

Indian Institute of Technology (IIT) Indore

Discipline of Physics

Advertisement number: IITI/Phy/Sept-2017/01

Discipline of Physics, IIT Indore, invites applications from sincere and research-oriented students for admission to the PhD Program. The vacancies are available in the following research areas with the below-mentioned categories of admission:

1. Condensed Matter Physics (Experimental)

Study of crystal and electronic structure, magnetic properties of functional materials; Nano materials, Magnetic/electronic materials with multiferroic properties; Synthesis/engineering/characterization (structure/physical) of nanostructured materials/thin film/single crystal/glassy forms of complex oxides/chalcogenides with semiconducting, superconducting, magnetic and optical properties; synthesis of composite materials for industrial applications, optical/magnetic multilayer, solar cell, etc.; Surface and Interfaces - nanomaterials, thin-films, structure property relationship - optical properties, photocatalytic activity; Electrical Energy Storage- batteries and supercapacitors; Superconductivity, High Pressure techniques in synthesis and characterization; Raman and photoelectron spectroscopy; Material characterization using synchrotron radiation, band structure of complex oxides; highly correlated electron system.

2. High Energy Physics (Experimental)

Relativistic heavy-ion collision experiments: ALICE experiment at LHC (Large Hadron Collider), CERN, Geneva (Switzerland)- world's largest particle accelerator. Compressed Baryonic Matter (CBM) experiment at FAIR, GSI (Germany). QCD phase diagram and Critical point; Phenomenology of (Quark Gluon Plasma) QGP-Students will be involved in detector R&D, data taking, and data analysis at CERN, Switzerland and GSI, Germany

3. Nonlinear Dynamics, Statistical Physics & Networks (Theoretical)

IMPORTANT NOTE: This is a rolling advertisement placed on 12th Sept 2017. Interviews (one or more) will be conducted whenever sufficient applications are received. PhD applications are invited for, (i) admission categories FA/SW/IS/EC/DF in all the above mentioned three research areas; and (ii) admission category 'TA' in two research areas; 'High Energy Physics (experimental)' and 'Nonlinear Dynamics, statistical physics and networks (Theoretical)'.

Description on admission categories can be found on the main page of institute Ph.D. advertisement: <http://academic.iiti.ac.in/phdadvt.php>

Before applying online, the applicants are encouraged to contact the following faculty members for more information about their research areas and/or visit <http://physics.iiti.ac.in> for detailed profile of any individual faculty.

Dr. Ankhi Roy	High Energy Physics Experiment	ankhi@iiti.ac.in
Dr Krushna R. Mavani	Experimental Condensed Matter Physics	krushna@iiti.ac.in
Dr Manavendra Mahato	Theoretical High Energy Physics	manav@iiti.ac.in
Dr. Pankaj R. Sagdeo	Experimental/Theoretical Condensed Matter Physics	prs@iiti.ac.in
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Dr Raghunath Sahoo	High Energy Physics Experiment and Phenomenology of Quark Gluon Plasma	raghunath@iiti.ac.in
Dr. Rajesh Kumar	Experimental Condensed Matter Physics	rajeshkumar@iiti.ac.in
Dr Sarika Jalan	Nonlinear Dynamics, Statistical Physics & Networks	sarika@iiti.ac.in
Dr Somaditya Sen	Experimental Condensed Matter Physics	sens@iiti.ac.in
Dr Parashram Shirage	Experimental Condensed Matter Physics	pmshirage@iiti.ac.in
Dr Sudeshna Chattopadhyay	Experimental Condensed Matter Physics	sudeshna@iiti.ac.in
Dr. Subhendu Rakshit	Theoretical High Energy Physics	rakshit@iiti.ac.in

Application Procedure:

1. Candidates must apply ONLINE through IIT Indore website. This will generate unique application number for each applicant.
2. After Submitting the application online, the same is to be downloaded and the signed hard-copy along with Demand Draft, recent photograph, Self-attested relevant Certificates, must be sent to the concerned DPGC Convener at the below-mentioned Address for the Correspondence.
3. The candidate MUST write his/her name, name of the discipline and the Application Number on the reverse side of the Demand Draft. The envelope of the application must CLEARLY mention "APPLICATION for ADMISSION in PhD Program in PHYSICS", with ADVERTISEMENT No. given on the top. In case a candidate wishes to apply in more than one discipline then separate application must be filled for each discipline.

Address for the Correspondence for Ph.D. applications in Physics:

Dr. Krushna R. Mavani (DPGC Convener)
Discipline of Physics
Indian Institute of Technology Indore
Khandwa Road, Indore - 453 552, MP, India
