



Dr. Dinesh C. Gupta is a distinguished professor and Head of the School of Studies in Physics at Jiwaji University, Gwalior. His career is a testament to academic and research excellence, marked by significant contributions to the field of **condensed matter theory**.

A Leader in Computational Physics

Dr. Gupta's primary area of expertise lies in using **ab initio methods**, also known as first-principles calculations. These advanced computer-based techniques allow him to predict and understand the physical properties of materials from the ground up, using only fundamental laws of physics. His work focuses on a variety of materials, including solids, alloys, and compounds, with practical applications in several cutting-edge fields.

His research has been instrumental in the development of:

- **Green Energy:** Dr. Gupta has a particular focus on creating innovative **thermoelectric materials**. These materials are capable of converting waste heat—which is produced by everything from power plants to electronics—directly into electricity. This research is vital for creating more sustainable and efficient energy systems.
- **Advanced Electronics:** His work also explores materials for next-generation technologies like **spintronics**, a field that utilizes the spin of electrons in addition to their charge to build more powerful and energy-efficient electronic devices. This research is paving the way for improved data storage and computing.

Impressive Scholarly Impact

The quality and influence of Dr. Gupta's work are globally recognized. For five consecutive years, from 2020 to 2024, he was named among the **top 2% of the world's most-cited scientists** by Stanford University and SCOPUS, a prestigious honor that reflects the widespread use and impact of his research by the global scientific community.

His prolific career includes:

- **422 peer-reviewed publications**, a remarkable number that underscores his dedication and productivity as a researcher.
- A **published patent** for his work on "innovative thermoelectric materials," which highlights his commitment to translating theoretical research into tangible, real-world applications.
- Served as an international subject expert and reviewer for major scientific bodies like the Swiss National Science Foundation and the Czech Science Foundation, demonstrating the high regard in which his expertise is held.

Building the Next Generation of Scientists

As a professor and academic leader, Dr. Gupta has left a lasting impact on the academic community through his commitment to mentorship. He has successfully guided **29 Ph.D.** and **19 M.Phil. students**, with more currently under his supervision.

Furthermore, he has been a driving force in securing significant funding for his department and university, including:

- Leading a university project that secured **₹100 crore** under the PMUSHA scheme.
- Helping his department receive a **₹5.15 crore** grant for advanced research instruments under the Centre of Excellence (COE) scheme.
- Mentored two WOS-A mentees granted funds from DST, New Delhi.
- Completed three major research projects funded by UGC, DST, New Delhi, and two minor research projects funded by the university.

His combination of groundbreaking research, scholarly influence, and dedicated mentorship makes him a leading figure in Indian physics. For a deeper look into his work, you can visit his profiles on:

- [Google Scholar Profile](#)
- [Scopus Profile](#)
- [Vidwan Profile](#)
- [ResearchGate Profile](#)
- [Publons Profile](#)
- [Web of Science Profile](#)
- [ORCID Profile](#)

