

Schedule

Day 1: 25 Nov 2021

9 am- 9:30am	Inauguration
9:30 am- 11:30am	Integrated Optoelectronics
11:45 am- 1:45pm	Diffraction Optics
3 pm- 5 pm	Nanoscale Meta-surfaces

Day 2: 26 Nov 2021

9 am- 11am	Basics of Optical Communication
11:30 am- 1:30pm	Advanced Optical communication
3 pm- 5 pm	Stress Management

Day 3: 27 Nov 2021

9 am- 11am	FBG based sensors
11:30 am- 1:30pm	Sensing with imaging microscopy
3 pm- 5 pm	2D nanomaterials for Photonics Applications

Day 4: 28 Nov 2021

9 am- 11am	Industry session on Prakash Shakti towards Aatmanirbhar Bharat
11:30 am- 1:30pm	Industry session on High power lasers and power amplifiers
3 pm- 5 pm	Industry session on Distributed Fiber Optics Sensing

Day 5: 29 Nov 2021

9 am- 11am	Silicon Photonics
11:30 am- 1:30pm	Bio-Photonics
3 pm- 5 pm	Feedback and Assessment

Resource Persons

The sessions would be handled by academia from leading universities in India and abroad as well as experts from industries

Registration

The applicants should register at AICTE ATAL web portal at the earliest.

Link: <https://atalacademy.aicte-india.org/login>

Number of participants is limited to 100

No registration fee will be collected from the participants

Important Dates

Last date for registration: **21 November 2021**

Intimation to participants: **23 November 2021**

Organizing Committee

Chief Patron

Prof. Souvik Bhattacharyya

Vice-Chancellor, BITS Pilani

Chairman

Prof. Sudhirkumar Barai

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Pilani Campus, Rajasthan

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AICTE TRAINING & LEARNING ACADEMY (ATAL)

Sponsored

Faculty Development Programme

on

Recent Advances in Photonics

November 25 - 29, 2021



Organized by

Department of EEE

Birla Institute of Technology & Science,

Pilani, Pilani Campus

Rajasthan- 333031

About ATAL

The objective of the academy is to train faculties, students and research scholars in recent technological developments. In addition, the training will be mandatory for new teachers from 2019 and it will be necessary for existing teachers and assistant teachers while applying for promotions. AICTE is statutory body established in November 1945. It comes under aegis of Department of Higher Education, Ministry of Human Resources Development. It is national-level council for technical education responsible for planning and coordination of technical education management of education system in the country. It is headquartered in New Delhi.

About the Institute

Birla Institute of Technology & Science, Pilani (BITS Pilani) established in 1964, focuses primarily on higher education and research in engineering and sciences. After expansion to campus in Dubai, it has become the first international deemed university, spearheading in science, engineering, and research with 4 established campuses and 13 academic departments. Through its highly successful and widespread alumni network spanning globally across varied fields, BITS Pilani has made a significant impact on corporates, academia, research, entrepreneurship, arts, and social activism. The institute is one of the first six institutes to be awarded the Institute of Eminence status in 2018. The institute has a three-tier academic structure: First Degree program, Higher Degree program, and Doctoral Degree program. BITS offers an opportunity to produce practicing engineers who will be in a position to graduate and to build industries in India, under Indian conditions. With its emphasis on the Practice School and ties to Indian industry, it helps educate Indian industrialists along with Indian engineers.

About the Department

EEE Department was formed by merging the existing Electrical Engineering and Electronics Engineering departments in 1969-70 and the Instrumentation program was started in the year 1973. The department offers B. E., M. E., and Ph.D. programs with a specialization in various fields. The department has earned a very high reputation in the country by producing professionals who excel in Innovation, Entrepreneurship, Creativity, and Management. The department offers interdisciplinary courses and projects for providing cross-cutting knowledge to the students to pursue their interests. The faculties in the department have extensive experience in the industry, research as well as teaching. Our staff members typically have a high sense of purpose and derive great meaning from working together to ensure BITS Pilani's academic and research excellence is well supported.

About the FDP

Fundamental & applied studies on topics related to light have transformed the quality of living and have enabled us to understand nature better. The application of light has become a key behind many devices found in modern homes, industries, and laboratories. The applications involve the cutting-edge use of optical sources like lasers, optical fibers, integrated electro-optical devices, microscopy, and bio-imaging. The application of photonics spreads across several differentiated sectors: from optical data communications to imaging applications, lighting, and displays; from the manufacturing sector to life sciences, health care, security, and safety. Photonics offers unique solutions where today's conventional technologies are approaching their limits in terms of speed, capacity, and accuracy. The main goal of the program is to provide an elementary-level exposure to the various flavors of photonics and their applications.

Course Content

- Silicon Photonics & Bio-photonics
- Diffractive Optics & Meta Surfaces
- Plasmonics & Nanophotonics
- Fiber Optics & Optical communication
- High power Fiber Lasers and Amplifiers
- Integrated Optoelectronics
- 2D Nanomaterials for photonics applications
- Industrial applications of Optical sensors
- Prakash Shakti towards aatmanirbhar Bharat

Important Information

- Faculty members of AICTE approved institutions, research scholars, PG students, participants from Government and Industry.
- Participants should arrange laptop/desktop/ smart phone with good internet connection and other audio-visual facilities, as required for online training.
- **Course Registration is free for all participants.**
- Seats are limited to 100 and the participants would be selected on a first-come-first-serve basis.
- Shortlisted candidates will be intimated through email.
- On completion of the course, participants have to undertake an objective quiz based assessment.
- **Participants with a minimum attendance of 80% and a test score of more than 60% will be issued a digital certificate by the ATAL Academy.**

