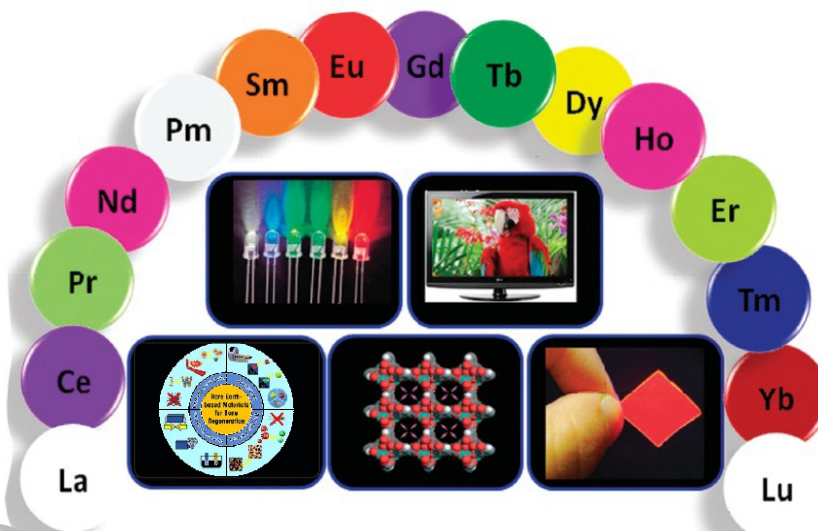




International Conference on **SCIENCE, TECHNOLOGY AND APPLICATIONS OF RARE EARTHS** **ICSTAR 2025**

21-23 April, 2025

Jointly organized by
Rare Earths Association of India, Mumbai
Department of Physics
Sri Venkateswara University, Tirupati
&
Department of Biotechnology
Sri Padmavati Mahila Visvavidyalayam, Tirupati



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ABOUT RARE EARTHS ASSOCIATION OF INDIA (REAI)

Rare Earths Association of India is a premier association of Scientists, Technologies and Academicians formed with the objectives 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. (www.reaindia.in).

ABOUT SRI VENKATESWARA UNIVERSITY (ACCREDITED WITH A+ GRADE BY NAAC)

Sri Venkateswara University, Tirupati was established in 1954 on sprawling campus of 1000 acres with a panoramic and pleasant hill view. This University stands as testimony to the wisdom and foresight of great visionaries - Late Sri Tanguturi Prakasam Pantulu, the then Chief Minister of Andhra Pradesh and Late Sri Neelam Sanjeeva Reddy, Former President of India, to cater the educational needs and aspirations of the back word people of Rayalaseema area. With a great wisdom, the founders of this University have rightly coined the motto "Wisdom lies in proper perspective" for it. The University has grown excellently from strength to stature over the past Sixty-Eight years, as premier institute of higher learning under the able and committed leadership of successive Vice-Chancellors starting from Late Prof. S. Govindarajulu to the present Vice-Chancellor Prof. Ch Appa Rao. The initiatives taken by the present Vice-Chancellor Prof. Ch. Appa Rao have already started tremendous yielding and excellent results, in terms of research funding, extension activities and thus keeping the University on the right path of excellence. It has gone through greater strides in the transformation of the University with acquiring necessary and modern sophisticated instrumentation to catch up with the world competition in academic and research programmes. Sri Venkateswara University has figured in reputed International and National rankings such as THE, **QS-Asia**, **MHRDNIRF** top 2% scientist rankings and AD Scientific rankings.

ABOUT SRI PADMAVATI MAHILA VISVAVIDYALAYAM (ACCREDITED WITH A+ GRADE BY (NAAC)

Sri Padmavati Mahila Visvavidyalayam (SPMVV), a Women's University in Tirupati, Andhra Pradesh, was established in 1983 by Sri N.T. Rama Rao to empower women through higher education and leadership. Spread across 129.85 acres near the Tirumala Hills, the campus is well-equipped with academic, administrative, and residential facilities, including a library, auditoriums, and seminar halls. The University offers 59 undergraduate, postgraduate, M.Phil., and Ph.D. programs across disciplines such as Sciences, Social Sciences, Engineering, and Management. SPMVV serves over 5,800 students through regular and distance learning programs, international collaborations, and professional courses, including teacher education. The University also supports students with remedial teaching, competitive exam coaching, and personality development programs. With funding from UGC and R&D agencies like DST, DBT, and ICSSR, SPMVV boasts robust innovation and entrepreneurship initiatives, including four incubators. It maintains global partnerships for staff and women entrepreneurship development. Accredited with an "A+" grade by NAAC, the University exemplifies its motto, "Gnanam Nirmochanam Streenam," producing alumnae excelling in diverse professions worldwide.

ABOUT TIRUPATI

Tirupati is considered one of the holiest Hindu pilgrimage sites because of Sri Balaji Temple, besides other historical temples, and is referred to as Spiritual Capital of Andhra Pradesh. Tirupati is a city in Tirupati district of the South Indian state of Andhra Pradesh. Tirupati is also home to many educational institutions and universities. Tirupati has a tropical wet and dry climate, designated under the Köppen climate classification. In winter, the minimum temperature will be between 25°C - 30°C. Usually summer lasts from March to June, with the advent of rainy season in July, followed by winter which lasts till the end of February.

BY AIR: Tirupati airport is located at Renigunta, which is about 15 KM away from the city. Regular flights are available from Hyderabad, Viskhapatnam, Vijayawada, Raichur, Bangalore and Mumbai. Chennai Airport is also well connected to Tirupati by road (3-4 hrs. journey by car/train).

BY TRAIN: Tirupati is a major junction in South Central Railways. Indian Railways operates direct trains from nearby metro cities- Bangalore, Chennai, Hyderabad, New Delhi, Mumbai, Tiruvananthapuram and many other major cities are connected to Tirupati. Trains can be boarded at nearby cities Renigunta (10 KM from Tirupati) and Gudur (100 KM). Frequent bus services are available across the Tamil Nadu, Karnataka and Andhra Pradesh.

ABOUT THE CONFERENCE

The International Conference on Science, Technology, and Applications of Rare Earths (ICSTAR-2025) aims to bring together global experts, researchers, and academicians to explore recent advancements in the Physical and Biological sciences of rare earth elements. Rare earths are pivotal in revolutionizing modern technology and healthcare, with applications ranging from sustainable energy systems to innovative medical diagnostics and therapeutics.

The conference provides an interdisciplinary platform to discuss the synthesis, characterization, and utilization of rare earth elements in areas such as:

- Physical Sciences: Lasers, photonics, nanotechnology, advanced materials, quantum computing, and energy applications.
- Biological Sciences: Biomedical imaging, drug delivery systems, environmental sustainability, and agricultural enhancements.

TOPIC OF INTERESTS

1. Rare earth doped glasses/glass-ceramics for high power solid state laser applications
2. Rare earths processing, purification, hydrometallurgy, organic reagents for solvent extraction and separation.
3. Rare earths recovery and recycling
4. Rare earths mining and environmental aspects emerging marketing avenues
5. Applications of Rare Earths
 - 5.1. Magnetic and magnetic refrigerant materials
 - 5.2. Rare earths based molecular materials:
 - a) Solid State Lighting / OLEDs
 - b) Live-cell imaging in medical sciences
 - c) Bioanalysis
 - d) Rare earths in Medical imaging
 - e) Rare earths in Cancer
 - f) Rare earths in Medicine
 - 5.3. Rare earth-based materials/nano-materials:
 - a) Lasers b) Catalysts c) Phosphors d) IR reflective pigments
6. Materials Science & Nano-Technology
7. Energy Materials

CALL FOR ABSTRACTS

The participants are requested to send the abstracts (MS-Word) directly as we intent to publish the proceedings of the abstract book and release the same during inaugural function of the international conference. The participating delegates will receive a copy of the proceedings book on the day of International conference.

GUIDELINES FOR ABSTRACT

Authors are requested to submit a soft copy of the abstract (s) of the paper (s) - mailed to the organizing secretary, ICSTAR-2025 on or before 10th April 2025 along with the registration fee. Abstracts may be confined to a vertical rectangle of dimensions 16 cm x 23 cm on a good A4 size paper in camera ready format. The title should be typed in bold capital letters and centered (Times New Roman of font size 12). The authors name and affiliation (Times New Roman of font size 10) may follow the title. The name of the author presenting the paper should be underlined. The text in Times New Roman of font size 12 may start after a gap of one single line spacing. A 'book of abstracts' containing abstracts of reviewed Contributed Papers, invited talks and oral presentations will be made available to the participants during the conference. A poster board of area 1m x 1m will be provided for each poster presentation. Abstracts which are not following required format will be rejected.

ONLINE REGISTRATION LINK

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IFSC Code : UBIN0810321

The registration fee is payable through NEFT (Transfer) / Demand draft (DD) drawn in the favor of "CONVENER CONFERENCE" payable at Tirupati.

IMPORTANT DATES

Abstract Submission Last Date : 1st April 2025

Acceptance of Abstracts : 2nd April 2025

Registration Last Date : 10th April 2025

Note: Abstracts will be included in the abstract book only those who pay the registration fee on or before 10th April 2025

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