



5-Day Hands-on Training Program on “Modeling Optical Physics using COMSOL Multiphysics®” (ONLINE)

Schedule : 7th July- 11th July, 2025

Time	Day 1	Day 2	Day 3	Day 4	Day 5
1500 – 1630	Introduction to optical modeling in COMSOL Multiphysics	Optical waveguide, optical fibers, and couplers	Optical scattering and plasmonics. Optical filters and photonic crystal resonators	Multiphysics analysis such as optoelectronics, and optical stress.	Introduction to Ray Optics.
1630 – 1700	Break				
1700 – 1800	1-1 Discussion				

Details of the course:

- **Dates:** 7th July to 11th July, 2025
- **Number of participants:** 40 (based on a first come, first basis)
- **Registration fees:** Rs. 800/-
- **Medium of instruction:** Online
- **Last date of registration:** 5th July, 2025
- **Registration:** Applicants are requested to register through this link:
https://docs.google.com/forms/d/e/1FAIpQLSdTqMCLC8jB27dueyFzQsLPEVaLM3zgjR3fmCjFIFGcW9iweg/viewform?usp=sf_link
OR
<https://forms.gle/GAScLsaRbrbzjAPu8>
- **Who Can Apply?:** Students (UG/PG)/Full time PhD Scholars, Faculty/R&D Organizations, Industry Participants



Instructor: Dr. Uttam M. Pal
Assistant Professor, Department of Electronics and Communication Engineering, IIITDM Kancheepuram

Highlights of the course:

- e-Certificate on the successful completion of the course (Quiz to be conducted on the final day of the training)
- Live hands-on and troubleshooting
- 1-1 discussion with the instructor
- Recorded videos available after the course

Instructor Bio:

Uttam is an Assistant Professor in the Department of Electronics and Communication, IIITDM Kancheepuram-Chennai. He obtained his Ph.D. from the Department of Electronic Systems Engineering, Indian Institute of Science Bangalore in 2021, where he worked on the design and development of novel multimodal cancer diagnosis systems using optical, thermal, and acoustic modalities. He completed his M.Tech from the Electrical Department, IIT Bombay in 2013, where he has specialized on computational electromagnetics. He completed his B.E. from A.D.Patel Institute of Technology (Sardar Patel University) in 2008. He has more than 8 years of industrial experience while working as Team Lead (High-Frequency Electromagnetics) at COMSOL Multiphysics (6 + years), Patent research engineer at Evalueserve (1 year), and Technology Analyst at an opto-semiconductor startup: De Core Science and Technologies (~ 1 year). His research interest lies in developing novel optical tools for intraoperative cancer margin assessment and diagnosis of disease (oral, cervical, and breast cancer).

For any queries, please write to uttampal@iiitdm.ac.in