CURRICULUM VITAE

Dr. MOHD. SHAHID KHAN

Professor

Department of Physics,

Jamia Millia Islamia (Central University),

Jamia Nagar, New delhi-110025.





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Members/1973/Mohammad_Shahid_Khan

<u>Google Scholar Profile</u> <u>Web of Knowledge Profile</u> <u>Scopus Author Profile</u> <u>https://www.scopus.com/authid/detail.uri?authorId=57311892500</u>

Academic Profile:

Ph. D. in Physics (2002) from Jamia Millia Islamia (Central University), New Delhi.

M. Sc. Physics (1992) from Jamia Millia Islamia (Central University), New Delhi.

Teaching Experience: UG: 20 Years PG: 18 Years Research Experience: 22 Years **Research Interest:** Nanostructured materials, Nonlinear Optical Materials, Computational Molecular and Nanoscience, Photonic Materials, Molecular and Optical Physics, Optical Spectroscopy, Clean Energy production and storage

Employment Profile:

Working as Professor in Department of Physics, Jamia Millia Islamia, New Delhi since October 02, 2019. Worked as Associate Professor in Department of Physics, Jamia Millia Islamia, New Delhi since May 22, 2018 till October 01, 2019. Worked as Assistant Professor in Department of Physics, Jamia Millia Islamia, New Delhi since November 21, 2006 till May 21, 2018.

Research Guidance: No. of Ph. D. students currently working $: 3+ 2^*$ (* as Co-

Supervisor)

• No. of Ph.D. Thesis Awarded

: 18

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• Research Guidance:

•	No. of Ph. D. students currently working	: 3+ 2* (*as Co-Supervisor)
•	No. of Ph.D. Thesis submitted/under evaluation	: 11+ 7* (*as Co-Supervisor)
•	No. of Projects Guided at Postgraduate Level	: 68 (<u>#Appendix_1</u>)

• Ph.D. Thesis awarded under my Supervision : 18

S.	Name of Ph. D.	Topic of Ph. D. Thesis	Year of
No.	Scholar		Award
18	Shafi Ul Islam	Study of ZnO nanocomposites as a	2024
		luminescent material for optoelectronic	
		applications	
17	Urosa Latief	Study of Luminescent and Functionalized	2023
		Quantum Dots for Photonic Applications	
16.	Imran Ahmad	Non Linear Optical Properties of	2023
	Salmani	Multiferroic Nanoparticles	
15	Jai Shanker Singh*	A Vibrational Study of Biomolecules and	2023
		Their Derivatives	
14.	Farha Jabeen [*]	Synthesis and Characterization of	2022
		Ferroelectric Composites and their	
		Applications	
13.	Anu	Investigations of Metal-Organic Complexes	2022
		for Electronic and Optoelectronic	
		Applications	
12.	Archana Sharma	Computational Study of Functionalized	2021
		MoS_2 for Environmental and Energy	
		Applications	
11.	Tahir Murtza	Synthesis, Characterization and Properties	2019
		of Composite Multiferroics	
10.	Shabir Ahmad	Effect of Laser, Gamma-ray and Swift	2017
	Kumar [*]	Heavy Ion Irradiation on Compound	
		Semiconductors	

9.	Munirah [*]	Studies of optical properties of CdS and	2016
		ZnO based thin film nano structures using	
		photo-thermal deflection and other	
		spectroscopic techniques	
8.	Cherry Dhiman	Cavity Ring Down and Laser Induced	2016
		Breakdown Spectroscopic Techniques for	
		the Study of Toxicants at Low	
		Concentration Levels	
7.	Rayees Ahmad	Synthesis and Characterization of Iron	2016
	Zargar [*]	Chalcogenide Superconductors	April
6.	Stuti Joshi	Study of Spectral Properties of Partially	2015
		Coherent Optical Fields and their	
		Applications	
5.	Shereena Joseph*	Light Matter Interaction in Periodic	2015
		Nanostructures	
4.	Sana Zafar	Structural, Electronic and Spectroscopic	2015
		Studies of Non Linear Optical Conjugated	
		Molecules and Organic Dyes	
3.	Md. Shahzad Khan	Hydrogen Storage in Carbon and Boron	2014
		Nitride Nanostructures – A First Principle	
		Computational Study	
2.	Zia ul Raza Khan	Study of Spectroscopic and Optoelectronic	2012
		Properties of Semiconductor Clusters and	
		their Semiempirical and ab-initio	
		Computations	
1.	Darakhshan	Study of Optical Gain and Relaxation	2012
	Qaiser*	Mechanism of Fullerenes in Solution	

* under Co-Supervision

Academic Work:

- Member, Departmental Committee for the design and development of Curriculum and Courses of B.Sc. (H) Physics, (Semester System- 2011-2012)
- Coordinated the design and development of Curriculum and Courses of M.Sc. Physics, (Semester System- 2009-2011)
- Redesigned the syllabus of the Course "Laser Physics and Spectroscopy" for M. Sc. Physics
- Developed the syllabi of the Courses "Photonics" for M. Sc. Physics and "Photonics" for Pre-PhD
- Redesigned the syllabus of the Course "Laser Spectroscopy" for M. Sc. Physics

Courses Taught:

- Postgraduate courses:
 - Laser Spectroscopy
 - Photonics (M. Sc. and Pre-PhD Course)
 - Laser Spectroscopy and Modern Optics
 - Laser Physics
 - Quantum Optics
 - Laboratory Courses (M. Sc. (P), M.Sc. (F), M. Sc. Sem -3 & 2)
- Undergraduate courses:
 - o Optics
 - o Mathematical Physics, Mathematical Physics II
 - Nuclear and Particle Physics
 - o Structure of Matter
 - Laboratory course

Research Projects:

Title of Project	Funding Agency	Duration		Grant/Am	Status
		From	То	ount Mobilized (Rs	Completed/ Non-
				Lakhs)	Completed
Detection of Toxic	Defence Research	December	December	Rs. 14.92	Completed
and Explosive	and Development	14, 2010	13, 2013	Lacs	
Traces Using	Organization				
Cavity Ring Down	(Ministry of				
Laser Spectroscopy	Defence), New				
(CRDS)	Delhi				

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Brief Bio-data:

Dr. Mohd. Shahid Khan is a Professor in the Department of Physics at Jamia Millia Islamia University, a prestigious Central University located in Jamia Nagar, New Delhi, India. With a rich academic background, he earned his Ph.D. in Physics from the same institution in 2002, after completing his M.Sc. in Physics in 1992. He has more than 18 years of postgraduate teaching experience. His contributions to the fields of Nanostructured materials, Nonlinear Optical Materials, Computational Molecular and Nanoscience, Photonic Materials, Molecular and Optical Physics, Optical Spectroscopy, Clean Energy production and storage reflect his 20 years of research experience. Dr. Khan is a highly accomplished academic and researcher with extensive experience in the field of physics and optical materials. With over 18 Ph.D. thesis awarded under his supervision, he has played a pivotal role in advancing scientific knowledge in his field. His impressive publication record of more than 120 research papers demonstrates his dedication to scholarly contributions. He is currently supervising three Ph.D. students as a primary and co-supervisor, demonstrating his dedication to developing the future generation of scholars.

Apart from his research endeavors, Dr. Khan actively contributes to the academic and administrative life of his university, Jamia Millia Islamia. He has held various positions, such as Chief Proctor & Incharge Security, Provost of MMAJ Hall of Boys Residence, Deputy Proctor, Advisor Security, and Senior Warden, highlighting his commitment to the holistic development of the university. His participation in academic audit teams, admission panels, and infrastructure development exemplifies his diverse contributions to the university. Dr. Khan's extensive academic and career demonstrates his commitment to both scholarship and the advancement of his academic community.

The Main Scientific accomplishments during last 5 Years:

The scientific results include: (1) Synthesis of Quantum Dots for Photonic applications; (2) Hydrothermal synthesis of Nanocomposites for Lighting applications; (3) Synthesis of Multiferroic nanoparticles for nonlinear optical properties and their nanocomposites; (4) Fabrication of thin films of nanostructured materials for nonlinear optical applications; (5) Synthesis of multiferroic materials; (6) Fabrication of thin films of nanostructured materials for nonlinear optical applications.

Lectures and Talks delivered:

12. Delivered an **invited talk (online)** on "**FUNCTIONALIZED QUANTUM DOTS FOR SOLID STATE LIGHTING**" in 10th *International Conference on Information Technology and Nanotechnology ITNT-2024* (May 20-24, 2024), organized by Samara National Research University, Samara, Russia on May 22, 2024.



The X International Conference on Information Technology and Nanotechnology

11. Delivered an invited talk on "Nonlinear Optical Properties of doped MoS2 for Photonic Applications" in 30th *International Conference on "Advanced Laser Technologies" ALT23* (September 18-21, 2023), Samara National Research University, Samara, Russia on September 18, 2023.

10. Delivered an **invited talk** on "**Nonlinear Optics and its Fascinating Applications**" in *National Seminar/Workshop on "Physics in 21st Century*" (Oct. 4-6, 2017), Abdul Ahad Azad Memorial Degree College, Cluster University, Srinagar on Oct. 4, 2017.

9. Delivered an invited talk on "Organic Non-Linear Optical Materials: An Experimental and Computational Quest" in *International Conference on New Scintillations on Materials Horizon (ICNSMH – 2016)* (Oct.21-23, 2016), Department of Applied Physics, Faculty of Engg. & Technology, MJPR University, Bareilly on Oct. 23, 2016.

8. Delivered an invited talk on "Hydrogen Storage in Carbon and Boron Based Nanostructured Materials" in *National Conference on Indian Development in Recent and Ideal Semiconductors for Novel Applications (NC IDRIS – 2012) (Oct. 6-7, 2012) Navapur,* India on Oct.7, 2012.

7. Delivered an invited talk on "Designing Nanostructured Materials for Hydrogen Storage using DFT Simulations" in National Workshop on Advancement of Nano Materials & Its Application (Feb 9-11, 2012) at Department of Physics, DAV College, Kanpur, India on Feb 9, 2012.

6. Delivered an invited talk on "Computational Exploration of Hydrogen Storage capabilities of Nanostructured Materials using Density Functional Theory" at in the

International Conference on Advanced Materials (ICAM-2011) held at PSG College of Technology, Coimbatore, India on December 15, 2011.

5. Delivered an invited talk on "Quantum Chemical Simulations for Structure and **Properties of Functional Materials**" at CINVESTAV-IPN, Mexico City, Mexico on August 20, 2010.

4. Delivered a Lecture on "Non-Linear and linear Optical Properties of electron donor – acceptor pyridine moity: A Comparative ab initio and DFT Study" in Symposium 5, of XIX International Material Research Congress (XIX IMRC), Cancun, Mexico on August 18, 2010.

3. Delivered a Lecture on "**Computational Study of Hydrogen adsorption on K**(**poatassium**)-**Doped Boron-nitride nanotube**" in Symposium 2, of XIX International Material Research Congress (XIX IMRC), Cancun, Mexico on August 17, 2010.

2. Delivered a Lecture on "Influence of Thickness on Structural and Optical **Properties of Thermally Evaporated CdTe Polycrystalline Thin Films**" in Symposium 9, of XIX International Material Research Congress (XIX IMRC), Cancun, Mexico on August 17, 2010.

1. Delivered Lectures on "Activity Based Science Learning" in the Workshop on "Train the Trainer- Innovative Teaching Methodologies and Best Practices", at Jodhpur and Jhalawar on Dec.1 and Dec.4, 2007, respectively.

Foreign Visits:

- Visited Russia to participate in 30th International Conference on Advanced Laser Technologies" (ALT23) held at Samara National Research University, Samara, Russia during September 18-21, 2023 and delivered an invited talk and chaired technical session.
- the XIX International Material Research Congress (XIX IMRC) held at Cancun, Mexico during August 15-19, 2010 and delivered three Oral Presentations.
- Visited **Mexico** to participate in the XIX International Material Research Congress (XIX IMRC) held at Cancun, Mexico during August 15-19, 2010 and delivered three Oral Presentations.
- Visited USA to participate as Citizen Exchange Fellow in the SOUTH ASIA SCHOOL COLLABORATION PROJECT (SASCP) of Department of State, USA,

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funded and supervised by Bureau of Educational and Cultural Affairs, USA held at *Nova Southeastern University, Florida, USA* during October10 - November 5, 2005 and in **Washington DC** during November 5 – November 11, 2005. Interacted with the educator participants from Bangladesh, India, Pakistan, Sri Lanka and United States and completed 200 hours of studies.

- <u>Research Publications</u>: (Appendix _2A)
- <u>Publications in Refereed Journals:</u>
 110
- Publications in Proceedings of Conferences/ A: (with ISSN/ISBN numbers): 14

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- Publications in Proceedings of Conferences: B: National Laser Symposia: 7
- <u>Chapters in Books:</u> 6
- Books:

Participation in Conference / workshop / seminar / project:

- 35. **Chaired** a Session at 6th International Conference on Emerging Technologies: Micro to Nano (ETMN-2024) jointly organized by Jamia Millia Islamia, New Delhi and Manipal University, Jaipur at JMI campus (November 22-23, 2024), on November 23, 2024.
- 34. Chaired a Session at International Conference on Renewable Energy and Sustainable Technologies (ICREST-2024) organized by Department of Applied Sciences and Humanities, Jamia Millia Islamia, New Delhi (July 04-06, 2024), on July 06, 2024.
- 33. Chaired a Session on Laser Diagnostics and Spectroscopy at in 30th International Conference on "Advanced Laser Technologies" ALT23 (September 18-21, 2023), Samara National Research University, Samara, Russia on September 18, 2023.
- 32. Attended Winter College on Optics: Terahertz Optics and Photonics held online by the Abdus Salam ICTP, Trieste, Italy during Feb. 06-17, 2023.

- Chaired a Session at International Conference on Advanced Materials (ICNOC-2022) organized by Department of Applied Sciences and Humanities, Jamia Millia Islamia, New Delhi (November 28-30, 2022), on November 29, 2022.
- Chaired a Session organized by Department of Electrical Engineering, Jamia Millia Islamia, New Delhi (2019).
- 30. Chaired a Session at International Conference on Advanced Materials (ICAM-2019) organized by Centre for Nanoscience & Nanotechnology, Jamia Millia Islamia, New Delhi (March 6-7, 2019), on March 7, 2019.
- 29. Attended the International Conference on Advanced Materials (ICAM-2019) organized by Centre for Nanoscience & Nanotechnology, Jamia Millia Islamia, New Delhi held during March 6-7, 2019, and Presented a research paper entitled "First-principles characterization of Stanene/MoS₂ Composite as anode for Lithium-ion Batteries" in on March 6, 2019.
- 28. Participated in the DAE-BRNS National Laser Symposium (NLS-27), held at RRCAT, Indore during December 3 6, 2019 and presented One Paper (4171)
- 27. Presented a research paper (Poster) entitled" DFT based study of Adsorption of CO on Cu-doped MoS₂ Sheet" in the International Conference on Sustainable Development through Research in engineering and Management (SDREM-16) held at YMCA University of Science and Technology, Faridabad (December26-27, 2016) on Dec 26, 2016.
- 26. Attended National Seminar on Photonics and Optical Materials organized by Department of Physics, JMI, New Delhi on January 21, 2016. (+1)
- Attended National Conference on Nanotechnology and Renewable Energy (NCNRE-14) organized by Department of Applied Sciences & Humanities, Jamia Millia Islamia, New Delhi-110025 (April 28-29, 2014).
- 24. Attended the 17th International Workshop on the Physics of Semiconductor Devices (IWPSD-2013) held at Amity University, Noida during December 10-13, 2013. (*Two Poster presentations*)(1+1)
- Attended First National Conference on Trends and Applications in Laser Technology and Optoelectronics (TALTO-1) held at Amity University, Gurgaon, India on April 4, 2013. (*One paper*)

- 22. Attended National Conference on Advanced Trends in Nanoscience and Nanotechnology (ATTN-2013) held at JMI on February 25, 2013.
- 21. Attended National Seminar on Developments in Materials, Theoretical and High Energy Physics held at JMI on February 3, 2012.
- 20. Attended the International Conference on Advanced Materials (ICAM-2011) held at PSG College of Technology, Coimbatore, India during December 12-16, 2011 and delivered an **invited talk** and **chaired** a session on Theory and Computer Simulation of Advanced Materials on December 15, 2011.
- Participated in the 2nd International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2011) held at IIT Guwahati, Guwahati during December 8-10, 2011 and presented a research paper (Poster).
- Attended the Three Day Joint Academies Lecture Workshop on "Frontiers in Physics", at University of Delhi South Campus, New Delhi January 21-23, 2011.
- Participated in the XIX International Material Research Congress (XIX IMRC) held at Cancun, Mexico during August 15-19, 2010 and delivered three Oral Presentations.
- 16. Attended National Seminar on Advances in Materials and Devices held at ITM University, Gurgaon, on May 15, 2010.
- 15. Attended National Seminar on Developments in Materials, Theoretical and High Energy Physics held at JMI during February 19-20, 2010.
- Participated in the Ninth DAE-BRNS National Laser Symposium (NLS-09), held at BARC, Mumbai during January 13 – 16, 2010. (One Poster (CP-11-04))
- 13. Attended a short course on "Laser Beam Diagnostics" conducted by Indian Laser Association at BARC, Mumbai, during January 11-12, 2010.
- Participated in the XV International Workshop on the Physics of Semiconductor Devices (IWPSD-2009) held at JMI, New Delhi during December 15-19, 2009. (*Two Poster presentations*)
- 11. Attended the National Workshop on FIBER OPTICS & APPLICATIONS held at South Campus, Delhi University, New Delhi during November 28-29, 2009.
- Participated in the Workshop on Right To Information Act 2005 held at JMI, New Delhi on October 10, 2009.

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- Attended "National Seminar on Condensed Matter, High Energy and Nuclear Physics", Department of Physics, JMI, New Delhi-25, March 23-24, 2009.
- Participated in the "Workshop on Web 2.0 in Education" organized by FTK-CIT, Jamia Millia Islamia, New Delhi on November 4, 2008.
- Participated in the Workshop on "Laser Spectroscopy and Nanophotonics" at IIT Delhi, during March 14-15, 2008.
- 6. Participated in "International Conference on Luminescence and its Applications" at NPL, New Delhi-, during Feb.13, 16, 2008. (*Poster entitled* "The study of Energy Transfer Dye Characteristics using Fullerene C60 with Coumarine – 440")
- Attended the National Seminar on Nano-Materials & Devices, held at JMI on January 30, 2008.
- Participated in the Workshop on "IT for all", at JMI, New Delhi, during Oct.31-Nov.1, 2007.
- Participated in the SOUTH ASIA SCHOOL COLLABORATION PROJECT (SASCP) held at *Nova Southeastern University, Florida, USA* during October10- November 5, 2005 and in Washington DC during November 5 – November 11, 2005.
- Participated in "International Conference on Spectroscopy: Perspectives and Frontiers (INCONS) held at BARC, Mumbai, during January 3-5, 1996.
- Attended the Symposium on Molecular Spectroscopy and Laser held at BHU, Varansi during November 26-28, 1994, and presented a poster (No.: P/2/48) entitled "A Theoretical Study of Electronic Spectra of Radical Cations of some Anthraquinones".

Participation in Orientation Programme / Refresher Course:

- Attended the two week NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP), organized by JMI, New Delhi during February 05-14, 2024.
- Attended the 4 Week Refresher Course in Physics at the UGC-HRDC, JNU, New Delhi during October 5-30, 2015.
- 2. Attended the 1st 3-Week Refresher Course in Basic Sciences (Interdisciplinary) at the Academic Staff College, Jamia Millia Islamia, New Delhi during May 6-27, 2011.
- Attended the 94th 4-Week Orientation Programme at the Academic Staff College, Jamia Millia Islamia, New Delhi during October 18, 2010 to November 16, 2010.

Seminars & Conferences Organised:

- **Organizing Secretary**: National Seminar on Photonics and Optical Materials organized by Department of Physics, JMI, New Delhi on January 21, 2016.
- Joint Secretary: National Seminar on Nanomaterials: |Synthesis, Characterization and Applications organized by Centre for Nanoscience and Nanotechnoogy, JMI, New Delhi on 14th March, 2015.
- Organizing Committee Member of the 17th International Workshop on the Physics of Semiconductor Devices (IWPSD-2013) held at Amity University, Noida during December 10-13, 2013.
- Joint Secretary: National Seminar on Condensed Matter, Nuclear and High Energy Physics, organized by Department of Physics, JMI, New Delhi during February 18-19, 2011.
- Co-ordinated the Parallel session at one venue (Hall 2) and Member Local Organizing Committee of: International Workshop on Physics of Semiconductor Devices, IWPSD-2009 Jamia Millia Islamia, (Dec. 15-19, 2009)
- Joint Secretary: National Seminar on Condensed Matter, High Energy and Nuclear Physics, Department of Physics, JMI, New Delhi-25 (March 23-24, 2009)

Outreach Activities:

- Delivered a Talk on " Chand ki taraf Hinustan ka safar" on Urdu Service, All India Radio, New Delhi, telecast on October 14, 2008.
- **Program Co-ordinator:** Workshop on "Innovative Teaching Methodologies and Best Practices", on Dec. 1, 2007 at Jodhpur and Dec. 4, 2007 at Jhalawar, Rajasthan, in collaboration with American Centre, New Delhi, and Ritinjali, an NGO, and funded by US Department of State.
- Participated in three Five day Workshops and Vetted/Reviewed the Manuscripts of Physics Textbooks for Class XI and XII (Urdu Version), organized by Department of Education in Science and Mathematics (DESM), National Council for Educational Research and Training (NCERT), New Delhi during May 9-13, 2005, May 27-31, 2005, and August 22-26, 2005.

 Participated in a Five day Workshop and Vetted/Reviewed the Manuscripts of Science Textbooks for Class IX (Urdu Version), organized by Department of Education in Science and Mathematics (DESM), National Council for Educational Research and Training (NCERT), New Delhi during December 20-24, 2004.

Contribution to Corporate Life:

- Chief Proctor and Incharge Security, Office of the Chief Proctor, Jamia Millia Islamia from July 22, 2024 to November 06, 2024.
- Hony. Deputy Director, Games and Sports, Jamia Millia Islamia from November 01, 2023 to November 06, 2024.
- Member, Board of Studies, Department of Computer Science, JMI for three years wef 11-08-2022.
- Member, Board of Studies, Department of Chemistry, JMI for three years wef 03-03-2022.
- Provost, M.M.A. Jauhar Hall of Boys Residence, Jamia Millia Islamia wef Jan. 30, 2020 to June 29, 2022.
- Deputy Proctor, Jamia Millia Islamia wef July 25, 2019 to August 27, 2022.
- External Member, Departmental Research Committee of (DRC) of Amity Institute of Applied Sciences, Amity University, Uttar Pradesh wef 07-04-2021.
- External Member, Centre Academic Integrity Panel (CAIP), Centre for Nanoscience and Nanotechnology, JMI for three years wef 10.08.2020.
- Advisor Security, Jamia Millia Islamia wef July 26, 2019 to Jan. 23, 2020
- Time Table In-charge of Department of Physics from 2007 to 2021
- Senior Warden, FRK Hostel wef Feb. 21, 2017 to May 31, 2019.
- Member Academic Audit Team for Session 2015-2016.
- Senior Warden (Mess), Dr. B.R. Ambedkar Hostel from August 27, 2015 Feb. 20, 2017.
- Advisor, Jamia Physics Association for the Session 2015-2016, 2016-2017, 2017-2018 and 2018-2019.
- Assistant Superintendent of Entrance Examinations, MCRC Centre June 2015

- Warden (Mess), Sir Abdul Majeed Khawaja Hostel & Dr. B.R. Ambedkar Hostel from October, 2012 to August 2015.
- Nodal Officer of NAAC Team for Department of Physics 2014-2015.
- Member Central Admission Coordination and Monitoring Committee (CACMC) for the Academic Session 2011-2012, 2012-2013, and 2013-2014.
- Member, Sub-Purchase Committee for the Department of Physics
- Member, NAAC verification Team, July 2013
- Warden, Sir Abdul Majeed Khawaja Hostel from October 5, 2011-October 2012.
- Assistant Superintendent of Examinations, UG Compartmental Examinations December 2011.
- Assistant Superintendent, Entrance Test of Centres of JMI-2011.
- Assistant Superintendent of Examinations, Pre-Ph. D. Examinations of Department of Physics –January 2011.
- Assistant Superintendent of Examinations, Post Graduate Examinations of Department of Physics Annual Examinations 2010, and Examinations 2011.
- Assistant Superintendent of Examinations, UG Compartmental Examinations December 27, 2010 – January 6, 2011.
- Assistant Superintendent, Entrance Test of Centres of JMI-2010 and Entrance Test of Centres of JMI-2009.
- Member, Co-ordination Committee for developing Instrumentation Maintenance Centre, JMI (2008-2010).
- Co-ordinated the Infrastructure Grant of Rs. 40 lacs from UGC to the Department of Physics.
- Placement Coordinator, Department of Physics, 2007-2011.
- Member, Book Purchase Committee for the Departmental Library 2007-2008.
- Deputy Proctor (Schools) August 2002 February 2007.
- Assistant Proctor September 2001 July 2002.
- Deputy Proctor (Schools) September 2000 August 2001.
- Warden Shafeeque Manzil Hostel, January 1998 October 1998.

Membership of Academic and Professional Bodies:

1. Life Member of Indian Laser Association, (Membership No. 917)

2. Affiliate Member of Institute of Physics, UK for the Year 2010-2011, (Membership No. 80029285)

Computational Skills:

Hyperchem and Chemplus Package, Hypercube Inc. USA. Gaussian 2003 Package, AMPAC and AMSOL packages General Atomic and Molecular Electronic Structure System (GAMESS) Program Programming in Fortran, Windows, Unix/Linux, Microcal Origin

Appendix 2A Research Publications:

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Publications in Refereed Journals: 110

110. Harnessing the half-metallicity and thermoelectric insights in Cs₂AgMBr₆ (M = V, Mn, Ni) double halide perovskites: A DFT study

MYSofi,Mohd.ShahidKhan,M.A.Khan,Mat. Sc. Semicond. Process.186, (2025)109023, onlineISSN 1873-4081, Journallink, IMPACT FACTOR:4.2https://doi.org/10.1016/j.mssp.2024.109023

109 Graphene quantum dots as hole transport material in lead free perovskite solar cell: A SCAPS-1D numerical study

MA Saifee, FFA Khan, Javid Ali, MA Kahn, **Mohd. Shahid Khan**, *Engg. Res. Express* --- (2024) 4, ISSN: 2631-8695, <u>IOP link</u>, <u>Impact FActor</u>: -, https://doi.org/10.1088/2631-8695/ada7c2

108. Pioneering computational insights into the structural, magnetic, and thermoelectric properties of A₃XN (A=Co, Fe; X=Cu, Zn) anti-perovskites for advanced material applications

MY Sofi, A. Ramzan, Mohd. Shahid Khan, M. A. Khan, et.al Mat. Sc. Semicond. Process. 185, (2025) 108925, online ISSN 1873-4081, Journal link, IMPACT FACTOR:4.2 https://doi.org/10.1016/j.mssp.2024.108925

107. Investigation of electrical, dielectric and multiferroic properties of 0.7Bi_{0.95}Sm_{0.05}Fe_{1-x}Ga_xO₃-0.3BaTiO₃ composite ceramic system for high temperature piezoelectric applications

F. Jabeen, N.K. Gupta, Mohd. Shahid Khan, R.Pandey, et al, *MaterialsTodayComm*, 41, (2024) 110543, ISSN 2352-4928 Journal link, IMPACT FACTOR:3.7 https://doi.org/10.1016/j.mtcomm.2024.110543

- 106. Control of spin on ferromagnetism and thermoelectric properties of K₂GeMnX₆ (X = Cl, Br, I) halide perovskites: emerging candidates for semiconductor spintronics and thermoelectric applications
 MY Sofi, Mohd. Shahid Khan, M. A. Khan, Mater. Adv., 5, (2024) 4913-4931, ISSN 2633-5409, Journal link, IMPACT FACTOR:5.2 https://doi.org/10.1039/D3MA01160G
- 105. Eco-friendly lead-free halide double perovskites A₂CuMCl₆ (A = K, Rb; M = Sb, Bi): stability, thermoelectric, and optoelectronic advancements through theoretical insights

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 Sofi,
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 Shahid
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 (2024)
 16045-16058,
 ISSN
 1879-2553,
 Journal link,

 IMPACT FACTOR:5.7
 https://doi.org/10.1039/D4TC00891J
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- 104. Unlocking the role of 3d electrons on ferromagnetism and spin-dependent transport properties in K2GeNiX6 (X=Br, I) for spintronics and thermoelectric applications MY Sofi, Mohd. Shahid Khan, Javid Ali, M. A. Khan, J. Phy. Chem. Sol. 192 (2024) 112022, ISSN 1879-2553, <u>Science direct link</u>, <u>IMPACT FACTOR</u>:4.3 <u>https://doi.org/10.1142/S179329202350114X</u>
- 103 Tri-chalcogenides (Sb₂S₃/Bi₂S₃) solar cells with double electron transport layers: design and simulation

MA Saifee, U. Latief, Javid Ali, **Mohd. Shahid Khan**, *Discover Energy*, **4** (2024) 4, ISSN: 2730-7719 (Print), <u>Springer link</u>, <u>Impact FActor</u>Factor: -, <u>https://doi.org/10.1007/s43937-024-00028-6</u>

102 Exploring the lead-free halide Cs2MGaBr6 (M = Li, Na) double perovskites for sustainable energy applications

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