Report On One Day Discussion Meeting Organized At Department of Polymer & Surface Engineering, ICT Mumbai On 19th July 2025.







ISRAPS, in collaboration with the Department of Polymer & Surface Engineering, ICT Mumbai, organized a one-day discussion meeting on "New Frontiers of Radiation Process in Polymers, Paints and Nanocomposites" on 19th July 2025. Dr. N. K. Goel from ISRAPS and Prof. A. S. Sabnis from ICT Mumbai coordinated the arrangement of the meeting. There were a total of seven lectures: three from BARC, one speaker from NMRL, DRDO, two from industries (Asian Paints Research and Technology Center and Hi-tech Dura Solution Pvt Ltd), and one from ICT Mumbai. The talks covered fundamental studies involving the use of radiation in synthesis, functionalization, and characterization of polymers, paints, and nanocomposites, and evaluation of their performance for various applications. There were a total of 170 registered participants, including undergraduates, postgraduates, doctoral students, and faculty members. Six registered research students were allowed to present their research through oral presentations and were evaluated for the best presentation award sponsored by ISRAPS.

The inauguration session was graced by Prof. Anirudh Pandit, Vice-Chancellor of ICT Mumbai, as chief guest. During the inauguration session, Dr. A. C. Bhasikuttan, President-ISRAPS, enlightened the delegates about ISRAPS and its activities. Additionally, Dr. Y. K. Bhardwaj, Vice President-ISRAPS, discussed the importance of the theme meetings. Following the inauguration function, an introductory talk on radiation processes in nanocomposites and polymers was given by Dr. Apurav and Dr. Juby. To educate the audience about the nature of interaction of radiation with matter, the talks by these speakers emphasized the basic fundamentals of radiation processes for a given material. Dr. R. B. Naik from NMRL-DRDO presented his research work on advances in coatings for protecting materials under extreme corrosive environments. These talks were well received by the young students, as evident from their interaction with the speakers. The talks were followed by oral presentations by the research scholars. The talks in the second session, post lunch, focused on the application part of polymers and paints. Dr. Bhasikuttan, Dr. P. D. Naik, Dr. B. M. Bhanage, and Dr. A. S. Sabnis chaired the sessions. Dr. R. B. Naik, Dr. N. K. Goel, and Dr. Juby evaluated the oral presentations. The active participation of approximately 160 undergraduate, graduate, and doctoral students and faculty from ICT Mumbai, ICT Jalgaon, and Somaiya University, Vidyavihar reflected the overall success of the meeting. The oral talk presented by Mr. Vishal Khomane, research scholar at ICT, was selected for best presentation, and he was awarded a citation and a cash prize of Rs. 1500/-. Another student, Mr. Devesh Sane from ICT, was also awarded a citation. The awardees were honoured by Dr. Bhasikuttan during the concluding session. The program concluded with a vote of thanks given by Dr. Beena. Overall, the program was successful due to active participation from the students and was the first meeting where ISRAPS engaged directly with researchers from prominent industries. Dr. Randhirsinh Parmar from Asian Paints Research and Technology Center became a life member of ISRAPS.

One Day Discussion Meeting on

"New Frontiers of Radiation Process in Polymers, Paints and Nanocomposites"

Jointly Organized by

Indian Society for Radiation and Photochemical Sciences (ISRAPS)

And

Department of Polymer & Surface Engineering, Institute of Chemical Technology, Mumbai

19th July, 2025 at ICT, Matunga, Mumbai-400019

About ISRAPS: The Indian Society for Radiation and Photochemical Sciences (ISRAPS) is a scientific society established in 1984, headquartered at Radiation & Photochemistry Division, Bhabha Atomic Research Centre, Mumbai, India. The society aims to foster advances in research pertaining to radiation, photochemical sciences and their related areas; encourage students and research scholars to devote themselves to the pursuit of radiation and photochemical sciences by providing travel grants and awards for ISRAPS sponsored symposia; offer a common platform to academicians, researchers and students to facilitate networking and exchange of innovative ideas; engage with similar societies or organizations, both within India and internationally, for mutual advantage and to collaborate on scientific initiatives.

About Host Institute: The Institute of Chemical Technology (ICT), Mumbai, has a rich history rooted in the advancement of chemical science and engineering in India. ICT has been ranked amongst top ten Engineering Institutes of India and 19th amongst the top universities of the country. Established in 1933, ICT has grown into a premier institution dedicated to education, research, and innovation in chemical engineering, chemical technology, and pharmacy. It has played a pivotal role in shaping the growth of nation's chemical and pharmaceutical industries. With a strong emphasis on industry-academia collaboration and a commitment to excellence, ICT continues to attract top talent and contribute significantly to technological advancements and skilled workforce development in the field of chemical sciences.

Aim of the discussion meeting

The aim of the ISRAPS discussion meeting is to sensitize students and young researchers towards the field of radiation and photochemical sciences. The talks by the experts will highlight the role of radiation processes in polymers, paints and nanocomposites for developing advanced functional materials.

Theme of the meeting

New Frontiers of Radiation Process: From Fundamentals to Applications

1) Ionizing Radiation in Synthesis of Nanocomposites & Polymers
2) Radiations for Societal and Healthcare Applications
3) Radiation Processing for Developing Advanced Functional Materials
4) Engineering Paints for Specific Applications

Highlights for Students

There would be presentations by eminent speakers from premier institutes like BARC, NMRL (DRDO) and industries. Students will get the opportunity to present their research and interact with the experts through oral presentations. The presentations will be evaluated for selecting the best presentation awards sponsored by ISRAPS. Moreover, the registered participants will get participation certificates.

Registration & Abstract Submission

Participants are required to register online through following link or QR code: https://forms.gle/34WxPn1pLXLpFJGp6 **Registration is free of cost**

Abstract Format

PDF file with Title (<150 characters), Author names with Affiliations, Abstract (<1500 characters and a figure) and can be sent to as.sabnis@ictmumbai.edu.in

Important Dates

Dates	Deadline
Registration	14th July 2025
Abstract Submission	14th July 2025

Organizing Committee

ISRAPS Executive Council & Dept. of Chem., ICT Mumbai

Convener (Local):
Prof. Anagha Sabnis
Dept of Polymer & Surf. Eng.
ICT Mumbai
Email: **as.sabnis@ictmumbai.edu.in**

Convener (ISRAPS):
Dr. N. K. Goel
Radiation Technology Development Division, BARC, Mumbai
Email: **nkgoel@barc.gov.in**

Our Speakers



Dr. A. Guleria
BARC



Dr. R B. Naik
NMRL, DRDO



Dr. J. K. Ajish
BARC



Dr. R. S. Parmar
Asian Paints R&T Centre



Dr. R. K. Mondal
BARC



Prof. A. Sabnis
ICT-Mumbai



Dr. R. Jadhav
HTD Solutions Pvt Ltd

INDIAN SOCIETY FOR RADIATION AND PHOTOCHEMICAL SCIENCES

(Reg. No. 617/1985, GBBSD, Bombay Trust No. F-10965)
c/o Radiation & Photochemistry Division
Bhabha Atomic Research Centre, Mumbai - 400 085

President
Dr. A. C. Bhasikuttan

Vice-Presidents
Prof. Anindya Datta
Dr. Yatender K. Bhardwaj

Secretary
Dr. P. Mathi

Jt. Secretary
Dr. Beena G. Singh

Treasurer
Dr.Sumana SenGupta

Executive Members
Dr. Atanu Barik
Prof. Shamik Chakraborty
Dr. Sharmistha Dutta Choudhury
Dr. Awadhesh Kumar
Dr. Amit Kunwar
Dr. Jyotirmayee Mohanty
Dr. Sukhendu Nath
Dr. Chandra N. Patra
Dr. R. Puspalata
Dr. Madhab C. Rath
Prof. Geeta K. Sharma
Dr. V. Sudarsan
Dr. Ankur Saha

Co-opted Members
Dr. Nihrendu Choudhury
Prof. Hirendra N. Ghosh
Dr. Narender K. Goel
Prof. Sriram K. Gundimeda
Dr. Manoj Kumbhakar
Prof. Avinash Kumbhar
Dr. Nandita Maiti
Prof. Jai P. Mittal
Prof. Tulsi Mukherjee
Prof. Prakash D. Naik
Prof. Anil K. Singh
Prof. Avesh K. Tyagi

Web Administrator
Dr. Abhishek Das
Shri. Subhamoy Saha

ISRAPS Discussion Meeting on

New Frontiers of Radiation Process in Polymers, Paints and Nanocomposites

(in association with Dept. of Polymer & Surf. Eng., ICT Mumbai)

Venue: **K. V. Auditorium, Institute of Chemical Technology (ICT) Mumbai**

Date: 19th July, 2025 (Saturday)

Programme

Registration	9.00 - 9.45
Inaugural Function	9.45-10.30

***High Tea*: 10.30-11.00**

Session I: 11.00 – 12.00 (Chair: Prof. P. D. Naik)

Talk-1: **Dr. Apurav Guleria**, *BARC* 11.00-11.30
Title: *Harnessing the Potential of Ionizing Radiation for Synthesis of Silicon Nanocomposites: Applications in Sensing and Biomedicine*

Talk-2: **Dr. Juby K. Ajish,** *BARC* 11.30-12.00
Title: *Radiation-Induced Approaches for the Synthesis and Functional Modification of Biopolymers and Polymeric Composites*

Session II: 12.00 – 13.30 (Chair: Prof. Awadhesh Kumar)

Talk-3: **Dr. R. B. Naik,** *NMRL-DRDO* 12.00-12.30
Title: *Protective coatings for marine application*

Oral Presentations: (OP 01 – 06) 12.30-13.30

***Lunch*: 13.30-14.30**

Session III: 14.30 – 15.30 (Chair: B. M. Bhanage)

Talk-4: **Dr. R. S. Parmar,** *Asian Paints Ltd* 14.30-15.00
Title: *Advancements in the Radiation and Photochemical Sciences for Paints and Coating Industries*

Talk-5: **Dr. R K. Mondal,** *BARC* 15.00-15.30
Title: *Radiation Processes Polymer Composites for Advanced Applications*

***Tea Break*: 15.30-16.00**

Session IV: 16.00 – 17.00 (Chair: Prof. Y. K. Bhardwaj)

Talk-6: **Dr. R. Jadhav,** *Hitech Dura Solutions Pvt. Ltd,* 16.00-16.30
Title: *Recent Development and Emerging Trends in Indian Paint Industries*

Talk-7: **Dr. A. Sabnis**, *ICT-Mumbai* 16.30-17.00
Title: *Radiation Assisted Depolymerisation of Polymeric Waste*

Concluding Session 17.00-17.30

E-mail:israps.secretary@gmail.com;mathip@barc.gov.in; Web Site: www.israps.org.in
Contact No:(022)- 25595087/25593866/25592668