

About the Workshop

National Workshop on Material Design and Processing aims to provide lecture cum hands-on training on crystal growth method, XRD, and simulation techniques for obtaining the physical properties of the materials and machine learning (ML). The Workshop will enable the young researchers and professionals to develop a better understanding and familiarization with both theoretical simulation and state-of-art experimental techniques. The workshop will provide a platform for Ph.D. students to present their research work and get published in reputed international journal.

About JNU

Jawaharlal Nehru University (JNU) is the foremost university in India, and a world-renowned centre for teaching and research. JNU has also received the Best University Award from the Honorable President of India in the year 2017. Still a young university, established by an act of Parliament in 1966, the strength, energy, and reputation of Jawaharlal Nehru University result from the vision that, ideas are a field for adventure, experimentation and unceasing quest, and that diversity of opinions are the basis for intellectual exploration. JNU is the place for the intellectually restless, the insatiably curious, and the mentally rigorous, giving them the space to grow amidst the calmness of an oasis, a green lung within the hustle and bustle and the crowds of the capital city of India. Jawaharlal Nehru University has collaborated with universities across the world in research projects, conferences, and publications. It has many active MoUs with international and national universities and exchanges faculty and students with them regularly. We also host the Indian segment of some international degree programmes.

About School of Physical Sciences (SPS), JNU

SPS is one of the leading departments of India in research and teaching in the fields of Physics, Chemistry and Mathematics. Since its inception in 1986, the faculty of SPS have made significant contributions to these subjects as well as to interdisciplinary areas bordering them. The school offers Ph.D. programmes in Physics, Chemistry & Mathematics. In addition, there are M.Sc. programmes in Physics (since 1992), Chemistry (since 2017) and Mathematics (since 2019). The school has attracted generous funding from several agencies: to name a few, DRS (1994 – 2009), DSA-I (2009 –2014) and DSA-II (2015 - 2020) from the University Grants Commission, and FIST-I (2002 – 2007), FIST-II (2008 – 2013), FIST-III (2014-2019), COSIST (2000 – 2005) and PURSE (since 2009) from the Department of Science and Technology.

In addition, faculty members have many individual research projects sponsored by Department of Science & Technology, Council of Scientific & Industrial Research, Department of Atomic Energy, National Board for Higher Mathematics, University Grants Commission, Department of Biotechnology, Department of Information Technology as well as collaborative Indo-French and Indo-US research projects.

About IAPT

The Indian Association of Physics Teachers (IAPT) was established in the year 1984 by the great visionary, (Late) Dr. D. P. Khandelwal, with active support from some Physics teachers, with the aim of upgrading the quality of Physics teaching and Physics teachers at all levels (Regn. No. 153/1986-87, Kanpur). It has now grown into a major organisation with about 6500 life members spread all over about 1500 organisations throughout the country including about 100 members from abroad. The members include school, college, university teachers, research workers, science administrators and science savvy enthusiasts. For its grass root working, the country is divided into 20 regions, each with a regional council. The apex executive council, co-ordinates and directs the effort at the national level.

Themes

1. TFAC: Thin Films, Alloys and Compounds
2. CM: Computational Methods/Simulations
3. CGD: Crystal Growth and Design
4. EMD: Electronic Materials and Devices
5. SI: Surfaces and Interfaces
6. ETC: Experimental Techniques and Characterization
7. GCPC: Glasses, Ceramics, Polymers, Composites
8. NM: Nano Materials: Synthesis and Devices
9. IBI: Ion Beam Interactions and effects on Materials
10. ONO: Optics and Nonlinear optics
11. SMS: Superconductivity, Magnetism and Spintronics

Calls for Papers

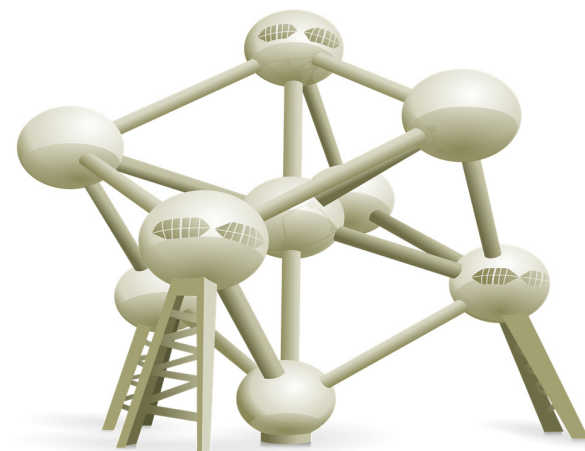
Papers are invited on the theme of the workshop and having acceptance will be **published in a journal of international repute after peer review.**

Paper Submission

The participants may submit their abstract by April 25, 2023 on the email: jnuspsiapt@gmail.com. Please mention the theme in which you are submitting your abstract in your email (e.g., 1_TFAC). The information about how to submit complete research papers will be provided later on.

National Workshop on Material Design and Processing (May 08-10, 2023)

Jointly organized by
**School of Physical Sciences, Jawaharlal Nehru
University (JNU), New Delhi**
&
**Indian Association of Physics Teachers (IAPT)
RC-1 (Delhi & Haryana)**



Venue

Jawaharlal Nehru University (JNU), New Delhi



National Advisory Committee

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Local Organizing Committee

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Prof. Kedar Singh, Dean SPS, JNU (Chairperson)
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Dr. Rekha Ghorpade, General Secretary, IAPT (Secretary)
Dr. Seema Vats, President, IAPT (RC01: Delhi & Haryana) (Co-Convener)
Dr. Yogesh Kumar, IAPT RC01: Delhi & Haryana (Secretary)
Team of IAPT (RC01: Delhi & Haryana) EC members

Accommodation

The outstation participants will be provided accommodation at University Guest house or nearby hotels on request and first come first serve basis.

Note: Accommodation charges will be extra as per actual (Detail will be shared at later stage).

Awards

- Three Best Oral Presentation Awards
- Three Best Poster Presentation Awards

Speakers

1. **Prof. Krishan Lal**, Co-Chair, IAP for Science, Global Network of Science Academies. Former Director NPL, New Delhi.
2. **Prof. P. K. Ahluwalia**, HP University, Shimla & President, IAPT
3. **Prof. Y. K. Vijay**, Director, Centre for Innovation in Science Teaching (CIST), IIS deemed to be University, Jaipur
4. **Prof. Rajnikant**, University of Jammu, Jammu (President, Indian Crystallographic Association)
5. **Dr. Swastik Mondal**, CSIR-CGCRI, Kolkata
6. **Dr. Jagdish Kumar**, Central University of Punjab, Bathinda
7. **Dr. Ashok Kumar**, Central University of Punjab, Bathinda
8. **Dr. Arun Kumar**, Government College, Bilaspur

Important Dates

Abstract Submission: April 30, 2023
Acceptance of Abstract: On or before May 02, 2023
Early Bird Registration: May 05, 2023
Accommodation Request: May 05, 2023

Registration Detail

(Only after acceptance of abstract)

Interested Faculty members/Scientists/Research students (*only for selected abstracts*) can register by filling the google form which will be provided through email after scrutiny of abstracts. The registration fee for the workshop will be as under:

Registration	Early Bird Registration (Till May 05, 2023)	After May 05, 2023 or On the Spot
Industry Person	Rs. 5000/-	Rs. 6000/-
Faculty/Scientist	Rs. 4000/-	Rs. 5000/-
Research Scholar /Project Staff/Postdoc	Rs. 2500/-	Rs. 3000/-
UG/PG Student (Without Paper)	Rs. 1500/-	Rs. 1800/-
Accompanying Person	Rs. 1500/-	Rs. 1800/-

There are limited seats for UG/PG Students. They can send their request for participation through Principal/HOD on email jnupsiapt@gmail.com.

Highlight of the Event

Day 1: Registration, Lectures and Training

- Registration and Inaugural
- Lecture and Hands-on training on Crystal growth
- Lecture and Hands-on training on Machine Learning
- Poster Session I

Day 2: Lectures and Training

- Lecture and Hands-on training on X-Ray Diffraction
- Lecture and Hands-on training on ELK
- Oral Presentations

Day 3: Lectures, Training and Valedictory

- Lecture and Hands-on training on Physics Experiments
- Lecture and Hands-on training on Siesta
- Poster Session II
- Award Ceremony and Valedictory

Peer Review Policies

1. Only one article/abstract will be entertained through one registration.
2. All articles will undergo peer-review as per the established norms of the journal.
3. The workshop only gives the authors/participants a window of opportunity to publish their articles.
4. The registration fee is utilized by the organizers to cover the expenses to host the workshop.
5. The fee (if any) upon acceptance of the paper in journal has to be paid by the authors.
6. Communications regarding rejections after peer review by the journal will not be entertained by the workshop committee/organizers.