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Outstanding Awards & Honors

- 2019 **Centre of Excellence**, Government of Uttar Pradesh, for setting up a Materials Science Lab.
- 2018 **Alexander von Humboldt Research Fellowship**, Germany (1999-2000, 2003, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2018)
- 2014 **UGC, Research Award**, Government of India.
- 2011 **UGC, Mid Career Award**, Government of India.
- 2007 **Usha-Vijay Sodha Prize for Scientific Research (2002-2007)**, University of Lucknow.
- 2014 **Young Scientist Award**, Council of Science and Technology, Government of Uttar Pradesh.
- 2011 **Nature Publishing Group Award**, USA.
- 2005-2010 **Regular Associates**, International Center for Theoretical Physics (ICTP), Italy
- 2007 **JSPS Fellowship**, Japan
- 2006 **MRSI - Medal**, Materials Research Society of India
- 2004 **CNRS Fellowship**, France
- 1996 **Biotechnology National Associateship**, Department of Biotechnology, Government of India,
- 1990-1991 **UGC - NET Fellowship**, Government of India.

Publications

- Books/Book Chapters **32 (06 International + 26 National)**
- Journal Papers **201 (193 International + 09 National)**
https://scholar.google.co.in/citations?hl=en&user=94YnYs8AAAAJ&view_op=list_works&sortby=pubdate
- Citations **2018**
- H Index **23**
- Publications Impact **11 papers > 5 Impact Factor; 27 papers > 3 Impact Factor; 57 papers > 2 Impact Factor**
- Book/ Journal Edited **04 (02 International Journal + 02 Books)**

Research Supervision

- Post Doctoral **09**, One in Indo-French Project, three UGC- DS Kothari Post Doctoral Fellow, three DST-NPDF Post Doctoral, one CSIR-RA Post Doctoral, one UGC Woman Scientist Fellowship
- Ph.D. Supervised **37** (29 Supervisor + 08 Co-Supervisor)
- Teacher Fellow **03** (one from Tribhuvan University, Nepal)
- DST Inspire Fellow **02**
- Junior Research Fellow **21**, One in Indo-French Project, one from UGC Project, one ISRO Project, two CST Project, two UGC-BSR Fellow, one RGNF and ten from UGC-CSIR, six in DST Project
- Senior Research Fellow **01**, CSIR

Conference Presentations

- Invited Lectures **35 (28 International + 17 National Conferences)**
- Presentations **22 (17 International + 05 National Conferences)**

Research Projects (Total Amount : Rs. 3.4 Crores +)

International Projects

Indo-French Project	Modelling vibrational spectra of complex molecular systems with molecular dynamics technique (IFCPAR): Duration - 3Years, Rs. 41,22,000/-
Indo-Brazil Project	Rigorous Characterization of Active Pharmaceutical Ingredients and Study of Polymorphism in the Solid State Using Vibrational Spectroscopy and Quantum Chemical Techniques (DST - CNPq): Duration - 3 Years , Rs.12,47,400/-
Indo-German Project	Paving the way for a new tool to characterize the polymorphism in pharmaceutical compounds using THz spectroscopy combined with theoretical modeling (DST - DAAD): 2 Years, Rs.8,09,500/-
Indo-Russian Project	Multimetallc Nanoparticle in Polymer Matrix as Precursors of Magnetic Sensor Materials (DST - RFBR): Duration - 3 Years, Rs.18,24,400/-
Indo-Brazil Project	Development, evaluation and characterization of new solid phases of active pharmaceutical ingredients (DST - CNPq): Duration 3 Years, Rs. 34,27,110/-

National Projects

ISRO	Formation of Prebiotic Molecules and Amino Acids in astrophysical ices: ab Initio Molecular Cluster and spectroscopic studies , Duration :3 Years, Rs. 22,03,000/-
UGC	Rigorous Characterization of Active Pharmaceutical Ingredients and Study of Polymorphism in the Solid State Using Vibrational Spectroscopy and Quantum Chemical Techniques . Duration: 2 Years, Rs. 40,66,238/-
UGC	UGC-BSR Mid Career Award ; Duration 1 Year, Rs. 7,00,000/-
UGC	Study of structure and dynamics of some conducting polymers in natural and doped form using vibrational spectroscopy and quantum chemical methods , Duration: 3.5 Years, Rs. 9,91,638/-
UPCST	Identification and evaluation of cost-effective polymers of biomedical importance , Duration: 3 Years, Rs. 2,72,000/-
DST	An experimental and theoretical Study of molecular organization, intramolecular interactions, vibrational dynamics and thermotropic behavior of stratum corneum lipids , Duration: 3 Years, Rs. 5,01,000/-
DST	Conformation dependent vibrational dynamics and phase transition in polypeptides and polynucleotides , Duration: 2 Years, Rs. 92,000/-
DST	Self focusing and its consequences in intense laser plasma interaction , Duration: 3 Years, Rs. 15,80,000/- (Co-PI)
DST	Self focusing /defocusing of EM beams in Ionospheric plasma and its effect on nonlinear process , Duration:3 years, Rs. 5,89,000/- (Co-PI)
DST	Ramanna fellowship programme and DST project on "Self focusing/defocusing of em waves on Ionospheric plasma and its effects on nonlinear process" , Duration: 3 Years Rs. 40,20,000/- (Co-PI)
DST	Physics of Dusty Plasmas , Duration: 3 Years, Rs. 24,56,240/-(Co-PI)

International Collaborations

2018	Alexander von Humboldt Fellow, Germany (1999-2000, 2003, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2018) (At different German universities in Halle, Heidelberg, Essen, Duisburg, Saarbrucken , Bremen, Jena, Marburg)
2017	DST-CNPq Fellow (Indo-Brazil Project) (2010, 2011, 2015, 2016, 2017) (University of Fortaleza, Brazil)
2015	DAAD Project Fellowship, Germany (University of Marburg, Germany)
2012	DAAD Project Fellowship, Germany (University of Marburg, Germany)
2009	JSPS Fellowship, Japan (Kanazawa University, Japan)
2006	Visiting Fellow, Indo-French Centre for Promotion of Advanced Research, Government of India & Government of France. (University of Lille, France)
2004	Foreign Researcher, CNRS Fellowship, France (University of Lille, France)

Invited Lectures (outside India)

Institutes & Universities

- 2018 **Institute of Organic Chemistry & Biochemistry**, Prague, Czech
2018 **University of Saarland**, Saarbrücken, Germany
2017 **Carlton University**, Ottawa, Canada
2017 **University of Toronto**, Canada
2017 **University of Waterloo**, Ontario, Canada
2010 **Tribhuvan University**, Nepal
2009 **Kyoto University**, Japan
2009 **Kanazawa University**, Japan
2009 **Kwansei-Gakuin University**, Japan
2008 **Bochum University**, Germany
2008 **International Centre for Theoretical Physics**, Trieste, Italy
2005 **Department of Physical Chemistry**, University of Dortmund, Germany
2003 **University of Freiburg**, Germany
2002 **University of Padova**, Italy
1999 **Jena University**, Germany
1999 **Max Planck Institute for Biophysics**, Göttingen, Germany

International Conferences

- 2017 **9th International Conference on Advanced Vibrational Spectroscopy**,
Victoria, Canada
2015 **8th International Conference on Advanced Vibrational Spectroscopy**,
Vienna, Austria
2014 **POLYCHAR 22 – World Forum on Advanced Materials**,
Stellenbosch, South Africa
2013 **The Fourth Asian Spectroscopy Conference**,
Singapore
2011 **POLYCHAR 19 – World Forum on Advanced Materials**,
Kathmandu, Nepal
2010 **Kathmandu Humboldt Kolleg**,
Kathmandu, Nepal
2010 **9th European Conference on Nonlinear Optical Spectroscopy**,
Bremen, Germany
2009 **POLYCHAR 17 – World Forum on Advanced Materials**,
Rouen, France

Contribution for Higher Education

- Expert, Course Framing Committee (BOS) **Dr. Shakuntala Devi National Rehabilitation University, Lucknow University
Banaras Hindu University, Varanasi**, Approval of courses.
Expert, Research Degree Committee (RDC) **CCS Meerut University**, Approval of research programmes, research guides.
Member, Academic Council **Lucknow University**, All academic matters of the university.
Member **Faculty Board**, Lucknow University.
Member **Committee to Develop International Collaboration Exchange**, Lucknow University.
Member **International Collaborations and Alumni Affairs**, Lucknow University.
Member **Committee to Develop International Collaboration Exchange**, Lucknow University.
Member **Committee making Proposal of Reward to Teachers and Employees** of
Lucknow University.
Member **Committee to Set up Central Instrumentation Laboratory**, Lucknow University
Expert **Committee of Selection of UGC-BSR Fellows**, Banaras Hindu University &
Lucknow University
Co-ordinator **MoU** between Martin Luther University, Halle, Germany & Lucknow University

Awards/ Honors/ Distinction

- 1999-2000 **Alexander von Humboldt Research Fellowship**, Germany
(Martin Luther University, Halle, Germany)
- 2003 **Alexander von Humboldt Research Fellowship**, Germany
(Martin Luther University, Halle, Germany)
- 2004 **Foreign Researcher**, CNRS Fellowship, France
(May-July) (University of Lille, France)
- 2004 **An Award of 20,300 Euro was granted by Alexander von Humboldt Foundation**, Germany for purchase of research equipment (FT-IR Spectrometer)
- 2005 **Alexander von Humboldt Research Fellowship**, Germany
(May-June) (Heidelberg University, Heidelberg, Germany)
- 2006 **An Award of 2730 Euro was granted by Alexander von Humboldt Foundation**, Germany for purchase of research equipment (Power Supply & Online UPS)
- 2005-2010 **Regular Associates, International Center for Theoretical Physics (ICTP)**, Italy
- 2006 **Visiting Fellow**, IFCPAR
(May) (University of Lille, France)
- 2006 **Alexander von Humboldt Research Fellowship**, Germany
(June) (University of Duisburg-Essen, Essen, Germany)
- 2007 **Alexander von Humboldt Research Fellowship**, Germany
(October) (University of Duisburg-Essen, Essen, Germany)
- 2008 **Alexander von Humboldt Research Fellowship**, Germany
(June) (University of Duisburg-Essen, Essen, Germany)
- 2008 **Member, Scientific Committee, POLYCHAR - World Forum on Advanced Material: Fellow, International Union of Pure & Applied Chemistry (IUPAC)**, USA
- 2009 **Alexander von Humboldt Research Fellowship**, Germany
(April-June) (University of Dusseldorf, Dusseldorf, Germany)
- 2009 **An Award of 20,000 Euro was granted by Alexander von Humboldt Foundation**, Germany for purchase of research equipment (DSC & Microbalance)
- 2009 **Alexander von Humboldt Research Fellowship**, Germany
(Aug.-Sep.) (University of Dusseldorf, Dusseldorf, Germany)
- 2009 **JSPS Fellowship**, Japan
(December) (Kanazawa University, Japan)
- 2010 **Alexander von Humboldt Research Fellowship**, Germany
(June) (University of Duisburg - Essen, Essen, Germany)
- 2010 **Nature Publishing Group Award** of \$1000 for participation in Gordon Conference (US)
- 2011 **Alexander von Humboldt Research Fellowship**, Germany
(June) (Jacobs University Bremen, Bremen, Germany)
- 2012 **Alexander von Humboldt Research Fellowship**, Germany
(June) (University of Saarland, Saarbrücken, Germany)
- 2012 **Alexander von Humboldt Research Fellowship**, Germany
(October) (Phillip University - Marburg, Marburg, Germany)
- 2012 **DAAD Project Fellowship**, Germany
(June) (Phillip University - Marburg, Marburg, Germany)
- 2015 **DAAD Project Fellowship**, Germany
(June) (Phillip University - Marburg, Marburg, Germany)
- 2015 **Fellow (Academician), Asia Pacific Academy of Materials (APAM)**
- 2017 **Awarded Certificate for Outstanding Contribution in Reviewing**
(Elsevier- Vibrational Spectroscopy)
- 2018 **Awarded Certificate for Outstanding Contribution in Reviewing**
(Elsevier- Journal of Molecular Liquids)
- 2018 **Alexander von Humboldt Research Fellowship**, Germany
(April-June) (University of Saarland, Saarbrücken, Germany)
- 1987-1989 **Awarded National Merit Scholarship**
- 1990-1991 **UGC-NET Fellowship**
- 1996 **Biotechnology National Associateship**, Department of Biotechnology
- 2002 **Young Scientist Award**, Government of Uttar Pradesh
- 2006 **MRSI-Medal by Materials Research Society** of India for outstanding contribution in the field of Materials Science
- 2011 **UGC Mid Career Award**
- 2014 **UGC Research Award**
- 1982-1984 **Awarded State Scholarship**
- 1987 **Awarded Merit Certificate** for securing **Third Position in Order of Merit in B.Sc.**
- 1989 **Awarded Merit Certificate** for securing **Third Position in Order of Merit in M.Sc.**
- 2007 **Usha-Vijay Sodha Prize for Scientific Research** (2002-2007)

Organizational performances

- 2019 **Organizing Secretary**, International Symposium on Advances in Functional & Biological Materials.
- 2016 **Convener**, 6th International Conference on Perspectives in Vibrational Spectroscopy.
- 2014 **Organizing Secretary**, International Symposium on Advances in Biological & Materials Sciences.
- 2013 **Organizing Secretary**, International Seminar on Advances in Bio- and Nano-Materials.
- 2010 **Nodal Person**, INSPIRE Summer Science Workshop.
- 2008 **Organizing Secretary**, Seminar on Frontiers of Spectroscopy.
- 2008 **Executive Secretary-cum-Treasurer**, POLYCHAR 16- World Forum on Advanced Materials held at University of Lucknow (17-21 February, 2008). About 300 delegates including 120 from abroad (35 countries) participated.
- 2010 **Convener & Treasurer**, International Conference & Humboldt Kolleg on "Frontiers of Environmental and Health Sciences Useful to Mankind: A Multidisciplinary Approach".
- 2006 **Convener**, 17th Annual General Meeting of the Materials Research Society of India & Theme Symposium on "Bio, Biomedical & Natural Materials" held at University of Lucknow. About 300 delegates from India and abroad.
- 2006 **Initiated & Organised** Lecture Series on Materials Science/ Nanotechnology at University of Lucknow.
- 2006 **Co-Coordinator** (Multimedia Publication), Public Lectures of Prof. C.N.R. Rao, Dr. R. A. Mashelkar & Prof. M. Vijayn, organized on the eve of 85th Anniversary of University of Lucknow.

Administrative Positions

- 2018-till date **Head**, Physics Department, *Lucknow University, Lucknow.*
- 2019-till date **Coordinator**, *Centre of Excellence*, Physics Department, *Lucknow University, Lucknow.*
- 2010-2011 **Incharge**, *Computer Centre, Lucknow University.*
- 2010-till date **Secretary**, *Humboldt Academy Lucknow (2010 - till date).*
- 2008- **Coordinator**, *Nanotechnology Teaching Programme, Lucknow University.*
- 2006- **Coordinator**, *Materials Science Teaching Programme, Lucknow University.*
- 2006-till date **Founder Secretary**, *MRSI-Lucknow Chapter (2006 - till date).*
- 2007- **Committee to surprise all administrative and Academic Work** in the *Department of Physics, Lucknow University.*

Teaching Positions

- 2006-till date **Professor (Specialization in Experimental Solid State Physics)**, *Physics Department, Lucknow University, India.*
- 2001-2006 **Reader**, *Physics Department, Lucknow University, India.*
- 1996-2001 **Senior Lecturer**, *Physics Department, Lucknow University, India.*
- 1991-1996 **Lecturer**, *Physics Department, Lucknow University, India.*

Education

- 1999-2000 **Postdoctoral Research**, Martin Luther University, Halle, Germany as Alexander von Humboldt Fellow
- 1992 **Doctor of Philosophy (Ph.D.)**, Department of Physics, Lucknow University, India. Dissertation Title: Conformation and Conformational Transitions in Biomolecules.
- 1989 **Master of Science (M.Sc.)**, Department of Physics, Lucknow University, India. First Div., 2nd Rank in the University.
- 1987 **Bachelor of Science (B.Sc.)**, Lucknow University, India. First Div., 3rd Rank in the University.

Placement of Ph.D. Students & Post Doctoral Fellows

Dr. Deepti Kapoor	Professor , Amity University, Noida
Dr. Anuj Kumar	Associate Professor , CCS University, Meerut
Dr. Bhawan Dutt Joshi	Associate Professor , Tribhuvan University, Nepal
Dr. Navnit Mishra	Associate Professor , BND College, Kanpur
Dr. Mahendra Singh	Associate Professor , BND College Kanpur
Dr. Ram Kumar Tiwari	Associate Professor , BSNV PG College, Lucknow
Dr. Sanjay Mishra	Reader , Physical Research Laboratory, Ahmadabad
Dr. Sujeet K Agrawal	Associate Professor , KNIT, Sultanpur
Dr. Abhishek Mishra	Assistant Professor , University of Petroleum & Energy Studies, Dehradun
Dr. Ajita Pathak	Assistant Professor , Amity University, Lucknow
Dr. Anuradha Shukla	Assistant Professor , Integral University, Lucknow
Dr. Girish Pandey	Assistant Professor , Amity University, Noida
Dr. Karthick Thangavel	Assistant Professor (Research) , Sastra University, Thanjavur
Dr. Parag Agrawal	Assistant Professor , TMU, Moradabad
Dr. Sandeep Shukla	Assistant Professor , Vishwakarma University, Pune
Dr. Soni Misra	Assistant Professor , Graphic Era University, Dehradun
Dr. Vikal Saxena	Assistant Professor , SRMS College of Engineering & Technology, Lucknow
Dr. Amit Kumar	Assistant Professor (Contractual) , MJP Rohilkhand University, Bareilly
Dr. Poornima Sharma	Assistant Professor (Contractual) , IT College, Lucknow
Dr. Shikha Mishra	Assistant Professor (Contractual) , Rakesh P.G. College, Pilani
Dr. Anamika Sharma	Tutor/Advisor , George Brown College, Toronto, Canada
Dr. Ashutosh Sharma	Senior Researcher , ELI-ALPS, Szeged, Hungary
Dr. Vineet Gupta	Researcher , ELI-ALPS, Szeged, Hungary
Dr. Mohd. Faisal	Lecturer , Inslamia College, Barabanki
Dr. Radha Mohan Mishra	Lecturer , M D Shukla Inter College, Lucknow
Dr. Subodh Kumar	Technical Assistant D , BSIP, Lucknow
Dr. Anuj Shukla	Scientist E , Defense Research & Development Organization (DRDO), Jodhpur
Dr. Vikas Porwal	Scientist E , Defense Research & Development Organization (DRDO), Dehradun
Dr. Mridula Singh	Senior Geophysicist , Oil & Natural Gas Commission (ONGC)
Mr. Prabhat Singh	Geophysicist , Geological Survey of India (GSI)
Mr. Ajendra Singh	Patent Examiner , India Patent Office, New Delhi
Dr. Archana Singh	Patent Examiner , Indian Patent Office, Kolkata
Dr. Deepika Chaturvedi	Sr Scientist , Dr. Reddy's Laboratories, Hyderabad
Dr. Rashmi Mishra	Technical Lead (Subject Matter Expert) , Molecular Connections Pvt Ltd., Bangalore
Dr. Ruchi Agarwal	Assistant Vice-President (Technical) , Sanshadow Consultant Pvt. Ltd.
Dr. Anubha Srivastava	UGC Woman Scientist , Lucknow University
Dr. Debraj Gangopadhyay	Postdoctoral Fellow at IOCB Prague, Czech Republic
Dr. Shivani	Postdoctoral Fellow , Lucknow University
Dr. Swapnil Singh	Postdoctoral Fellow , ISSER, Mohali