Faculty Details (Prof. Supreeti Das)

Title	Professor	First Name	Supreeti	Last Name	Das	Photograph
Designation		**Professor**				
Address (Office)		Gargi College, Delhi University Siri Fort Road, New Delhi 110049				
Contact No. (Mobile)		9810528425				
Email		supreeti.das@gargi.du.ac.in				

EDUCATIONAL QUALIFICATIONS

Degree	Institution	Year
B.Sc. Physics Hons.	St. Stephen's College, DU	1983
M.Sc. Physics	I.I.T. Kanpur	1985
Ph.D.	I.I.T. Kanpur	1991

CAREER PROFILE

Lecturer: 1992-1996

Senior Lecturer: 1996-2001

Reader: 2001-2006

Associate Professor: 2006- 2023

Professor: 2023 -till date

Teaching experience: 33+ years

Date of joining Gargi College as Permanent Lecturer: 17th July,1995

Present position: Professor, Department of Physics, Gargi College, Delhi University, New Delhi

ADMINISTRATIVE ASSIGNMENTS

1. **Students' Union Advisor :2004-2006**
2. **Convenor Path Finder Sciences :2011**
3. **Teacher Proctor Sciences 2014**
4. **NAAC core committee member: Aug 2020- Aug 2022**

5. **Bursar: April 2021- June 2023**
6. **Staff Council Secretary: Feb. 2024-till date**

AREAS OF INTEREST / SPECIALIZATION

1. Applications of Nonlinear Dynamics
2. Nanofluids for heat transfer applications

SUBJECT TAUGHT

Mathematical Physics, Atomic, Molecular and Nuclear Physics

RESEARCH GUIDANCE

Masters' Thesis, Galgotia's University 2021

REFRESHER COURSE/ORIENTATION PROGRAMME/FACULTY DEVELOPMENT PROGRAMMES ATTENDED:

Self – Development& Learning new skills 2024-2025

1.5-day FDP on Quantum Mechanics and Quantum Computing,2025

2. 5-day FDP Program on "Transcending Mathematics: Theoretical Escalation to Interdisciplinary and Industrial Innovations" organized by Amity Institute of Applied Sciences Kolkata - Department of Mathematics, Amity University Kolkata,2025

3. 5 -day FDP "Computational techniques using HPC in Physical Sciences" organized by Department of Physics and Materials Science and Engineering of Jaypee Institute of Information Technology, Noida, UP, 2024

4. One Week FDP "Advances in Semiconductor and Photonic Devices (ASPD-2024)" 2024.
5. One-week Online FDP on, Data Analytics using Machine Learning, BIT Mesra off campus, NOIDA (2024) (Online)

6.One -week FDP on Teaching Learning Methods organized by PMMMNMTT -Ramanujan College Delhi University (2024)

PUBLICATIONS PROFILE

1. Das, S. (2024), Thermophysical Properties of SWCNT Nanofluids. *Macromolecular Symposia*, 413(1) Wiley,1-5
2. Das, S., Agarwal, P., Sahota, L. (2024) et.al. Economic and Performance Analysis of Modified Solar Distillation System Coupling Different Integrations Using Carbon Quantum

Dot Nanoparticles: Generalized Thermal Model.*J of Solar Energy Engineering (ASME)*,146, 041008-1-20.

3. Das, S., (2023),Carbon Mitigation: An Ongoing Challenge. *International Journal of Research and Analytical Reviews,*10(4),469-471.
4. Das, S., (2023), Hydrogen: A Vector for Sustainable Energy. *International Journal of Research and Analytical Reviews,*10(4),339-343.
5. Das, S., (2023), Heat Transfer in a square Cavity filled with Titania nanofluid. *International Education and Research Journal*, 9(5),52-53.
6. Das, S., (2023), Nonlinear Dynamics of Coupled Neurons.*International J of Research in Engineering and Science*,11(5), 362-365.
7. Das, S., (2023), A Review of MWCNT Nanofluid for Heat Transfer: Comparisons and Applications with different Base Fluids. *International J of Innovative Research in Technology*, 9(9), 14-20.
8. Das, S., (2022), Thermophysical Properties of MWCNT-Thermal oil nano fluid for industrial applications. *International J of Research in Engineering and Science*, 10(2),45-50.
9. Das, S., Sahota, L., (2022), Heat transfer and cost analysis of circular heating source based tubular rods loaded with thermal oil MWCNT nanofluids. *Materials Today Proceedings* ,54, 941-950.
10. Das, S., (2018), Comparative evaluation of Thermophysical properties of nanofluids for industrial applications.*IOSR-Journal of Applied Physics*, 10(2),13-17.
11. Das, S., (2015), Simulating flow of Nanofluids for Heat Transfer. *Journal of Basic and Applied Engineering Research*,2(22),1916-1918.
12. Das, S., (2015), Nano-fluids for heat transfer: An analysis of thermophysical properties. IOSRJournal of Applied Physics, 7(5),34-40.
13. Govindan, R., Das, S., Bhattacharjee, J.K., Properties of Lorenz model for convection in a rotating fluid layer,(1992). *Modern Physics Letters B*,6 (16,17),1055-1061.
14. Das, S., Bhattacharjee, J.K., Stabilization against Kuppers- Lortz instability by a magnetic field (1991), *Physics of Fluids A, Fluid dynamics*, 3(5), 978-983.

Book Published:

Laplace and Fourier Transforms for Physicists and Engineers, (2017), published by Scientific International Private Limited.

Book Chapters

1.Nanofluids for Thermal Management in Defense Applicationsin the edited book Advanced Functional Materials for Sustainable Environments, published jointly by Springer& Capital Publishing Company,October 2024.

1. Das, S., (2024), Hydrogen: A sustainable fuel for future in *Futuristic Trends in Renewable & Sustainable Energy* e-ISBN: 978-93-6252-921-3 IIP Series, Volume 3, Book 6, Part 1, Chapter 3.
2. Das,S. (2015), Nanofluids for Heat Transfer, *Energy Research and Environmental Management: An Innovative Approach*, Krishi Sanskriti Publications,ISBN:978-81-930585-2-7
3. Chebrol,N., Das, **S**.&Ruina, A.,(2014), Dynamics of coupled FN neuron model in the

proceedings of APCMSET2014, *Innovations & Research in Physico-Chemical Sciences - A step towards Sustainability*, ISBN 978-93-83083-88-6, Excellent Publishing House.

E CHAPTERS/STUDY MATERIALS

PAPERS PRESENTED IN INTERNATIONAL/NATIONAL CONFERENCES/SEMINARS/SYMPOSIA (2024-25)

1. Nanofluids for Clean Environment: An Application for Carbon dioxide Absorption Invited speaker in ICRDHBESS – 2024, organized by G.A.V. Degree College,Patauda,Jhajjar (Haryana).
2. Mathematical Modelling of Titanium di Oxide Nanofluids for Thermal Management, Oral Presentation in International Conference on Applied Mathematical Sciences (ICAMS24), organized by Mahatma Gandhi Central University,Motihari (2024)
3. Molten Salt Nanofluids for Thermal Energy Storage at AFMD 2025 -oral presentation
4. Invited talk on Nanofluids for Clean Environment: An Application for Carbon di Oxide absorption in ICRDHBESS24, organized by GAV Degree College in association with Research Plateau Publishers,2024

CONFERENCE/SEMINARS/SYMPOSIA/WEBINARS/PRESENTATIONS/ORGANIZATION

WORKSHOP/TRAINING PROGRAMME ATTENDED (2024-25)

1. Matlab, organized by JSF and AIP (2024) online
2. Mastering DFT: A Hands -on training workshop, organized by JSF and AIP (2024)
3. Attended the conference on Financial Literacy: Demystifying Investment Options, Gargi College (2024)

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RESEARCH PROJECTS (MAJOR GRANTS/RESEARCH COLLABORATION)

1. 2017-19**,**U.G.C. minor projectNo.F.8-4(231)/2015(MRP/NRCB) February, 2017
   Project Title**:** Designing efficient thermal flow nano-fluids
   Total Funding: Rs. 2,32,000/ Funded by University Grants Commission.
2. 2015-16, Innovation Project GC305:With Prof. Aparajita Mohanty andDr JK Abat
   Project Title:DNA barcoding for grasses of Aravalli range in Delhi region and subsequent creation of database of DNA barcode sequence information: An essential study for formulating future conservation strategies

Total Funding: Rs 5,50,000/Funded by University of Delhi.

AWARDS AND DISTINCTIONS

Certificateof Appreciation by Gargi College for publishing in Scopus/Web of Science Indexed Journals in the academic year 2023-2024.

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ASSOCIATION WITH PROFESSIONAL BODIES

VIDWAN

OTHER ACTIVITIES