

### **Fully funded PhD position at IIT Indore**

Fully funded PhD position is available in the Applied and Theoretical Mechanics (**ATOM**) Lab (<https://www.sikundalwal.com/atom-lab>), Department of Mechanical Engineering at Indian Institute of Technology (IIT), Indore.

The first objective of this research is the large-scale synthesis of carbon nanotubes/graphene layers on different substrates using CVD and their characterization using AFM, Nanoindenter, SEM, TEM, STM, Raman spectroscopy etc. In the second, based on the characterization of nanostructures, structure-property relations/modeling are required to be developed.

**Stipend:** The amount of fellowship will be as per the Institute norms.

#### **Essential Qualification:**

- M.Tech/ME degree in Mechanical Engineering/Metallurgy/Material Science/Nanotechnology Engineering. **OR** M.Sc. in Physics/Material Science or in equivalent streams.
- GATE or UGC/CSIR-NET, NET JRF qualification of Indian applicants. Valid TOEFL/IELTS OR equivalent qualification for International applicants.

#### **Essential work experience:**

- Synthesis and characterization of 1D and 2D nanostructures.
- Hands-on experience on Chemical Vapor Deposition (CVD) system for synthesis of 1D and 2D nanomaterials.
- Hands-on experience with AFM, Nanoindenter, STM, FESEM, Raman spectroscopy etc.

**How to Apply:** Interested candidates are requested to send a detailed CV to Dr. Shailesh I. Kundalwal ([kundalwal@iiti.ac.in](mailto:kundalwal@iiti.ac.in)), via email only with the subject line as “Application for PhD position”. The review of candidates will begin immediately, and this opening will remain active until the position is filled.

**About IIT Indore:** IIT Indore located at Simrol, Khandwa Road, Madhya Pradesh, is one of the eight new Indian Institutes of Technology (IIT) established by the Ministry of Human Resource Development (MHRD), Government of India in 2008-09. IIT Indore, is a unique educational institution that focuses on interdisciplinary research and teaching. The institute is growing rapidly as the only center for advanced learning and knowledge-dissemination in the pure and applied sciences in Central India. The interdisciplinary approach of the institute is well reflected in its departmental setup comprising basic sciences, a school of engineering and a school of social sciences. The larger commitment of the institute to socio-economic development is evident in its multi-dimensional approach to social problems and is engraved in its motto ('knowledge for the wellbeing of all'), which makes this institution one of its kind and it stands out even within the distinguished IIT family. Recently IIT Indore is ranked 14th amongst all engineering universities and institutions in India and a very impressive 5th in teaching and resource category by MHRD as per NIRF 2018. Also, IIT Indore debuts with a rank of 351-400 in the times higher education world University ranking 2019, 2nd amongst Indian institutes