Summary or Highlights of IEEE Photonics Society student chapter IIT Indore

Sr. No.	Event Name	Date	Description
1	IEEE Photonics Society Student Chapter Core Team Meeting	16 Dec 2023	IEEE Photonics Society Student Chapter Core Team Meeting for the discussion of a roadmap for annual activities.
2	Skill Enhancement Activity in Advanced Optics	27 Jun 2023	Lab visit, Expert Lecture
3	Meeting and discussion on High School related activities	03 Mar 2023	The meeting of Officers has been done on 3rd March for the discussion of events in nearby High Schools.
4	Student chapter officers meeting for the planning of international light day calibration 2023.	13 Jan 2023	Student chapter officers meeting for the planning of international light day calibration 2023.
5	Group meeting for discussion of IEEE Student Chapter Future Events.	20 Dec 2022	Group meeting for discussion of IEEE Student Chapter Future Events.
6	Workshop on Advanced Photonics	30 Nov 2022	Workshop on Advanced Photonics. An Inaugural Event of IEEE MP Photonics Society
7	International Light day celebration	16 May 2022	Introduction to Light and its Applications (For School kids from 9-12 standard). Expert Lecture on Programmable Photonics
8	IEEE Photonics Society Membership Drive	12 May 2022	Membership Drive of IEEE and IEEE photonics society

9	Workshop on Advanced Device Simulations	26 Apr 2022	Workshop on Advanced Device Simulations organized by IEEE-Photonics society chapters discusses the two main theme as follows. Tech Next Lab (TNL) is an Atomistic TCAD Software provider, founded in 2015 by EDA industry experts. TNL is involved in the research, innovation & development for rapid advancement and optimization of current and future semiconductor devices and its applications. The significance of using full flow of TNL TCAD suit especially for advanced node and power device technologies in comparison with real time device fabrication can reduce technology development time and its associated costings.
10	One Day Workshop on Integrated Photonics (WIP)	04 Mar 2022	With the ever-increasing demand for reducing the size, weight, and power consumption, the research community is rapidly shifting its focus towards Integrated Photonics. Integrated Photonics (IP) uses light as a carrier which enjoys various advantages as compared to its electronic counterpart. It finds applications in a wide variety of areas including telecommunications such as 5G networks, biosensors for speeding up medical diagnosis, and in automotive where it is used in LIDAR. IP comprises the integration of multiple photonic functions on a Photonic Integrated Circuit (PIC) fabricated using automated wafer-scale generic integration technology over silicon, silica, or Indium Phosphide (InP) substrates. The motive of this workshop is to enlighten about integrated photonics and its applications in different areas. The workshop also demonstrates the tools used in designing Photonic Integrated Circuits.

The outcome of all the events

The IEEE Photonics Society Student Chapter at the Indian Institute of Technology (IIT) Indore has been instrumental in organizing an impactful event that caters to a diverse audience, ranging from school students and teachers to members of the

IEEE and non-IEEE communities, undergraduate, postgraduate, and Ph.D. students, as well as foreign and industry experts. The event is designed to provide a multitude of benefits, primarily focusing on knowledge enhancement through a variety of activities.

One of the key components of the event is the provision of lectures and expert sessions. Renowned professionals in the field of photonics deliver talks that cover a wide range of topics, contributing significantly to the knowledge enhancement of the participants. The inclusion of hands-on activities and lab visits further augments the learning experience, allowing attendees to gain practical insights into the intricate world of opto-electronic devices fabrication and characterization.

The celebration of Light Day for school students and the IIT Indore community serves as a unique opportunity to foster a better understanding of light and its applications. This initiative not only educates participants but also instills a sense of curiosity and appreciation for the role of light in various technological advancements. The impact is not limited to academic circles; it resonates with the broader community, raising awareness and fostering interest in the field of photonics.

An integral part of the event is the specialized training program for school teachers. This initiative spans over two days and

provides teachers with valuable exposure to laboratory practices. The focus is on enhancing their skills, particularly in the fabrication capabilities of on-chip opto-electronic devices. The program is designed to be immersive and hands-on, ensuring that teachers not only acquire theoretical knowledge but also gain practical experience that they can impart to their students. The significance of this training program is underscored by the fact that it acts as a boon to the career development of participating teachers.

The IEEE Photonics Society Student Chapter at IIT Indore has also played a pivotal role in contributing to the academic growth of Ph.D. students. Two Ph.D. students have undergone specialized training under the chapter's umbrella, further highlighting the commitment to nurturing talent and facilitating advanced research in the field of photonics. This hands-on training equips Ph.D. students with the skills and knowledge necessary for cutting-edge research and innovation.

The financial support provided by IEEE for these endeavors is acknowledged and put to optimal use for the betterment of society. The funds are channeled into organizing events, securing expert speakers, facilitating lab visits, and ensuring the overall success of the initiatives undertaken by the chapter. The responsible utilization of resources reflects the commitment of the IEEE Photonics Society Student Chapter at IIT Indore to its

mission of advancing knowledge and contributing to societal development.

The collective impact of these events extends beyond the technical community, reaching out to the non-technical community and inspiring young minds. By creating awareness about the future of photonics, the chapter is actively shaping the trajectory of the field and, in turn, contributing to a more comfortable and technologically advanced life for individuals within and beyond the academic realm. The far-reaching effects of these initiatives underscore the significance of the IEEE Photonics Society Student Chapter at IIT Indore in fostering a community that is well-versed in and excited about the potential of photonics in the modern world.

Photos Of the Events


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IEEE Madhya Pradesh Section
Photonics Society Chapter
in association with
IIT Indore Photonics Society Student Chapter


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IEEE Photonics Society
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IEEE Madhya Pradesh Section
Photonics Society Chapter

Workshop on Advanced Photonics

An Inaugural Event of IEEE MP Photonics Society

Date: 30th Nov-01st Dec 2022

30th Nov Venue: L-13 Takshila Lecture Hall Complex	1st Dec Venue: Learning Resource Centre Auditorium
Expert Talk 1 **Dr. Pramod Watekar**, Sterlite Tech. Ltd. **Theme**: Optical Fiber Sensors **Time : 10 to 11 AM**	**Expert Talk 3** **Prof. Sheng-Lung Huang,** National Taiwan University **Theme**: Optical Coherence Tomography **Time : 10 AM to 12 PM**
Expert Talk 2 **Prof. Sanghoon Chae,** NTU Singapore **Theme**: 2D materials based optoelectronic devices **Time : 11:30 AM to 12:30 PM**	In association with Student chapters of IEEE Photonics Society & OPTICA
Prof. Getam Singh Tomar, Chair, IEEE MP Section **Theme**: IEEE Chapter Benefits **Time : 2 to 3 PM**	
Mr. Nitin Nigam, Application Engineer **Theme**: Optical measurements with passive components **Time : 3 to 4 PM**	
Cadfem India **Theme**: Tutorial on Optical Simulation **Time : 4 to 5 PM**	

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CAE Centre for Advanced Electronics

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IEEE Photonics Society
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IEEE Photonics Society & OPTICA Student Chapter
Indian Institute of Technology, Indore

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Presents

International
Day of Light

16 May 2022

Programme:

1. **Introduction to Light and its Applications**
   (For school students)
2. **Expert talk on Advanced Photonics**

CAE
Centre for Advanced Electronics

OSRL

Organizer: **Optoelectronic Nanodevice Research Laboratory**


IEEE Madhya Pradesh Section
Photonics Society Chapter
Workshop on Advanced Photonics
In association with
Student chapters of
IEEE Photonics
Society & OPTICA
IIT INDORE


IIT INDORE

IEEE Photonics Society
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IEEE Photonics Society
&
OPTICA Student Chapters
Indian Institute of Technology Indore

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One Day Workshop On Integrated Photonics

Date: 4th March, 2022 **Time: 10 AM Onwards**

About the Workshop

In today's data-hungry world, with the ever-increasing demand for reducing the size, weight, and power consumption, the research community is rapidly shifting its focus towards Integrated Photonics. Integrated Photonics (IP) uses light as a carrier which enjoys various advantages as compared to its electronic counterpart. It finds applications in a wide variety of areas including telecommunications such as 5G networks, biosensors for speeding up medical diagnosis, and in automotive where it is used in LIDAR. IP comprises the integration of multiple photonic functions on a Photonic Integrated Circuit (PIC) fabricated using automated wafer-scale generic integration technology over silicon, silica, or Indium Phosphide (InP) substrates. The motive of this workshop is to enlighten about integrated photonics and its applications in different areas. The workshop also demonstrates the tools used in designing Photonic Integrated Circuits.

Speakers

Prof. Hamed Dalir
George Washington University
Washington DC
Time: 10 AM (IST)
Date: 4th March, 2022

Prof. Mukesh Kumar
IIT Indore
Time: 4 PM (IST)
Date: 4th March, 2022

Dr. Sourabh Jain
University of Texas, Austin
Time: 11 AM (IST)
Date: 4th March, 2022

Mr. Ankush Sharma
CADFEM
Time: 3 PM (IST)
Date: 4th March, 2022

Meeting Link (Webex)

https://meet203.webex.com/meet203/j.php?MTID=md3d0bdd0c902acc066ff6d7f391715b5
Meeting Number (Access Code): 2641 945 3827
Meeting Password: fQdp2bZGm57

IIT Indore Opto-Nano OSA Student Chapter

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Impact of Coherence on Interference
OPTICA
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IIT Indore Photonics Society Student Chapter


Optical Coherence Tomography:
Technologies and Challenges
Sheng-Lung Huang
Graduate Institute of Photonics and Optoelectronics, National Taiwan University
Department of Electrical Engineering, National Taiwan University
All Vista Healthcare Center, National Taiwan University
IEEE Photonics Society Madhya Pradesh Chapter, Dec. 1, 2022
IEEE Madhya Pradesh Section
Photonics Society Chapter
in association with
IIT Indore Photonics Society Student Chapter


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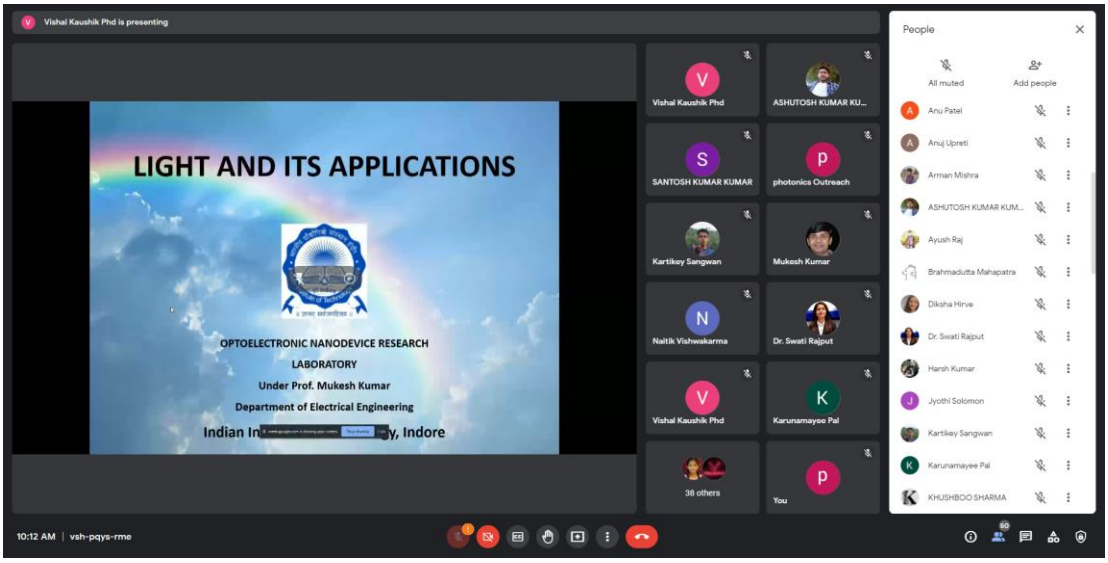
Lab Meeting at Hotel Sayaji Indore, August 2023


Vishal Kaushik Phd is presenting
LIGHT AND ITS APPLICATIONS
OPTOELECTRONIC NANODEVICE RESEARCH
LABORATORY
Under Prof. Mukesh Kumar
Department of Electrical Engineering
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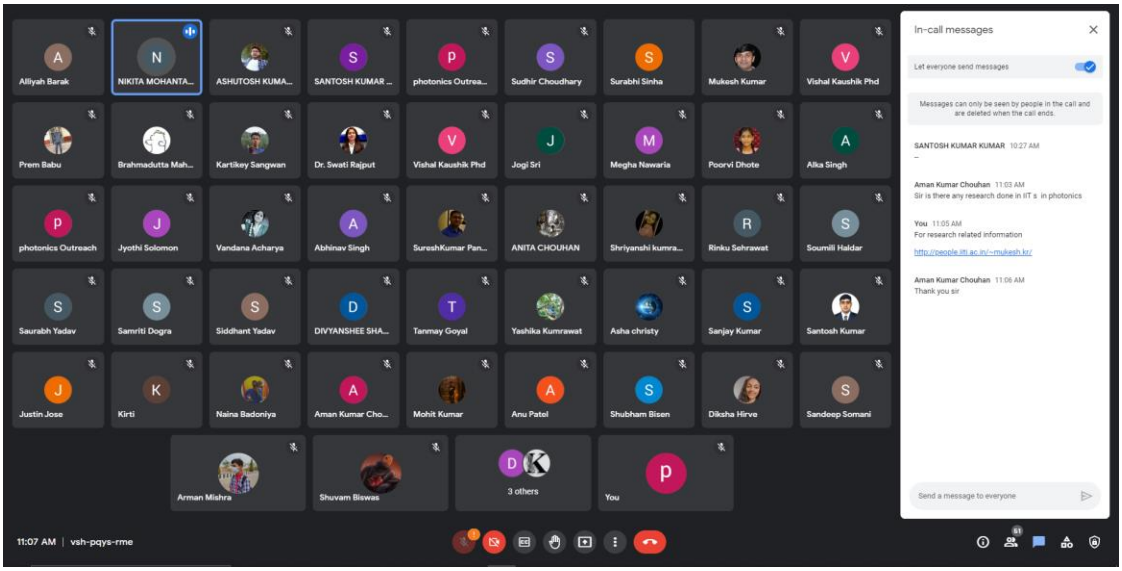
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Mukesh Kumar
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Prem Babu
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Kartikey Sangwan
Dr. Swati Rajput
Vishal Kaushik Phd
Jogi Sri
Megha Nawaria
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Vandana Acharya
Abhinav Singh
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Soumili Haldar
Saurabh Yadav
Samriti Dogra
Siddhant Yadav
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Justin Jose
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Mohit Kumar
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Shubham Bisen
Diksha Hirve
Sandeep Somani
Arman Mishra
Shuvam Biswas
3 others
You
In-call messages
Let everyone send messages
Messages can only be seen by people in the call and are deleted when the call ends.
SANTOSH KUMAR KUMAR 10:27 AM
Aman Kumar Chouhan 11:03 AM
Sir is there any research done in IIT s in photonics
You 11:05 AM
For research related information
http://people.iiti.ac.in/~mukesh.kr/
Aman Kumar Chouhan 11:06 AM
Thank you sir
Send a message to everyone
11:07 AM | vsh-pqys-rme

IEEE Photonics Society

CAE Centre for Advanced Electronics

Two Day

Skill Enhancement Activity in Advanced Optics

For School/College Teachers

Specifically designed program in

- Basics and Advanced Optics
- Applications of Photonics
- Photonics for Biology

Limited Seats Only

Venue:
ONRL, IIT Indore

Date: 27-28 June

- No registration fee.
- Selection on First come First serve basis.
- Travel expenses (3 Tier AC) through shortest route will be reimbursed.
- Local accommodation & food will be provided.

For registration: E-mail your consent with a short resume to photonics_outreach@iiti.ac.in & cc to santoshkumar@iiti.ac.in

Sponsored by:

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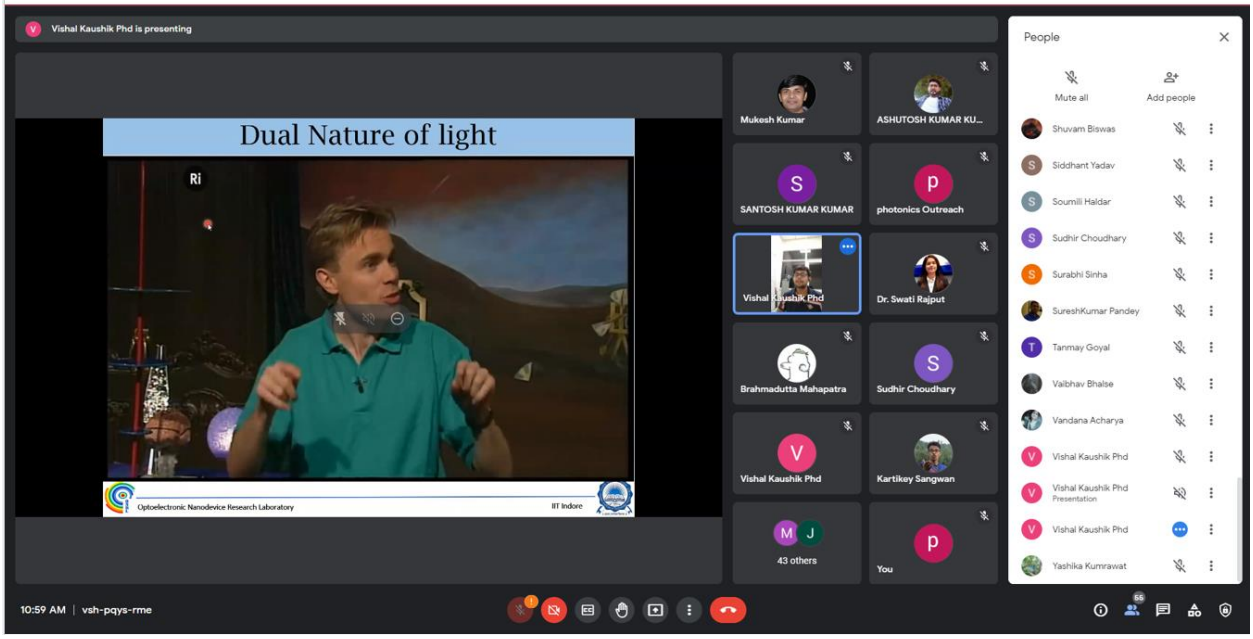
Vishal Kaushik Phd is presenting
Dual Nature of light
Optoelectronic Nanodevice Research Laboratory
IIT Indore
Mukesh Kumar
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photonics Outreach
Vishal Kaushik Phd
Dr. Swati Rajput
Brahmadutta Mahapatra
Sudhir Choudhary
Vishal Kaushik Phd
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Siddhant Yadav
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Surabhi Sinha
SureshKumar Pandey
Tanmay Goyal
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Vandana Acharya
Vishal Kaushik Phd
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Presentation
Vishal Kaushik Phd
Yashika Kumrawat
10:59 AM | vsh-pqys-rme

The officers of IEEE with IEEE photonics Society Logo t shirts.

Website and Social Platform for IEEE events

1. Gallery (iiti.ac.in)
2. Optoelectronic Nanodevice Research Laboratory (ONRL) , IIT Indore. | Groups | LinkedIn