermal reduction of sillimanite in a transferred arc thermal plasma reactor	International Journal of Refractory Metals and Hard Materials	36, pp.174 – 178, 2013	0263-4368	2.404
35.	Fabrication and characterization of Flexible thin film depletion mode field effect transistor (FET) using High k dielectric Nano zirconia	International Journal of Emerging Trends in Engineering and Development	Vol 2, Issue 3 pp.295 -299, 2013	2249- 6149	4.364(SJIF)
36.	Photocatalytic inactivation of gram positive and gram negative bacteria by reactive plasma processed nanocrystalline TiO ₂ powder	Current Applied Physics,	13 (3) 510-516 2013	1567- 1739	2.144
37.	Investigations of Pure and Ag doped Lithium Lanthanum Titanate (LLTO) Nanocrystalline electrolyte for rechargeable lithium ion batteries	Ceramics International	39 (2), 947 – 952 2013	0272-8842	2.758
38.	Structural and optical properties of thermally evaporated BiSb ₂ S ₃ thin film	Advanced Materials Research	Vol.678 pp.123-130 2013	1662- 8985	-
39.	Size dependence of transport properties in Ce _{1-x} Zr _x O ₂ (x = 0.2 – 0.8) solid solutions	International Journal of Applied Physics,	15274 2012	2249- 3174	-
40.	The Best route to synthesis SnSb nanoparticles with low distribution size.	International Journal of Nanoscience and Nanotechnology	Vol 2(3), 217-224, 2011	0974- 3081	-
41.	Nanosized High k dielectric material for FINFET,	Integrated Ferroelectrics: An International Journal	1607-8489, Volume 121, Issue 1, Pages 31 – 35, 2010	1058- 4587	0.367
42.	Midgap luminescence centers in single-wall carbon nanotubes created by ultraviolet illumination	Appl. Phys. Lett.,	89 (17), 173108 2006	0003-6951	3.495
43.	Cellulose derivatives as excellent dispersants for Single Wall Carbon Nanotubes as demonstrated by Absorption and Photoluminescence Spectroscopy	Appl. Phys. Lett.,	88 093123 2006	0003-6951	3.495

44.	Near-infrared electroluminescent devices using single-wall carbon nanotubes thin films	Appl. Phys. Lett.	87 211914 2005	0003-6951	3.495
45.	Near-infrared photoconductive and photovoltaic devices using single-wall carbon nanotubes	J. Appl. Phys.	98 084314 2005	0021 -8979	2.176
46.	Aging effect of 8mol% Yttria Stabilized Zirconia Ceramics with difference Microstructures	Journal of Electrochem. Soc.,	151(8) A 1286 2004	0021- 891X	3.662
47.	All solid-state lithium secondary battery with ceramic/ polymer composite electrolyte	Solid State Ionics	152 – 153 137 2002	0167- 2738	2.354
48.	Characterization of Europium substituted Lithium Lanthanum titanates	Solid State Ionics	154 – 155 629 2002	0167- 2738	2.354
49.	Preparation of fine-grained BaTiO ₃ Ceramics by Spark Plasma Sintering	J.Mater.Res.	17(3) 575 2002	0884- 2914	1.495
50.	Improvement of Mechanical Strength of 8mol% Yttria Stabilised Zirconia Ceramics by Spark Plasma Sintering	J. Electrochem. Society	149(4) A455 – A461 2002	0021- 891X	3.662
51.	A Study of a Tertiary Superionic system AgI-PbI ₂ -CsI	Solid State Ionics	86 251 1996	0167- 2738	2.354
52.	A Study of a Fast ionic conductor AgI-CsI	physica status solidi (b)	197 13 1996	1521- 3951	1.795
53.	A Study of a Fast ionic conductor Ag _{1-x} Cu _x I	Crystal Research and Technology	29, 439, 1994	0232- 1300	1.0
54.	A Study on Cationic Substituted Silver iodide	Crystal Research and Technology	28, 1, 1993	0232- 1300	1.0

Events attended : (Training undergone/ Invited lectures delivered)

S.No	Nature of Activity	Theme	Name of the Institutions	Duration	
				From	To
1.	National Seminar on Battery Materials (Invited Lecture)	Solid State Battery Materials	St.Joseph University, Nagaland	10.03.2022	
2.	Indo – Norwegian International online conference on Functional materials for energy, environment and biomedical applications (FARAON - 2022) (Chaired a Session)	Energy Storage	Madurai Kamaraj University and Institute for Energy Technology (IFE) and University of Oslo	03.02.2022	

3.	4 th Refresher Course in Material Sciences: Recombinant Memetics (Invited Lecture)	Batteries Away from Lithium	UGC- HRDC, University of Calicut	14.12.2021	
4.	Refresher Course (Invited Lectures)	Prospects of Solid State Batteries	UGC- HRDC, Bharathiar University	15.09.2021 (2 Sess.)	
5.	Refresher Course	Physics	UGC- Human Resource Development Centre , Bharathiar University	22.01.2020	04.02.2020
6.	National Conference (Chaired a Session)	-DST – SERB Sponsored National Conference on Transition Metal Based Sodium ion batteries (SIBs) for Ultrafast Energy Storage Systems	Dr.N.G.P.Institute of Technology, Coimbatore -	13.11.2019	
7.	Seminar (Invited Lecture) -	Technical Seminar on Scope of Engineers in Nanotechnology,	Hindusthan Institute of Technology, Coimbatore	15.10.2019	
8.	National Conference (Invited Lecture)	TNSCST Sponsored National Conference on The Advancements & Innovations in Nanomaterials and Material Science for Environmental Applications	PKR Arts and Science College, Gobi	13.09.2019	
9.	Seminar (Invited Talk)	Nanoworld for Engineers	Kongu Arts and Science College, Erode	04.07.2019	
10.	Faculty Development Programme - Invited Lecture	-AICTE Sponsored One week short term course (QIP) on Nanomaterials for frontier Applications,	Coimbatore Institute of Technology, Coimbatore	06.06.2018	
11.	Orientation Course	Orientation Course	UGC- Human Resource Development Centre, Bharathiar University	17.11.2017	14.12.2017
12.	International Conference	15 th Asian Conference on Solid State Ionics	Indian Institute of Technology, Patna	27.11.2016	30.11.2016
13.	Workshop	Mechanical Property Analyses for Nano Materials	Indian Institution of Production Engineers and Karunya Univ.	19.06.2016	-

14.	Seminar (Invited lecture)	Advanced Materials for Mechatronics Nanotechnology Applications	Nehru College of Engineering and Research Centre, Thrissur	14.3. 2016	
15.	International Conference	Energy, Environment and Engineering	Coimbatore Institute of Technology, Cbe	29.02.2016	02.03.2016
16.	Workshop	Frontier Materials	Royal Society of Chemistry & Avinashilingam University	15.02.2016	-
17.	Seminar (Invited lecture)	Recent advances in Physics	Vellalar College for Women Erode	17.12.2015	
18.	Faculty Development Programme (Invited Lecture)	Characterization of materials using X- Ray diffraction	Coimbatore Institute of Technology	27.11.2015	
19.	Training Programme (Invited Lecture)	Training Programme on Impedance spectroscopy	Materials Research Centre	12.10.2015	
20.	Orientation Training	Empanelled Training Institution- National Service Scheme	Avinashilingam University	21.04.2014	27.04.2014
21.	Seminar (Invited Lecture)	Nanobiomaterials 2014	Anna University Regional Centre, Cbe	14.3.2014	
22.	Training Programme	Training Programme on Public speaking , Event Management & Team work	Silver Tongue	19.11.2013	20.11.2013
23.	National Conference	Tuning Nanoscientific Research towards Industrial Needs	Mother Teresa Women's Universtiy, Kodaikanal	08.10.2013	12.10.2013
24.	Workshop (Invited lectures (6 lectures))	Workshop on "Experimental Physics"	PSGR Krishnammal College for Women	04.03.2013	06-03-2013
25.	Seminar (Invited Lecture)	Nanoscience and Technology	Sree Narayana Gurukulam College of Engineering, Kolenchery, Kerala	16.02.2013	
26.	Workshop	Intervention of Science and Technology in Traditional Crafts	Karunya University, Coimbatore	14.12.2012	
27.	Symposium	An interface of Biology with Nanotechnology	Nirmala College for Women	8.10.2012	
28.	Workshop	Innovations in Teaching Methods	Avinashilingam University, Coimbatore	28.9. 2012	

29.	Workshop	Powder, Nano and thin film characterization using X-ray diffraction techniques	Avinashilingam University, Coimbatore	26.9. 2012	27.9.2012
30.	Seminar (Guest lecture)	Micro and Nanotechnology – Transforming the Market to medical applications	Kongu Engineering College Erode	19.05.2012	
31.	Workshop	Enhancing Educational Ecosystem	Avinashilingam University, Coimbatore	9.3. 2012	10.3. 2012
32.	International Conference	4 th Indo-Korean Conference on Integrative Bioscience Research opportunities and challenges	Avinashilingam University, Coimbatore	10.02.2012	11.02. 2012
33.	Faculty development programme	Harmony in Work-Life	Avinashilingam University, Coimbatore	23.1. 2012	-
34.	Workshop	Nanomeasure 2011	N.G.M.College Pollachi	15.9. 2011	16.9. 2011
35.	International Conference (Invited Talk)	Advanced Materials and its Applications (ICAMA 2011)	Kalasalingam University	4.3.2011	5.3.2011
36.	Workshop	Recent trends in emerging chemistry	Sri G.V.G Visalakshi College for Women, Udumalpet	29.01.2011	
37.	Short term training Course (Invited talk)	Perspectives in Nanoscience and Nano-biotechnology (KU-PNSNBT 2010)	Karunya University, Coimbatore	29.11.2010	10.12.2010
38.	Soft skill development programme	Labview Core I and Core II	NI Instruments Ltd, Bangalore	22.11.2010	26.11. 2010
39.	International Conference	International Conference on Nanoscience, Nanotechnology and Advanced Materials, Vizhakapatnam	Gitam University, Vizhakapatnam	17.11.2010	19.11.2010
40.	Workshop	Nanoscience and Nanomaterials	APA College, Palani	20.10.2010	
41.	International Conference	International Conference on Synthesis, Characterisation, Consolidation and Modeling of Nanomaterials	PSG College of Technology, Coimbatore	5.3. 2010	6.3.2010
42.	International Conference	11 th Asian Conference on Solid State Ionics, Coimbatore	Bharathiar University, Coimbatore	9.6. 2008	13.6.2008
43.	Seminar	Bio and Nanomaterials	PSG Institute of Advanced Studies	7.5.2008	-

44.	Workshop	Frontier Topics in Physics	N.G.M.College Pollachi	22.1.2008	24.1.2008
45.	Workshop	Research Project Proposal writing	Karunya University, Coimbatore	16.11.2007	17.11. 2007
46.	Seminar	National Seminar on Nanoscience and Technology (Convenor)	Karunya University, Coimbatore	29.9. 2007	
47.	Symposium	Fifteenth National Symposium on Environment	Bharathiar University, Coimbatore	5.6. 2007	7.6.2007
48.	National Conference	National Conference on Luminescence and its Application	Bharathiar University, Coimbatore	18.1. 2007	20.1.2007
49.	Faculty Develop - ment programme	"Towards better Teaching"	N.G.M.College, Pollachi	30.9. 2006	-
50.	Symposium	Medical Physics and Biomedical Instrumentation	PSGR Krishn ammal College	21.7. 2003	
51.	Staff Development Programme	Impact of Educational Technology on Teaching and Learning Process	Dr. MCET College of Engineering and Technology, Pollachi	21.04.2003	03.05.2003
52.	International Conference	Solid State Ionics: Materials and Processes for Energy and Environment	Cairns Convention Centre, Cairns, Australia	8.7.2001	13.7.2001
53.	International Conference	10 th International Conference on Solid State Ionics, Singapore	National University of Singapore	3.12.1995	8.12.1995

Research Guideship:

Ongoing:

Doctoral Degree:

1. **G.G.Soundarya (17PHPHF002)** "A Novel Flexible all Solid-State Supercapacitors" – Thesis Submitted (January 2022)
2. **P.Priyanka (17PHPHF003)** "Improvisation of cell performance by Interfacial analysis in sulphide based Na All Solid State Battery" (**INSPIRE FELLOW**)
3. **Dhanya K (19PHPHF001)** "Identification of Bio-Polymer Electrolyte with Good Tensile Strength for Lithium Ion Battery Applications"
4. **Shamli T C (21PHPHF004)** " Opto triggered Electrochemical Li – ion Battery"

(Degree Awarded Ph.D. – 4 ; M.Phil – 6; M.Tech – 7; M.Sc., - 26)

S.No	Name of the Candidate	Degree Awarded	Date of Award	Title of the Thesis	Awarding University
Doctoral Degree					
1.	D.Lakshmi (13PHPHF001) (INSPIRE FELLOW)	Ph.D. Physics	09.10.2018	Performance Enhancement of Tin Antimonide Anodes towards the Achievement of All Solid State Batteries	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

2.	M.Ramya (12PHFNF004)	Ph.D. Food Science and Nutrition	January 2018	Synthesis of Eco Friendly Nanogranular Films in Food Packaging Using Medicinal Plants and Nanoparticles (Co- Supervisor)	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
3.	M.Kalpana (07ZF003)	Ph.D. Physics	03.12.2014	Systematic Study on $Ce_{1-x}Zr_xO_2$ and $Ni/Ce_{1-x}Zr_xO_2$ for Intermediate Temperature Solid Oxide Fuel Cell (IT_SOFC) Application	Karunya University
4.	P.Nithyadharseni (07ZF002)	Ph.D. Physics	31.08.2012	Development of nanostructured anodes for all solid state lithium ion batteries	Karunya University
Pre Doctoral Degree					
5.	Sumithra devi. V	M.Phil. Physics	July 2019	Electrochemical Evaluation of Leaf Composited Membrane with and without Electrolytic salt for Supercapacitors	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
6.	Roopasri M	M.Phil. Physics	July 2019	Optimization and Evaluation of CMC-BB Membranes with and without Electrolytic Salt for Supercapacitors	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
7.	Revathi Priyadharshini A	M.Phil. Physics	July 2016	Effect of Dysprosium in the Europium doped Tin Antimony (SnSb) Matrix	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
8.	Aarthi P	M.Phil. Physics	July 2014	Effect of Triple Phase Boundary in a Ceria Based Intermediate Temperature Solid Oxide Fuel Cell	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
9.	Ragapriya S	M.Phil. Physics	July 2013	A Compatibility Study Between an Anode and an Electrolyte of Pervoskite Structure for All Solid State Battery	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

10.	Uthayalakshmi.M	M.Phil. Physics	2010	Fabrication and Characterization of a SnSb Nanoalloy based gas sensor device	Karunya University
Masters in Technology Degree					
11.	Cyril Robinson Azriah.J	M.Tech Nanotechnology	12.04.2011	Fabrication and Characteristics of Field Effect transistor (FET) using High-k Dielectric Material (Co-Guide)	Karunya University
12.	Sidhartha Sindhan.P	M.Tech. Nanotechnology	12.04.2011	Stress Migration Reliability of Tin Antimony (SnSb) alloy interconnects	Karunya University
13.	Shalom Boyineni	M.Tech. Nanotechnology	12.04.2011	Automation of Electronic Interfacing and Sensing Extraction for Gas Sensors (Co-Guide)	Karunya University
14.	Rajana.J.Kelath	M.Tech. Nanotechnology	28.04.2010	Metallic Interconnects for Nano Integrated Circuits through Nanosuspensions	Karunya University
15.	P.P.Jiju	M.Tech. Nanotechnolgy	20.07.2009	Heat Transfer Characteristics of Copper Nanofluids	Anna University, Coimbatore
16.	S.Radhakrishnan	M.Tech. Nanotechnolgy	20.07.2009	Heat Transfer Characteristics of Aluminium Nanofluids	Anna University, Coimbatore
17.	Mahalakshmi Sridhar	M.Tech. Nanotechnolgy	20.07.2009	Cell Architecture for Nano Electronic Design	Anna University, Coimbatore
Master in Science Degree					
18.	Sowmiya R	M.Sc., Physics	21.05.2021	Evaluation of Iron Doped Zinc Cobaltite for Photosensitive Supercapacitor Applications	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
19.	Priyatharani K S	M.Sc., Physics	21.05.2021	Evaluation of Ni Doped Zinc Cobaltite for Photosensitive Supercapacitor Applications	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
20.	Priyadharshini S	M.Sc., Physics	21.05.2021	Evaluation of Chromium doped Zinc Cobaltite for Photosensitive Supercapacitor Applications	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

21.	Jayasudha J	M.Sc., Physics	21.02.2021	Electrochemical Performance of NaFePO ₄ for Sodium Batteries	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
22.	Devadharshini S	M.Sc., Physics	25.06.2020	Suitability Evaluation of Bovine Bone and Xanthan Gum with Sodium Alginate for Sodium Battery Applications	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
23.	Swetha R	M.Sc., Physics	25.06.2020	Evaluation of Cationic and Anionic filler in the High Molecular Weight Poly Ethylene Oxide for Supercapacitor Applications	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
24.	Vichithra K	M.Sc., Physics	25.06.2020	Evaluation of Xanthan Gum with Additive salts as an electrolyte for Electrochemical Cells	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
25.	Krishnapriya R I	M.Sc., Physics	25.06.2020	Evaluating the Effect of Electrolytic Salt and Zinc Cobaltite filler in High Molecular Weight Polyethylene Oxide	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
26.	R.Sudharsana	M.Sc., Physics	22.04.2019	An attempt to Carbonize SnSb using Glucose	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
27.	M.Sangeetha	M.Sc., Physics	22.04.2019	Evaluation of SnSbO electrodes for Li Batteries	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
28.	Jayapadmaloshini.J	M.Sc., Physics	22.04.2019	Electrochemical Performance Evaluation of SnSbO for Na and K Batteries	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

29.	Mathumitha.V	M.Sc., Physics	10.04.2018	Influence of Concentration on Cyclability of an Electrochemical Cell with Prepared Natural Carbon	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
30.	Roopasri M	M.Sc., Physics	10.04.2018	Comparison of Characteristics between Prepared and Commercial Carbon	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
31.	Priyanka P	M.Sc., Physics	10.04.2017	A Novel method of Generating Tricolor Emission with SnSb alloy	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
32.	Deepika.R	M.Sc., Physics	29.04.2016	Effect of Terbium in Tin antimonide host	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
33.	Muthuselvi.K	M.Sc., Physics	29.04.2016	Improvized Photoluminescence of Tin antimonide alloy	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
34.	Gokila S	M.Sc., Physics	29.04.2016	Effect of Concentration of Cerium in Tin antimonide alloy	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
35.	Abirami.M	M.Sc., Physics	30.03.2015	Process Dependant Quality Estimation of Extracted Silica from Rice Husk	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
36.	Induja.G	M.Sc., Physics	30.03.2015	Silica Extraction from Rice Husk in a Plasma Reactor	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

37.	Sakalachiteswari. V	M.Sc., Physics	31.03.2014	Interfacial Behaviour due to Thermal change in an Anode/Electrolyte Junction	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
38.	Nithyaprabha.P	M.Sc., Physics	31.03.2014	Reactivity Between Perovskite Solid Electrolyte and a Spinel Anode	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
39.	Srilekha.R	M.Sc., Physics	31.03.2014	Conduction analysis across an All Solid State Half Cell	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
40.	Narmada.N	M.Sc., Physics	10.05.2013	Optical Characterization of Cobalt Substituted SnSb Nano alloy	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
41.	Aarthi.P	M.Sc., Physics	10.05.2013	A Study of Cobalt substituted SnSb Nano Alloy	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
42.	Ramya T	M.Sc., Physics	30.04. 2012	A Theoretical Study on Cation Substituted Ceria	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
43.	Sangeetha.D	M.Sc., Physics	30.04. 2012	Influence of O ₂ Content and Vacancy in Ceria Structure	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

Membership / Fellowship:

S.No	Name	Institution	Received
1.	Senior Research Fellowship (SRF)	Council of Science and Industrial Research (CSIR)	
2.	Life Member	Indian Society of Solid State Ionics	1995
3.	Life Member	Indian Society for Technical Education (ISTE)	2002
4.	Life Member	Luminescence Society of India (LSI)	2014
5.	Life Member	Society of Magnetic Materials	2007

Languages known:

S.No	Name of the Language	Read	Write	Speak
1	Tamil	√	√	√
2	English	√	√	√
3.	Malayalam	√	√	√
4.	Hindi	√	√	√
5.	Japanese	√	√	√

Travels Abroad:

Countries	Duration	Month& year	Purpose of visit
Japan	4 years	(January 2000- January 2002) (April 2004 – May 2006)	Post Doctoral Fellowship
Australia	One week	8.7.2001 – 13.7.2001	Attending Conference
Singapore	One Month	December 1995	Collaborative research work in NUS
Italy	Two weeks	February 2001	School in ICTP, Trieste