



DAE - BRNS sponsored Tenth Biennial Symposium on
**Emerging Trends in Separation Science and
Technology
(SESTEC-2022)**

at

**Institute of Chemical Technology (ICT),
Mumbai, India**

November 22-26, 2022

*Organized by
Bhabha Atomic Research Centre*

*In association with
Association of Separation Scientists and Technologists
(ASSET)*



SESTEC-2022

The DAE-BRNS sponsored tenth biennial symposium on “*Emerging Trends in Separation Science and Technology (SESTEC-2022)*” is being organized by Bhabha Atomic Research Centre, Mumbai in association with the Association of Separation Scientists and Technologists (ASSET). This symposium is sponsored by the Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy (DAE). It will be held during **November 22-26, 2022 at Institute of Chemical Technology (ICT), Mumbai, India**. The objective of **SESTEC-2022** is to provide a forum for scientists and engineers to discuss the recent advances in the area of separation science and technology relevant to the nuclear fuel cycle activities, such as separation of actinides, lanthanides, and fission products and their speciation. The symposium also covers recent developments in membrane technology, separation techniques and wastewater remediation. The symposium will be extremely useful, especially to the young researchers, as there is a participation of eminent scientists and engineers from National Laboratories, Universities and Research Institutes from India and abroad and it would provide a platform for effective interaction among those engaged in research in the area of separation science and technology.

SCOPE

- A. Synthesis of solvents, resins and membranes
- B. Separations in nuclear fuel cycle
- C. Green separations
- D. Chromatography, electrochemical and pyrochemical separations

- E. Separation in Industries
- F. Isotope separations
- G. Membrane science and technology
- H. Radiochemical separations,
- I. Speciation studies

The five day symposium will bring together a panel of highly accomplished experts in the field of separation science and technology. The scientific programme of the symposium includes several Invited Talks by eminent scientists from India and Overseas. The invited talks will encompass both basic studies and applications addressing the topics of novel issues related to separation science and technology. Contributed papers will be presented in both Oral and Poster sessions.

It is proposed to have oral presentation by the researchers based on the novelty of their work as recommended by the reviewers. The oral presentations will be reviewed by a panel of judges for the best presentation awards.

*The symposium also includes
a theme meeting on “Separation Science in Industries”*

&

*a Separate Session to honour of Shri H.N. Sethna, Former
Chairman, AEC.*

Abstract of the contributed papers will be peer reviewed prior to their acceptance in the symposium proceedings. Limited numbers of papers will be selected for publication in the reputed journal, “**Separation Science and Technology**”. The authors will be intimated in advance about the selection of their contributions for journal publication.

THE VENUE

The symposium will be held at Institute of Chemical Technology (ICT), Mumbai, India.

ABOUT MUMBAI

Mumbai, the financial center of India situated on the west coast. On the harbor waterfront stands the iconic Gateway of India, built in 1924. Offshore, nearby Elephanta Island holds ancient cave temples dedicated to the Hindu god Shiva. Mumbai has a tropical climate, with pleasant

temperature ranging from 20 to 30°C during the months of October-December.

LOCATION

ICT is located on a 16 acres (65,000 m²) campus at 19.024°N 72.859°E Coordinates: 19.024°N 72.859°E. The institute is located in Matunga (a locality in the heart of Mumbai City). The academic building faces Nathalal Parekh Marg. VJTI (Veermata Jijabai Technological Institute) (Backside), Khalsa College, Don Bosco Church are well-known landmarks adjacent to the ICT.

How to reach the VENUE

(i) From Chhatrapati Shivaji Internation Airport, Santacruz

Rent a pre-paid taxi for Maheshwari Udyan/King's Circle, Don Bosco and ICT. It takes about 30-40 minutes.

(ii) By local train and bus

Most of the long distance trains on the Central and Western Railways halt at the *Dadar Railway Station*. From Dadar station, a taxi can be hired for Maheshwari Udyan/King's Circle, Don Bosco and ICT.

Alternately BEST Bus No.64 (for central railway) and Bus No. 169 (for western railway) can be used to reach ICT. In addition all buses operated by the Maharashtra State Road Transport Corporation and private carriers stop at *Dadar bus station* (popularly called Dadar TT).

(iii) From Chhatrapati Shivaji Terminus (CST)

Board a Harbour train to Wadala station or central line train to Matunga station. From both the stations ICT is at a (12-15 min) walking distance.

Tourist Attractions



The Elephanta caves



Trimurti in Elephanta caves



Gateway of India



Marine Drive



Chhatrapati Shivaji Terminus



Essel World



Sanjay Gandhi National Park



Bandstand Promenade

BRNS

The Department of Atomic Energy (DAE) through its nodal funding agency–The Board of Research in Nuclear sciences (BRNS) supports extramural research and development activities in nuclear and allied sciences, engineering and technology. The major activities of BRNS are: identifying and funding R&D programmes and projects, award fellowship to pursue doctoral programmes and research grants to young scientists. It also organizes symposia on topic of relevance and interest to DAE as well as other frontier areas of science and technology, extend financial support to symposia and conferences organized by professional bodies and other agencies, establishment of chairs in universities and other institutions of higher learning, create infrastructure facilities for advance research, identify/create and support centers of excellence. For more information, please visit the website (www.brns.res.in).

TRAVEL ARRANGEMENTS

It is expected that, the participants will make their own travel arrangements. However, transports will be provided to the delegates at pre-specified time from Anushaktinagar to the venue during the conference.

FINANCIAL ASSISTANCE

TA/DA may be made available to a few deserving student participants, where the parent institution is unable to arrange. Request for financial assistance must reach Secretary, Symposium Organizing Committee, on or before October 20, 2022. The financial assistance request forms can be downloaded from the website (www.asset.org.in/sestec-2022). Filled forms should be sent via email to the symposium secretary at sestec2022@gmail.com.

AUTHORS PLEASE NOTE

1. Papers based on original unpublished work will only be accepted.
2. Contributory papers are invited on topics listed overleaf in the form of one page manuscript. The entire text should be typed using the MS Word template. The template can be downloaded from www.asset.org.in/sestec-2022. Manuscripts not complying with the format will not be sent for review.
3. Manuscript should be categorized (A to I) as per the titles given under SCOPE of the symposium.

4. **Abstract submission should be done online via website: www.asset.org.in/sestec-2022. The abstract submission deadline is 15th September, 2022.**
5. E-mail ID of the corresponding author should be given in the manuscript and the name of the presenting author should be underlined. All the future communications in respect of manuscript will only be made to the corresponding author.
6. Exclusively for authors from DAE: Please note that the contributed papers should be accompanied with the note of **approval from the competent authority**.

7. DEADLINES

Submission of Contributory Paper	: September 15, 2022
Intimation of Acceptance of Paper	: September 30, 2022
Request for accommodation	: October 15, 2022
Submission of Registration Fees	: October 15, 2022

REGISTRATION FEE

Research Scholars / Students	:	INR 2000/-
Delegates from academic / Research Institutes	:	INR 5000/-
Delegates from Industries	:	INR 10,000/-
Delegates from Overseas	:	USD 600/-
Students from Overseas	:	USD 300/-
Accompanying person (India)	:	INR 2000/-
Accompanying person (Overseas)	:	USD 300/-

Registration should be done through the website (www.asset.org.in/sestec-2022). The registration fees to be paid through online portal after the acceptance of the abstract.

Registration fee should be paid via NEFT:

A/C Name : SESTEC-2022
A/C No. : 41184040775
Bank Name : State Bank of India
IFSC Code : SBIN0001268
MICR Code : 400002006

Sent a copy of receipt to: sestec2022@gmail.com

ADDRESS FOR CORRESPONDENCE

Arijit Sengupta

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ADDRESS FOR LOCAL CORRESPONDENCE

Dr. Rathod, V. K., ICT, Mumbai

Co-Convener, SESTEC 2022
Head, Chemical Engineering
Department ICT, Mumbai, India
Email: vk.rathod@ictmumbai.edu.in
Tel: +91-22-33612020

ACCOMMODATION

A number of affordable hotels of all ranges are available near the venue. The organizers are in a process of discussion with the management of selected hotels for availing special conference discount. Participants are requested to book their hotel accommodation directly. The Hotel names and the discounted tariffs will be updated on the conference website at a later date. For more updates on accommodation booking kindly see the website (www.sestec.org.in). Local transportation will be provided **only** from the hotels suggested by the organizers. Limited number of accommodations at Anushaktinagar for student participants on chargeable basis can be arranged by the organizers.

The accommodation booking forms for students can be downloaded from the website. Filled forms should be sent via email to the symposium secretary at sestec2022@gmail.com. The filled forms should reach on or before October 20, 2022.

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Singh, K.K., BARC, Mumbai
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Tripathi, R., BARC, Mumbai
Vats, B.G., BARC, Mumbai
Venkatesan, K.A., FCD, IGCAR
Yadav, K.K., BARC, Mumbai

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Dr. Rathod, V. K., ICT, Mumbai

Chairman

Dr. Gogate P.R., ICT, Mumbai

Dr. Vaidya, P.D., ICT, Mumbai

Dr. Patwardhan, A., ICT, Mumbai

Foreign Invited Speakers

Dr. R. Wickramsinghe	University of Arkansas, USA
Dr. D.L. Clark	LANL, USA
Dr. S.N. Kalmykov	Lomonosov Moscow State University, Russia
Dr. Andreas Geist	Karlsruhe Institute of Technology, Germany
Dr. S.D. Kolev,	Univ. Melbourne, Australia
Dr. Alberto Figoli	ITM, Italy
Dr. Mark L. Dietz	Argonne National Laboratory, USA
Dr. Stosh A. Kozimor	Los Alamos National Laboratory, USA
Dr. Ken Czerwinski	University of Nevada, USA
Dr. Isabelle Billard	CNRS LEPMI, France