Curriculum Vitae

Full Name	Dr. Shubhra Kala
Designation	Assistant Professor
Department	Physics
Campus	Birla and Chauras
Telephone	
Mobile	7060482253
Email	shubkala@gmail.com



Education Qualification	Ph.D., IIT Delhi			
Teaching Experience	10 Years	Research Experience	20 Years	

Areas of Interest/ Specialization

- 1. Nanomaterials
- 2. Thin films
- 3. Energy Harvesting: thermoelectric, photovoltaics and hydrogen storage

Honours & Awards NA

- 1.
- 2.
- 3.

Member of Academic Institutions NA

- 1.
- 2.
- 3.

Membership of Scientific Organization NA

- 1.
- 2.
- 3.

Research Supervision (No. of Ph.D. Degree Awarded/Registered) Awarded 03 and registered 01

Research Projects/MoU undertaken NA

- 1. Title, Funding Agency, Total Cost, Completed/Ongoing
- 2.
- 3

Administrative Experience NA

- 1.
- 2.
- 3.

Scientific Visits Abroad/International Collaboration NA

- 1.
- 2.
- 3.

Conference/Symposium/Workshop Attended during last five years (2017-2022). International

1. Paper Presented, International conference on Aerosols, Air Quality & Climate change on Himalaya Region of Uttarakhand AAC-2018 Department of Physics

- HNBGU 21-23 October 2018.
- 2. Talk delivered ICAMEES-2018, UPES, Dehradun, 14-15 December 2018.
- 3. Invited Talk, International Conference on Material Science and applications (ICMSAA-19) Dept. of Physics HNBGU 25 -27 November 2019.
- 4. Invited Talk. International conference on advanced nanomaterials ANM-2020, JIIT Noida 18-20 February 2020.
- 5. Participated "Recent Advances in Material Science (ICRAMS-2021)" held on 15th to 17th May 2021.
- 6. Invited Talk International conference on Aerosols, Air Quality & Climate change on Himalaya Region of Uttarakhand AAC-2022 Department of Physics HNBGU 21-23 October 2022.

National

- 1. Invited Talk, IAPT & National Synposium on Recent Trends in Physics at Different Scales-2017, GKV, Haridwar, 29-31 October 2017.
- 2. Delivered Talk, National Symposium on Nano Science and Technology NSNST-2018, IISc. Bangalore, 18-20 June 2018.
- 3. Paper Presented, National Conference on Recent frontiers in chemistry (NCRFC-2018) Department of Chemistry, HNBGU, 27-28 April 2018.
- 4. Paper Presented 13th Uttarakhand State Science and Technology Congress, 2019, Dehradun, 26 February 2019.
- 5. Chaired Session, National workshop on Recent advancements in atmospheric science with special reference to himalaya RAAS 2019, Department of Physics HNBGU, 25 September 2019.
- 6. Convenor, Short term Course, Materials Synthesis and Characterization Techniques, NIT Uttarakhand, HNBGU and SLIT, 7-11 September 2020.
- 7. Chaired a technical session, 3rd National Conference on "Recent Advancement in Physical Sciences" jointly organized by Department of Chemistry, Department of Physics & Department of Mathematics, National Institute of Technology, Uttarakhand, December 19-20, 2021 at NIT Uttarakhand.

Conference/Symposium/Workshop Organized during last five years (2017-2022)

1. Organizing Secretary, "Two days workshop on Physical and Applied Sciences" Department of Physics, HNBGU, 14-15 March 2018.

Research

Publications 2017 onwards

Journals

1. "Synthesis of Mixed AuZn Nanoparticles by Spark Discharge Technique" Kala Shubhra, Kruis F.E. MRS Advances, 4, 1621, 2019 (Impact Factor= 0.84)

Proceedings

- 1. "Green Synthesis of copper and copper sulfide nanoparticles" Rawat Pooja, Nigam Anju, Kala Shubhra, AIP conference proceedings, 2220, 020102, 2020
- **2.** "Optical, Structural and XPS studies of Ag nanoparticles prepared via Melia Azedarach plant extract" Nigam Anju, Kala Shubhra, AIP conference proceedings, 2220, 020116, 2020

- **3.** "A Statistical study on daily solar radiation and meteorological parameters" Yadav Garima, Kala Shubhra, Amar Deep and Purohit K.D., 2220, 130050, 2020
- **4.** "Viability of spark-discharge technique to produce semiconductor nanoparticles" Kala Shubhra, Rawat Pooja and Kruis Frank Einar, Materials Today Proceedings, 28, 96, 2020.
- **5.** "Urtica Diocia Leaves Extract: A Natural Resource to Reduce Iron Salt to Synthesize Fe Nanoparticles" Kala Shubhra and Nigam Anju, IOP: Journal of Physics, 1849, 012035, 2021.
- **6.** "Synthesis of Fe:Ag nanocomposites and their anti-bacterial activities" Nigam Anju, Rawat Pooja, Kala Shubhra, IOP: Journal of Physics, 2070, 01215, 2021
- 7. "Structural and bioactive properties of iron sulfide nanoparticles synthesized by Green-route' Nigam Anju, Kala Shubhra, Materials Today: Proceedings, 66, 2144, 2022
- **8.** "Effect of annealing on structure and morphology of copper sulfide nanoparticles prepared by green methodology" Rawat Pooja, Kala Shubhra, Materials Today: Proceedings, 67, 719, 2022
- 9. "Metal nanoparticles prepared by using plant extracts as reducing agents: A review", Rawat Pooja, Nigam Anju and Kala Shubhra, CSIR-NISCAIR Applied Innovative Research (ISSN 2581-8198 (Online), 2, 80, 2020.
- 10. "Online-growth measurements on the generation of metal nanoaerosol and their offline structural properties", Kala Shubhra, Kruis F.E., Mehta B.R., CSIR-NISCAIR Applied Innovative Research (ISSN 2581-8198 Online), 2, 93, 2020.
- 11. "Radiosonde: A tool to monitor atmospheric profiles", Yadav Garima, Kala Shubhra, Amardeep, Purohit K.D., CSIR-NISCAIR **Applied Innovative Research** (ISSN 2581-8198 Online), 2, 103, 2020.

Books

1. Shubhra Kala, Ashok Kumar, Tarun Rawat, B. C. Chanyal and Kamal Deolal, Elements of Quantum Mechanics and Relativity, E-book for Uttarakhand Open University, Haldwani, 2019.

Total Number of Research Publications: 27

Total Citation, h-index, i10 index (Scopus/WoS/Google Scholar)

	All	Since 2019
Citations	219	77
<u>h-index</u>	9	6
i10-index	6	2