BIO-DATA

1. Name and full correspondence address: **MD ASHIQUE HASSAN**

Address: **104, Dept of Mechanical Engg,**
National Institute of Technology, Jamshedpur
Jamshedpur-831014, Jharkhand

2. Email(s) and contact number(s) : **hassan.me@nitjsr.ac.in**

Mob:9801082645

3. Institution: **NATIONAL INSTITUTE OF TECHNOLOGY, Jamshedpur-831014**

4. Date of Birth: **29/07/1980**

5. Gender (M/F/T) : **M**

6. Category Gen/SC/ST/OBC : **GENERAL**

7. Whether differently abled (Yes/No): **NO**

8. Academic Qualification (Undergraduate Onwards):

	Degree	**Year**	**Subject**	**University/Institution**	**% of marks**
1	B Tech	2002	Mechanical	AMU, Aligarh	71.08
2	M Tech	2005	Thermal Engg	AMU, Aligarh	72.05
3	PhD	2016	Mechanical	IIT Patna	8.95

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award:

Title: **"Natural Convection of Viscoplastic Fluids in an Enclosure"**

Guide: **Dr Manabendra Pathak, Dr M K Khan**

Institute: **Indian Institute of Technology, Patna**

Year of Award: **2016**

10. Work experience (in chronological order):

S No	**Positions held**	**Name of the Institute**	**From**	**To**	**Pay Scale**
1	Lecture and Senior Lecturer	Hindustan Institute of Technology, Greater Noida	10/08/2005	12/11/2009	8000-275-13500 and 10000-325-15200
2	Assistant Professor	Birla Institute of Technology, Mesra Ranchi-835215	16/11/2009	29/08/2018	15600-39100 AGP: 8000
3	Assistant Professor -I	National Institute of Technology, Jamshedpur-831014	29/08/2018	Till date	107500/- 7th Pay Level- 12

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant:

S No	Name of Award	Awarding Agency	Year
1	Shrestra Sikshak Puraskar	Sharda University, Greater Noida	2008
2	Bry Air Asia Award	Bry Air	2012
3	Empanelled Researcher	Government of Bihar	2013

12. Sponsored Projects (Ongoing):

1. **SERB ECRA Project**, 2017-2020, file no: ECR/2017/001003, "Effect of Nano-particles in Viscoplastic Complex Fluids: A Thermorheological Characterization and Heat Transfer Investigation", 28.05 Lakhs
2. **SERB CRG Project,** 2020-2023, file no: CRG/2019/1266, "Nanoparticle Oxygen Carrier Assisted Chemical Looping Combustion", 38.90 Lakhs
3. **DST AGROTECH Project,** 2020-2022, file no: DST/TDT/TD/2019/663, Design and Development of Compact Semi-Automatic Parboiling Machine with Dryer for Marginal Farming, 12.50 Lakhs

13. Publications (List of papers published in SCI Journals, in year wise descending order):

Published in 2020:

1. Chemical looping combustion with nanosize oxygen carrier: a review, W Akram, Sanjay, **MA Hassan**, International Journal of Environmental Science and Technology, 1-12, 2020. **(SCI), IF: 2.852**
2. Natural convection of viscoplastic fluids in an enclosure with partially heated bottom wall, **MA Hassan**, M Pathak, MK Khan, NH Khan, International Journal of Thermal Sciences 158, 106527, 2020. **(SCI) IF: 3.893**
3. Three-Dimensional Thermo-Hydraulic Analysis of Solar Air Heater with Equilateral Prism-Shaped Rib Roughness I Ahmad, NH Khan, **MA Hassan**, MK Paswan, ASME Journal of Solar Energy Engineering, 142 (5), 2020. **(SCI), IF: 1.641**
4. Methanol-Filled Hybrid Photonic Crystal Fiber with High Birefringent and Negative Dispersion, S Uddin, **MA Hassan**, SS Singh, DK Singh, Brazilian Journal of Physics, 1-9, 2020. **(SCI), IF: 0.895**
5. Heat transport in nanofluid coolant car radiator with louvered fins A Kumar, **M A Hassan**, P Chand, Powder Technology, Accepted, 2020. **(SCI), IF: 4.142**
6. Structural and Behavioural Analysis of As_2Se_3, TeO_2, SiC, SiO_2 and Si_3N_4 for Photonic Application, **MA Hassan**, A Kumar, DK Singh, Materials Science Forum 978, 360-368, 2020.
7. Two Sides Rhombus Shaped Cladding Hexagonal PCF with Low Confinement Loss and Negative Dispersion, A Kumar, S Uddin, **MA Hassan**, DK Singh, SSRN 3573506, 2020.
8. Poly Lactic Acid, Poly Acrylic Acid and Ethanol Based Bio-Materials for PCF Design, MA Hassan, M Singh, DK Singh, Materials Science Forum 978, 377-383, 2020.
9. Convection of Viscoplastic Fluid in U-Tube Bends, NH Khan, MK Paswan, **MA Hassan**, Recent Advances in Mechanical Engineering, 299-311, 2020.
10. Low Confinement Loss Solid Core Rectangular Photonic Crystal Fiber, S Tabassum, DK Singh, **MA Hassan**, Optical and Wireless Technologies, 271-277, 2020.

11. Analysis of Optical Parameters of Hexagonal Solid Core PCF with Methanol filled inner Cladding ring, Shahir Uddin, T Parveen, **M A Hassan** and D K Singh, River Publishers Series in Information Science and Technology, Proceeding: International Symposium on 5G & Beyond for Rural Upliftment 2020, ISBN: 9788770222181, (Book Chapter 42).
12. Monitoring air pollution Based on Internet of Things (IoT) and Interfacing of Microcontroller with VGA display by Shahir Uddin, Kamal Kant, Vishal Kumar and D K Singh, **M A Hassan**, River Publishers Series in Information Science and Technology, Proceeding: International Symposium on 5G & Beyond for Rural Upliftment 2020, ISBN: 9788770222181, (Book Chapter 26).
13. Energetic Additives for Hybrid Rocket Propulsion – Review, M Z Akhter, **M. A. Hassan**, IEEE Xplore, 2020 Advances in Science and Engineering Technology International Conferences (ASET), DOI: 10.1109/ASET48392.2020.9118206, 2020.

Published prior to 2020:

S.No.	Authours	Title	Name of Journal	Volume	Pages	Year
1	M Z Akhter, M A Hassan	Ballistic and Thermo-mechanical Characterisation of Paraffin-based Hybrid Rocket Fuels Loaded with Light Metal Hydrides	*Journal of Energetic Materials*	Accepted for publication	NA	2019
2	M Z Akhter, M A Hassan	Characterisation of paraffin-based hybrid rocket fuels loaded with nano-additives	*Journal of Experimental Nano-Science*	vol:13 issue:S1	31–44	2018
3	Shalini, Shahiruddin, D K Singh and M A Hassan	Design and Analysis of Rhombus-Shaped Dual-Core Propylene Glycol Filled PCF	*Lecture Notes in Electrical Engineering, Springer*	vol:472	51-63	2018
4	Shalini, Shahiruddin, D K Singh and M A Hassan	Transmission Properties of Lower Refractive Index Liquid Filled Hexagon Solid Core PCF	*Optical and Wireless Technologies, Nature*	29	213-219	2018
5	Shahiruddin, D K Singh and M A Hassan	Comparative Analysis of Hexagonal Solid Silica and Nitro-benzene Filled Hollow Core Photonic Crystal Fiber	*Mater. Sci. Eng.*	vol:310	pp:012040(1-8)	2018
6	Kishan Jhunjhunwala , Shahiruddin and M. A. Hassan	Convective heat transport in Viscoplastic material due to localized heating: An Experimental approach	*Mater. Sci. Eng.*	vol:310	pp:012066(1-7)	2018
7	AK Tiwari, AS Vidyarthi, VK Nigam, MA Hassan	Study of rheological properties and storage life of ripe jackfruit products: Jam and jelly	*Asian J of Microbiol., Bioterch. & Env. Sc*	18	475-482	2017
8	M Z Akhter, M A Hassan	Low Energy Nuclear Reaction (LENR)– Sustainable and Green Energy: A Review	*Applied Mechanics and Materials*	81	507-511	2016
9	M. A.Hassan, M. Pathak M. K. Khan	Rayleigh-Benard convection in Herschel- Bulkley fluid	*Journal of Non-Newtonian Fluid Mechanics*	*Vol 226*	*32-45*	2015

10	M. A.Hassan, M. Pathak M. K. Khan	Thermorheological characterization of elastoviscoplastic Carbopol Ultrez 20 gel	ASME *Journal of Engineering Material and Technology*	*137*	*P031002 (1-8)*	2015
11	Sarim Jamal, M. A. Hassan	Mixed convection in lid driven square cavity using finite volume method	*Applied, Mechanics and Materials*	*Vol 592-594*	*P 1652-1656*	2014
12	M. A.Hassan, M. Pathak M. K. Khan	Natural convection of viscoplastic fluids in a square enclosure	ASME *Journal of Heat Transfer*	*Vol 135*	*P122501(1-9)*	2013

14. Detail of patents. **NONE**

15. Books/Reports/Chapters/General articles etc

SNo.	Title	Author's Name	Publisher	Year of Publication
1	Computational Study on Dynamics of Heat Transfer During Thermosiphonic Flow of Liquids in Annulus	M A Hassan, Binay Kumar	*World Education, New Delhi*	2010

16. Any other Information (maximum 500 words):

1. Visited National University of Singapore, Singapore, 2008.

2. Selected for Korean research Fellowship 2009.

3. Attended and presented paper at ASME Summer Heat Transfer Conference Minneapolis, 2013.

4. Attended and presented paper at ASME Summer Heat Transfer Conference Washington, 2016.

5. Lead a team of students to Design develop and demonstrate an autonomous robot for lunar application under NASA Lunabotics project in 2013, visited Kennedy space Centre, Florida USA.

6. Lead a team of students to Design develop and demonstrate an autonomous robot for lunar application under NASA Lunabotics project in 2012, visited Kennedy space Centre, Florida USA.