

International conference on
**Science, Technology and
Applications of Rare Earths**

ICSTAR 2024

August 21-23, 2024

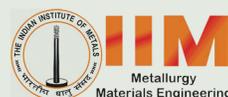
Organized jointly by

Rare Earth Association of India



The Indian Institute of Metals

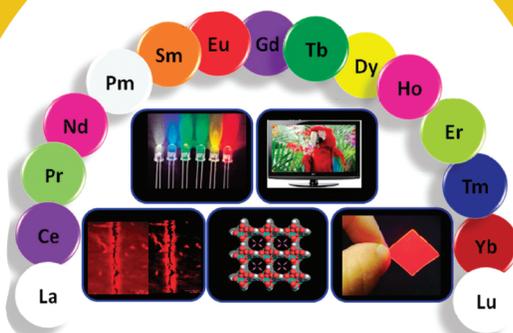
Trivandrum Chapter



Venue:
Uday Samudra

Kovalam
Thiruvananthapuram
India

First
Circular and
Call for
papers



www.icstar2024.com
E-mail: icstar2024@gmail.com

About Rare Earth Association of India (REAI)

Rare Earth Association of India (REAI) is a premier association of scientists, technologists and academicians formed with the objective of :- a) promoting research, development and application of science and technology of rare earths and related materials by exchanging, promoting, communicating and disseminating information in this field.

About the Indian Institute of Metals (IIM, TVM)

The Indian Institute of Metals (IIM), Trivandrum Chapter was established in 1979. Today, in its long professional and technical journey it has become a nodal platform for the metallurgists, materials engineers and scientists of the chapter covering R&D organizations like VSSC, CSIR-NIIST, LPSC, IIST, SCTIMST and industries like Brahmos, IREL, Travancore Titanium Products (Ltd). Its activities include the whole gamut of Technology and Science applications in the areas of extractive metallurgy, ferrous and non-ferrous metals and alloys, advanced ceramics, composites and other emerging materials.

Scope of the conference

It is indeed a great honour for the Rare Earth Association of India (REAI) and Indian Institute of Metals, Trivandrum Chapter (IIM) to jointly host the forthcoming International Conference on Science, Technology and Applications of RARE EARTHS (ICSTAR-2024), August 21-23, 2024, at Kovalam, Thiruvananthapuram, Kerala, India.

Rare Earth Elements (REEs) are extensively used in clean energy applications like wind turbines, hybrid car batteries/ electric motors, solar energy collectors, permanent magnets, phosphors, multifunctional pigments, thin film technologies, defence-related systems, biomedical applications etc. By 2024, global demand is expected to exceed 200,000 tons per year. The rare earth industry is now in a state of transition. The dominance of the current leading producers is being challenged by new producers from all over the world. This is likely to result in greater stability in terms of both supply and price of rare earths. There is a need for the development of an appropriate strategy for the indigenous production of rare earths, based on the analysis of availability, identification, exploration and discovery of economically extractable deposits. The current global demand for rare earths is expected to provide a myriad of business opportunities for rare earth industries across the world including India for the utilization of rare earths in green energy, technology and industry. Therefore, a timely opportunity needs to be created to concentrate and spur the interests of scientists working on rare earth based materials and hybrids from various perspectives, including advanced science and revolutionary technologies. This conference is organized with the above objectives and will bring together scientists, engineers, policy makers and leading experts from all over the world working in the field of rare earth materials and their industrial applications. This event will also provide an excellent forum for discussion and exchange of information. Participants will have opportunity to mix with key industry experts, academicians, leading analysts, infrastructure specialists, scientists, technologists and a myriad of other players associated with the rare earth science, technology, applications and industry.

Topics to be discussed in the conference

- Rare earths processing, purification, hydrometallurgy, organic reagents for extraction and separation
- Rare earths recovery and recycling from Electronic and Magnetic Materials.
- Rare earth-based materials/ nano-materials for catalysis, phosphors, IR reflective pigments/coatings, magnetic and magnetic refrigerant materials, and alloys
- Rare earth based molecular materials for solid-state lighting, bioanalysis, imaging and medical applications
- Trends in Rare earth magnetic materials
- Beneficiation and value addition of beach sand heavy minerals
- Rare based metals and alloys for strategic sector.
- Exploration of Critical minerals & materials (beneficiation, extraction techniques and product development)

Conference Dates: **August 21-23, 2024**

Venue: **Uday Samudra, Kovalam, Thiruvananthapuram, India**

Language:

The official language of the conference is English.

Call for Papers

Keynote, Plenary and Invited Talks by experts in the respective fields, and presentation of contributory papers by scientists/engineers/academicians/professionals/research scholars across the world will form the main program of the conference. Those desirous of presenting papers in the conference are requested to submit one page abstract of their

paper along with the completed registration form. Format for submitting abstract is available in the REAL website. An extended abstract of the technical paper should be submitted to the Chairman, Organizing Committee on or before 15th May 20 24. Authors will be notified of acceptance of abstract by 1st June, 2024.

Abstract format

Authors wishing to present papers at the Conference are requested to submit an abstract of not more than 400 words. The abstract should be in English and conform to the following format: Title in Times New Roman 14, bold capital letters, centered ; Author(s) Name(s) in Times New Roman 12, centered, presenting author's name underlined; affiliation and address (including e-mail) in Times New Roman 12, centered; Text in Times new Roman12. Please give a margin of 3 cm on top and bottom and 2.5 cm on left and right side of each page. Figure caption should be given under the figure and table heading should be given on the top of the table, both in Times New Roman 12. References in the text should be in square brackets and they should be listed at the end of the extended abstract in the ascending order, with initials and names of all authors, journal name (*italic*), Year, volume, page numbers. For example:

M.L.P.Reddy, V. Divya, K.S. Bejoymohandas, *Dyes and Pigments*, 215 (2023) 111248.

Books should be sighted as follows: K. Binnemans, *Handbook on the Physics and Chemistry of Rare Earths*, Elsevier, Amsterdam, 2005, vol. 35, pp. 107-272.

An electronic version of the abstract should be e-mailed to the Chairman, IC STAR 2024 on or before 15th May, 2024. E-mail: icstar2024@gmail.com

All correspondence regarding paper submission should be sent to: Organizing Committee Chairman, ICSTAR 2024 (icstar2024@gmail.com). Abstracts will be considered by a panel of referees for inclusion in the program. Authors will be notified whether their abstract has been accepted or not before 1st June 2024. Abstracts Book will be available to registered participants.

Registration Fee

Registration fee will enable to entitle for entry to conference sessions, exhibitions, tea/coffee breaks, conference lunch, dinner, conference kit and abstract book. In addition to the scientific activities of the conference, site seeing tours may be arranged upon request. For more details, please contact the information/travel desk at the conference venue.

Details	Indian	Foreign
Delegate fee	Rs 6,000/-	USD 400/-
(REAI Members & IIM Members)	Rs. 4,500/-	
Retired Members (REAI & IIM)	Rs. 3,500/-	
Students - (REAI Non-Members)	Rs. 3,000/-	USD 200/-
(REAL Members)	Rs. 2000/-	
Accompanying Person (India)*	Rs. 5,000/-	USD 150/-

*Registration kit is not included for accompanying person.

Important Dates

Abstract submission closes on: 15th May, 2024

Acceptance of abstracts: 1st June, 2024

Early-bird registration ends on: 15th July, 2024

Souvenir

A souvenir consisting of abstracts of the scientific papers/posters, advertisements and general information will be published on the occasion of ICSTAR-2024. The organizing committee requests all the well wishers/ participants to render their fullest support by way of providing advertisements/scientific inputs in the souvenir.

Advertisement charges

Tariff for advertisements in the souvenir are given below:

Back cover : Rs. 50,000/-

Inside covers : Rs.25,000/Full page colour : Rs. 20,000/-

Full page (B&W) : Rs.10,000/-

Sponsorships

Sponsorships are solicited from industrialists/ philanthropists for organizing the conference as per details given below:

Category Fees with offers

Platinum Rs.10 Lakhs : 5 Free delegates, 1 full page colour advertisement & display of logo at the venue

Diamond Rs.5 Lakhs : 4 Free delegates, 1 full page colour advertisement & display of logo at the venue

Gold Rs. 3 Lakhs : 3 Free delegates, 1 full page colour advertisement & display of logo at the venue

Silver Rs. 1 Lakh : 2 Free delegates, 1 full page colour advertisement & display of logo at the venue.

Exhibition

It has been decided to organize an exhibition of rare earth based products, magnets, instruments, machinery, books, etc., in connection with ICSTAR-2024. This will provide an excellent opportunity to display their products for industry and discuss with experts on the future business scope in the field of rare earth-based materials and their application.

Size of the Exhibition	Stall charges
3 meter X 3 meter	Rs 75,000/-

Accommodation

Organizers have reserved limited number of rooms at hotels near the conference venue for the participants from abroad/ India during the conference period at special discount rates. Hotel reservation will be made on a first-come, first-served basis. For student participants, budgeted accommodation can be provided upon request and the same will be confirmed only on receipt of the accommodation charges well in advance.

Payment Options

Foreign Delegates - Wire Transfer

Payment should be made through wire transfer by using the following details

Account Name : **Rare Earth Association of India (REAL)**
Account No : **67146367193**
Bank Name : **State Bank of India**
Branch name : **Industrial Estate, Pappanamcode**
IFSC Code : **SBIN0070030**
MICR : **695002943**

Note: Participants must bear the fees their banks charge for the remittances out of their accounts.

Indian Delegates

Account holders of any national banks can make the payment through NEFT transfer. Rare Earth association of India; Account No. 67146367193; State Bank of India; Branch: Industrial Estate, Pappanamcode, Thiruvananthapuram-695019, Kerala, India; IFSC Code: SBIN0070030.

Demand Draft (DD) drawn in favor of "REAL", payable in Thiruvananthapuram. The DD should be sent to Dr.K.Jayasankar, Convener, Organizing Committee ICSTAR-2024, Materials Science and Technology Division, CSIR-NIIST, Thiruvananthapuram-695019, Kerala, India.

Refund and cancellation policy

For cancellations submitted by 15th July 2024, 50% of your conference registration fees will be refunded. Please note that refund will be made after deducting the processing fee charged by our bank. No refund of conference registration fee available for cancellations after 15th July 2024.

International Advisory Board

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National Organizing Committee

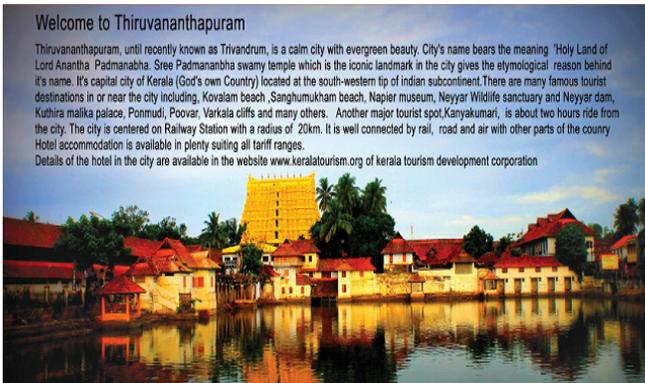
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About Thiruvananthapuram

Located at the south-western tip of Indian subcontinent, Thiruvananthapuram, which is also known as Trivandrum is a calm, beautiful and quiet city. It is the capital of Kerala (God's own country), which has a long coast line full of coconut trees and is much –sought–after tourist destination. The major attractions in Trivandrum are lakes, beaches, palaces, temples, museum and zoo. The world famous Kovalam beach and Sri Padmanabha Swamy Temple are in Trivandrum. Another major tourist spot, Kanyakumari, is about 95 km south of Trivandrum.



Welcome to Thiruvananthapuram

Thiruvananthapuram, until recently known as Trivandrum, is a calm city with evergreen beauty. City's name bears the meaning 'Holy Land of Lord Anantha Padmanabha. Sree Padmanabha swamy temple which is the iconic landmark in the city gives the etymological reason behind it's name. It's capital city of Kerala (God's own Country) located at the south-western tip of Indian subcontinent. There are many famous tourist destinations in or near the city including, Kovalam beach, Sanghumukham beach, Napier museum, Neyyar Wildlife sanctuary and Neyyar dam, Kuthira malika palace, Ponnudi, Pooovar, Varkala cliffs and many others. Another major tourist spot, Kanyakumari, is about two hours ride from the city. The city is centered on Railway Station with a radius of 20km. It is well connected by rail, road and air with other parts of the country. Hotel accommodation is available in plenty suiting all tariff ranges.

Details of the hotel in the city are available in the website www.keralatourism.org of Kerala tourism development corporation

Climate

The temperature in Thiruvananthapuram during August generally varies from a high of 30 degrees to a low of 25 degree celsius. Climate is generally humid.

How To Reach Thiruvananthapuram

By Air

Thiruvananthapuram is well connected by air to all major cities in India and abroad. Trivandrum international Airport is about 10 KM from the venue of the conference. Prepaid taxis are available to Kovalam, the venue of the conference from airport.

By Train

Thiruvananthapuram Central is one of the most important railway stations in South India and is well connected by train to all parts of India. Public transport/taxi is available from these stations. The bus station is just across the road.

By Road

Thiruvananthapuram is well connected to all main destinations in India by a very good road network. Bus services are available from Chennai, Bangalore, Mangalore, and major cities in Kerala, Karnataka and Tamil Nadu. The local bus service provides a convenient way of moving in the city. Taxis and three wheelers are also available for local travel.

Address for Correspondence:

Dr. M. L. P. Reddy

Chief Scientist, CSIR-NIIST (Retired) & Secretary, REAI
Chairman, Organizing Committee, ICSTAR 2024
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Dr. K. Jayasankar

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