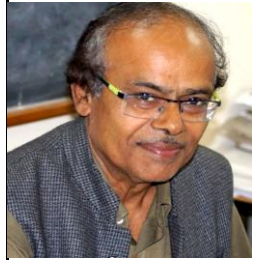




Shivaji College Faculty Details Proforma

Title		First Name		Last Name		Photograph
Dr.		ASHOK KUMAR		SHUKLA		
Designation	Associate Professor					
Address	AG-247, Shalimar Bagh, Delhi-110088					
Office Phone No.						
Residence						
Mobile						
Email	ashokshukl22@gmail.com					
Web-Page						
Educational Qualifications						
Degree	University/Institute			Year		
Ph.D.	University of Delhi					
M.Phil./M.Tech.	University of Delhi					
PG	University of Delhi					
UG						
Any Other Qualification						
Career Profile						
<ul style="list-style-type: none"> To work a challenging and dynamic environment to keep adding value to myself and simultaneously contribute to the growth and success of the organization or institute. 						
Administrative Assignments						

- Teacher-in-charge, Deptt. Of Physics Shivaji College from 1991-92 & 2004-05.
- Convener and member of different committee's setup by staff council from time to time.
- Founder Member: Semi Conductor Society of India.
- Ex-Executive Member: Indian Physics Association Delhi Chapter.
- Executive Member of Organizing Committee for many Conferences.
- Chairman: Rural Science Educational Society.
- Convener: Physics Society Shivaji College
- Bursar: Shivaji College 2007-13.

Areas of Interest/Specialisation

- Electron Transport Phenomenon in polycrystalline Semiconductors.

Subjects Taught

- Mathematical Physics
- Mechanics
- Electricity and Magnetism
- Electromagnetic theory
- Thermal Physics
- Statistical Mechanics
- Waves and Optics
- Superconductivity
- Solid state Physics
- Quantum mechanics
- Atomic and Molecular physics
- Nuclear physics

Innovation Project/Research Projects (Major Grants/Research Collaboration)

Publications Profile (Research Papers/Books)

LIST OF PUBLICATIONS AND OTHER ACADEMIC ACTIVITIES

- Effect of Temperature on the Electrical transport properties of P-type poly crystalline InSb.
P.C. Mathur, A.K. Shukla R.P. Sharma and P.K. Shukla, P.K. Goyal, J. Electronic Materials 12, 483 (1983).
- Hopping conduction in polycrystalline semi conductors.
R.P. Sharma, A.K. Shukla, A.K. Kapoor, R. Srivastava and P.C. Mathur, J. Appl. Phys. 51, 2026 (1985).
- Low Temperature conduction in solar grade polycrystalline semi conductors.
A.K. Shukla, R.P. Sharma, A.K. Kapoor and P.C. Mathur, International Conference on Physics and Energy for development, Jan. 26-29, 1985. Dhaka-Bangla Desh.
- Effect of hydrogen annealing on the conduction mechanism in polycrystalline CdTe.
R.P. Sharma, A.K. Shukla, O.P. Sharma and P.C. Mathur, International Conference on II-VI Compounds, March 4-8, 1985. Aussois-France.
- Electrical Transport Properties of PbSe.
A.K. Kapoor, S.Kaul, A.K. Shukla, R.P. Sharma, R. Malhan, T. Nath and P.C. Mathur, International Conference on the physics and Technology of compensated semi-conductors feb. 20-22, 1985, I.I.T. Madras.
- Thermoelectric Power of Polycrystalline InSb.
A.K. Shukla, R.P. Sharma and P.C. Mathur, National Conf. on Physics of Semi conductors and Devices, I.I.T. Madras, Jan, 1984.
- Investigation of the conduction Mechanism in P-Type polycrystalline CdTe.
A.K. Shukla, O.P. Sharma, A.K. Kapoor and P.C. Mathur, IV National Seminar on Physics of Semi-Conductor and Devices, Jan, 16-19, 1985 Jaipur.
- Participated in workshop on "Education and Research in Electronics" held at Indian National Science Academy, New Delhi, from October 14-16, 1982.

R. Singh, **A. K. Shukla**, S. S. Gaur, P. Verma, P. Biswas and O. Rana, "COMPARISON OF THE RESULTS OF DIFFERENTIAL EQUATION BY ORDINARY METHOD AND EULER'S METHOD USING SCILAB", *Vidyabharati International Interdisciplinary Research Journal (Special Issue)*, 126-128 August, 2021, ISSN 2319-4979

Dr. Ravindra Singh, **Dr. Ashok Kumar Shukla**, Dr. Shiv Shankar Gaur, Dr. Priyanka Verma, Polly Biswas, Dr. Omwati Rana, "The Matrix Formulations and Algebraic Equations Using Scilab", *National Journal of Environmental and Scientific Research*, Vol-2, Issue-7, pp. 56-71, July 2021, E-ISSN-2582-5836. DOI - [10.53571/NJESR.2021.2.7.56-71](https://doi.org/10.53571/NJESR.2021.2.7.56-71)

Polly Biswas, **Dr. Ashok Kumar Shukla**, Dr. Ravindra Singh, "Mathematical Treatment Using Runge-Kutta (Rk-4) Method For Hermite Gaussian (H-G) Laser Pulse In Vacuum For Circularly Polarized Laser Pulse & Linearly Polarized Laser Pulse, and Effects of Decentre Parameter & Electron Energy Gain Versus Laser Intensity Parameter", *Bull. Cal. Math. Soc.*, 113, (3) 189-194, 2021

Polly Biswas, **Dr. Ashok Kumar Shukla**, Dr. Ravindra Singh, "The Study of Partition Function, Occupation Number, Internal Energy and Entropy Using Scilab", *International Journal of Research In Computer Applications And Robotics*, Vol. 9 Issue 6, pp. 1-6, June 2021, ISSN 2320-7345

Polly Biswas, **Dr. Ashok Kumar Shukla**, Dr. Ravindra Singh, Dr. Shiv Shankar Gaur. "The Study of Fermi-Dirac, Bose-Einstein and Maxwell-Boltzmann Distribution with Energy at Different Temperatures with Scilab Software", *National Journal of Environmental and Scientific Research*, Vol-2, Issue-6, pp. 53-59, June 2021, E-ISSN-2582-5836.

Polly Biswas, **Dr. Ashok Kumar Shukla**, Dr. Ravindra Singh, "Weighted Least Square Fitting Through Matrix Form Using Scilab Programming", *International Research Journal of Humanities and Interdisciplinary Studies*, Vol. 2, Issue 6, pp. 259-264, June 2021, ISSN 2582-8568. DOI Link- <https://doi-ds.org/doi/10.2021-79778634/IRJHIS2106033>

Polly Biswas, **Dr. Ashok Kumar Shukla** & Dr. Ravindra Singh, "The Equations of Motion of The Electron Under Certain Conditions With An Electric Field & Path Comparison", *Exploring The Scientific Research (Volume-2) International Book of Multidisciplinary Studies*, AkiNik Publications, Chapter 5, pp. 41-50, 2021 ISBN: 78-93-91216-06-1, E-Book ISBN: 978-93-91216-18-4, Book DOI: <https://doi.org/10.22271/ed.book.1215>

Conference/Seminar/Faculty Development Programme/Workshop

- As convener of Physics Society in Shivaji College, organised an Inter College debate competition on "Solar Energy is the ultimate solution to the Energy Crisis of the world" in Association with Deptt. Of Non-conventional Energy sources (Ministry of Energy, Govt. of India) at Shivaji College on 2th February, 1985. A seminar on "Physics Education" is proposed to be held in Nov. 2005.
- Participated in national seminar on Interaction between Research in Universities and Industries held at Vigyan Bhawan, New Delhi from July 9-11, 1986 organised by University of Delhi and sponsored by UGC, DST, DOE Govt. of India. (Also member of the organizing committee.
- Participated in 'VI National Seminar on Semi conductor and Devices' held at IACS Calcutta from Dec. 10-12, 1986.
- Participated in 'International conference and Intensive tutorial Course on Semiconductor Materials' held at Taj Palace Hotel, New Delhi From December 8-16, 1988.
- Participated in "2nd International Conference and Intensive Tutorial Course on Semiconductor Materials" held at University of Delhi, South Campus from Dec. 14-19, 1992.
- Participated in Seminar " convention on Examination reforms organised by DUTA on 6-2-1993 at University of Delhi.
- Participated in "Regional Work shop on Low Dimensional Semi conductor structures" held at University of Delhi, South Campus, N. Delhi on 18th Dec. 1995 organised by Semi conductor Society (India).
- Participated in " 3rd International conference and Intensive Tutorial Course on Semi Conductor Materials and Technology held at Deptt. Of Electronic Science, University of Delhi South Campus, New Delhi from Dec. 16-21, 1996.
- Attended 84th Indian Science Congress with Focal Theme "Frontiers in Science and Engineering and Their Relevance to National Development" hosted by University of Delhi in 1997.
- Participated in " International Conference on Physics Education ICPE-2005 with focal theme "world view on physics Education in 2005, Focussing on change" held at Vigyan Bhawan, New Delhi from 21-26 August 2005.
- As convener of the physics society Shivaji College, organized a debate and Quiz competition in Oct., 2005
- Participated in 2nd International Conference on Current Developments in Atomic, Molecular & Optical Physics (CDAMOP) held at Delhi University from March 21-23, 2006

- Participated in one day workshop on **Astrophysics cosmology and Computation** organized by department of Physics Shivaji College on 12th February 2016.
- Participated in one day workshop organized by department of Physics Shivaji College on 31st January 2017.
- Organizing committee member of National Conference on Current and Future Perspectives in Nanotechnology “ **Nanoworld-2018**” organized by Department of Physics Shivaji College (**University of Delhi**).
- Participated as an Organizer of annual departmental fest INVENIO two days held at Shivaji College University of Delhi on 30 and 31 March, 2017.
- As a resource person in inspire science camp held from 13.12.2015 to 19.12.2015 at Shivaji College , conducted by Department of Science and Technology **DST**.

Research Guidance (*Supervision of Doctoral Thesis/Dissertations*)

Awards and Distinctions

- Scientist ‘B’ at University of Delhi.
- Visited France and England in 1985 to participate and present research paper in International conference.
- Visited Dhaka, Bangladesh in 1989 to participate and present research paper in International conference

Memberships

Other Academic Activities

Cultural/Extracurricular Activities

Signature of Faculty Member