IPS ACADEMY
JHABUA CAMPUS

Presents

Online One Week Faculty Development Programme (FDP) on

"Polymer Electrolytes and Characterization Techniques"

26 June to 05 July, 2023

Organized by
Department of Physics
IPS Academy
Jhabua, (M.P.) 457661
https://ipsacademyjhabua.org/

Brief Summary of FDP:

The Faculty Development Program (FDP) on Polymer Electrolytes and Characterization Techniques is a comprehensive training program aimed at equipping participants with a deep understanding of polymer electrolytes and the essential techniques used to characterize them. The program focuses on the significance of polymer electrolytes in various applications, particularly in energy storage devices, and provides participants with the knowledge and skills to analyze and evaluate their properties. Participants will learn about the advantages of polymer electrolytes over traditional liquid electrolytes, including their enhanced conductivity, flexibility, and safety. The program also highlights the importance of polymer electrolytes in addressing challenges related to energy storage and sustainability.

Objectives of the FDP:

The main objective of the FDP will be to give key concepts about polymer electrolytes and their potentially applications toward the electrochemical and renewable energy devices. During the FDP, the eminent speakers from academics and research laboratories will share their expert knowledge. This FDP will provide a roadmap to the researchers intending to carryout their research work in this field. Its focus more on

- Introduction to polymer electrolytes
- Electrical and ion transport mechanisms
- Characterization techniques
- PE synthesis and processing
- Structural analysis
- Interface characterization
- Advanced characterization methods
- Applications and challenges
- Future perspectives

Impact/ Expected Outcome:

- Researchers/ faculty will be able to understand the basics of polymer electrolytes and their characterization techniques.
- Researchers/ faculty will be able to find the details on various synthesis and characterization techniques.
- This Lecture series will fill the gap between the research and applications of these Polymer electrolytes in electrochemical devices.
- Researchers/ faculty will be able to comprehend the importance of polymer electrolytes toward emerging applications, like supercapacitor, solar cells, rechargeable batteries, electric vehicles (EV) etc.

Patron
Ar. Achal K Choudhary
President, IPS Group of Institutions

Convener
Dr Amit Saxena
Principal, IPSA Jhabua

ABOUT IPSA, JHABUA

Jhabua is known for its natural beauty, natural resources of minerals, ores, tribes, and tradition. IPS Academy, Jhabua, was established in 2019 with the aim of commitment and dedication toward quality education and placement. The campus is on the Jhabua-Ranapur highway (10 km from Indore-Ahmedabad Highway-NH-47). This place is 152 km from Indore and 190 km from Vadodara, and a transport facility is available from both locations.

IPS Academy Jhabua is affiliated with DAVV, Indore, and has recognition from higher education, Bhopal. The college has adequate faculty, library, and laboratory facilities. The college has an ultra-modern infrastructure with a rich history of placements. The college offers traditional and professional courses like B. Sc. (Biotechnology/ Horticulture/ PCM/ Bio/ Computer Science), BCA, BBA, and B.Com. (CA/ Plain).

ABOUT IPSA, INDORE

IPS Academy (a premier institute in Central India) is a prestigious institute in Indore which has carved a niche for itself across India as a centre of excellence for education. The academy has grown manifold under the visionary leadership of Architecture Achal K Choudhary, an alumnus of IIT Kharagpur. Today it is at the pinnacle of success with its 16 colleges, 76 courses, 500 faculty members and 10000+ students. The academy has all kinds of modern laboratories, libraries, classrooms, and qualified, skilled and experienced teachers. It works to develop the student's innate talent, intellectual and physical abilities, and overall personality. Students are trained as per the need of future employers, considering the growing needs of industry & future employment prospects. Theory sessions are suitably supplemented with experiential learning & practical field experience so that the students can adapt to the challenges of competition & globalization & rise to the expectations of the corporate world. Continuous & rigorous training & development excels in student's communication, leadership & entrepreneurial skills. The presence of IPS Alumni in every nook & corner of the globe bears testimony to our triumph. Our next step is to establish a global university where Indian spirituality, ethics & values meet Western science & technology and usher into a new dawn for humanity. Under the umbrella of IPSA Indore following institutions are offering their outstanding academics.

- School of Architecture
- Institute of Business Management & Research (NAAC A++)
- Institute of Engineering & Science
- School of Computers
- Institute of Science & Research
- College of Commerce
- Institute of Economics & Research
- Institute of Hotel Management
- College of Pharmacy
- School of Fine Arts
- College of Law
- School of Performing Arts
- School of Travel & Mass Communications
- School of Travel & Tourism
- School of Education
- School of Social Science
- Institute of Fashion Technology

Our Resource Persons@ FDP

26-June-2023	27-June-2023	28-June-2023	30-June-2023
			
Prof. Abdul Kariem Arof Department of Physics, University of Malaya **MALAYSIA**	**Dr. Ikhwan Syafiq Mohd Noor** Physics Division, Centre of Foundation Studies for Agricultural Science, University Putra Malaysia, **MALAYSIA**	**Prof. Bhaskar Bhattacharya** Department of Physics, Banaras Hindu University, Varanasi **INDIA**	**Prof. Ram Adhkari** Central Department of Chemistry (CDC) & Research Centre for Applied Science & Technology (RECAST), Kathmandu, **NEPAL**
01-July-2023	**03-July-2023**	**04-July-2023**	**05-July-2023**
			
Dr. Rahul Singh Dept. of Chemical and Biomolecular Engg., Sogang University **S. KOREA**	**Dr Pragya Palod** Department of Physics, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore **INDIA**	**Dr Nitu katariya** Department of Physics, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore **INDIA**	**Dr. Aditya Narayan Singh** Department of Energy and Materials Engineering, Dongguk University **Republic of KOREA**

FDP Program Schedule

Time (IST)	Title of the Talk	Resource Person
10:30 AM to 10:50 AM	***Inaugural Session***	
	Day 1: 26-June-2023	
10:50 AM - 11:50 AM	A SNAPSHOT ON IMPEDANCE SPECTROSCOPY	Prof Abdul Kariem Arof
	Day 2: 27-June-2023	
11:30 AM - 12:30 PM	IMPEDANCE SPECTROSCOPY FOR EVALUATING TRANSPORT PROPERTIES OF POLYMER ELECTROLYTE	Dr. Ikhwan Syafiq Mohd Noor
	Day 3: 28-June-2023	
11:30 AM - 12:30 PM	AN OVERVIEW ON POLYMER ELECTROLYTES AND APPLICATIONS IN SOLAR CELLS	Prof Bhaskar Bhattacharya
	Day 4: 30-June-2023	
11:30 AM - 12:30 PM	POLYMER CHARACTERIZATIONS BY MICROSCOPIC TECHNIQUES	Prof. Ram Adhkari
	Day 5: 01-July-2023	
11:30 AM - 12:30 PM	ION-CONDUCTING MEMBRANES	Dr. Rahul Singh

Time	Title of the Talk	Resource Person
	Day 6: 03-July-2023	
11:30 AM - 12:30 PM	A GLANCE AT POLYMERIC MATERIALS FOR SUPERCAPACITORS: OPPORTUNITIES AND CHALLENGES	Dr. Pragya Palod
	Day 7: 04-July-2023	
11:30 AM - 12:30 PM	SYSTEMATIC APPROACH TO POLYMER CHARACTERIZATION : A ROAD MAP	Dr. Nitu Katariya
	Day 8: 05-July-2023	
11:30 AM - 12:30 PM	AN UNTOLD STORY OF ADVANCED LITHIUM-ION BATTERY	Dr. Aditya Narayan Singh
12:30 PM – 12:50 PM	**Valedictory Session**	

- Interested candidates must register for the FDP via Google link given below.
- Limited seats are available, registration will be done on first come, first serve basis.
- Attendance is compulsory for all sessions for getting the Certificate.
- **NO REGISTRATION FEE**
- **Registration Link for FDP:** https://forms.gle/VFknEEipMFfvbUiQ8

For any Queries regarding the FDP, write to us on principal.jhabua@ipsacademy.org or call : 9837012535

QR for Registration