



राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

(An Institute of National Importance)
Under Ministry of Education, Government of India



DEPARTMENT OF PHYSICS

ABOUT THE NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR AND PHYSICS DEPARTMENT

The National Institute of Technology Raipur, formerly known as the Government College of Mining and Metallurgy, was established on 1st May 1956. The institute is dedicated to the development of technical education, producing skilled graduates in the fields of engineering and technology, along with basic sciences and humanities. The development of India as an emerging industrial power requires a combination of cost-effectiveness and efficiency, as well as the production of world-class technology. For over six decades, NIT Raipur has been committed to this goal. Currently, the institute offers graduate-level courses in twelve disciplines. The Physics Department at NIT Raipur offers M.Sc. and Ph.D. programs.

DEPARTMENT STRENGTH

In addition to its academic programs, the Physics Department also provides research and development, testing, and consultancy services. These services cover areas such as optoelectronics, dielectric and optical properties of ceramics, spintronics and optimization, luminescence, inorganic and perovskite solar cells, thermoelectric materials, semiconductor quantum dots, and photocatalytic wastewater treatment. It has gained widespread recognition in the industry due to its strong reputation built on years of service excellence and expertise. The department has successfully completed numerous research, consultancy, and testing projects, and its team of professionals and experts is committed to delivering high-quality services to clients across various industrial sectors.

DEPARTMENT RESOURCES

The department's proficient faculty and technical staff are adept at utilizing a diverse range of instruments and software. This proficiency significantly enhances their ability to expedite research, consultancy, and testing project progress.

The Department of Physics has four labs: Applied Physics-I, Applied Physics-II, Computational Lab and the Research Lab. In the Applied Physics labs, there are many instruments for B.Tech. and M.Sc. practical experiments. The research lab is equipped with sophisticated instruments like high-temperature furnace, density measurement tools, FTIR spectrometer, UV-VIS spectrophotometer, spectrofluorophotometer, Raman spectrometer, TLD reader/OSL reader, chroma meter, AAA solar simulator, LCR meter, etc. So far, the department has produced 20 PhDs and successfully completed 08 sponsored research projects.

Key Testing Instruments

1. FT-IR Spectrometer
2. UV-VIS Spectrophotometer
3. Spectrofluorophotometer
4. Raman Spectrometer
5. LCR Meter
6. High temperature furnaces
7. Ball mill
8. AAA Solar Simulator
9. Glove Box
10. Thermal Conductivity apparatus
11. TLD Reader
12. Vacuum Spin Coater

Prime Collaborators of Physics Department



For more about Department of Physics, scan the code.

Dr. Aayush Khare

Coordinator, IIC Cell, Department of Physics

Email: akhare.phy@nitrr.ac.in; Contact: +91-9425213445