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Editor of [Radiation Protection and Environment](#) Journal

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National Seminar
Recent Trends on Applications
of Radio Isotopes
&
Radiation Technologies
ARIRT - 2023
Andhra University,
Visakhapatnam,
September 28-29, 2023
Organized by



Department of Nuclear Physics,
Andhra University,
Visakhapatnam
&



National Association for
Application of Radioisotopes
and Radiation in Industry
(NAARRI), Mumbai

Radioisotopes and radiation technologies have been playing a significant role in the march towards excellence in the field of industry, agriculture, healthcare, food preservation, isotope hydrology and environmental remediation. Applications of radiation technology have provided better quality of products and efficient process control techniques besides offering environment friendly energy source for industrial processing.

During the past five decades, significant progress has been made in all facets of radioisotope production and radiation technology programmes. Radioisotopes are produced in nuclear reactors and accelerators. Electron beam accelerators are also increasingly being employed for a variety of applications. It is possible now to design, develop and commercially operate irradiators based on either radioactive Cobalt-60 sources or electron beam machines for food preservation, municipal waste hygenisation, water treatment and environmental applications.

The demand for radioisotopes for medical and industrial applications continues to grow. The success achieved in many recently developed therapeutic and diagnostic radiopharmaceuticals has contributed in enhancing the demand for these radionuclides.

The industrial non-destructive testing (NDT) and radiotracer technologies have also progressed significantly. Convention NDTs using chemical film based industrial radiography are being replaced with computed radiography, digital radiography and computed tomography.

Realizing the significant advancement of applications of radioisotopes and radiation technologies, Department of Nuclear Physics of Andhra University, Visakhapatnam and the National Association for Application of Radioisotopes and Radiation in Industry (NAARRI), Mumbai are jointly organizing a two days National Seminar during September 28-29, 2023. The intended objective of the seminar is to provide an opportunity to the academicians, professionals, scientists, research scholars and technocrats etc. for fruitful deliberations and interactions in updating the latest developments in the field.

Topics to be covered

- Radioisotope production.
- Electron Beam Accelerators.
- Industrial Applications of Radioisotopes.
- Applications of Radioisotopes and Radiation for Food and Agriculture.
- Radiation Processing of Materials.
- Radioisotopes and Radiation in Health-care.
- Radioisotopes and Radiation for Environmental Remediation.
- Environmental Radiation
- Radiation Monitoring and Radiation Protection
- Radiation Safety and Regulatory Aspects.
- Socio-economic Impact of Radiation Technology.

Technical sessions include **invited lectures** and **few oral presentations** those contributions fit well with good subject content. Papers presented in the seminar may be published in the journal **“Radiation Protect and Environment”** as a special issue after finishing evaluation of the full-length papers as per the journal procedure and norms. Authors are needed to submit the full-length papers to the editor of the journal as per the guidelines of the journal. The editor of the journal is Dr.D.D.Rao, email: ddrao217@gmail.com. For journal details, Visit <https://www.rpe.org.in/>

About the Organizers

Department of Nuclear Physics, Andhra University

The Department of Nuclear Physics at Andhra University is the only one of its kind in India, meant for advanced level teaching and research in Nuclear Physics. It established various fields of research in Nuclear Spectroscopy, Nuclear reactions and interaction of Gamma Radiation. The UGC recognized the Department as a centre for carrying out advanced level research in Nuclear Spectroscopy under “Departmental Support Programme”, in 1978. Presently, the department is engaged in research in the field of radiation physics, nuclear spectroscopy, nuclear reactions, material science, medical physics and elemental analysis with nuclear techniques. Andhra University was established as the 17th University in the country in the year 1926. At present it has constituent colleges contributing to various fields such as College of Science & Technology, College of Engineering, Women Engineering college, Pharmacy college, College of Arts & management, College of Law along with different research centers and center of excellences. Prof S. Radhakrishnan, Former President of India served as the 2nd Vice-chancellor of this University. The alumina of Andhra University includes a number of illustrious personalities like Noble prize winner Dr. C.V. Raman, Shri M. Venkaiah Naidu (Former Vice President of India) and many a Padma Awardees and Shanti Swaroop Bhatnagar Awardees.

National Association for Application of Radioisotopes and Radiation in Industry (NAARRI), Mumbai

NAARRI is a professional body founded in 1976. Since its inception, NAARRI has been striving to provide an effective interface between the Department of Atomic Energy (DAE) and users of radiation technology. To achieve its objectives, NAARRI has been organizing National and International conferences, seminars, symposia, workshops, training courses and public awareness programmes aimed at dispelling the apprehensions and unfounded fears about radiation. NAARRI has organized eight international conferences, the latest one being NICSTAR-2023 held at Kochi, Kerala during January, this year. It also, on a regular basis publishes Newsletters, thematic bulletins and other relevant publications in the field.

The Venue

Visakhapatnam is a city of destiny, Goa of the East. The Hindu god of courage (Valour) Visakha inspired the name Visakhapatnam. Visakhapatnam also known as Vizag or Waltair, Visakhapatnam is one of the oldest port cities in the country. Situated in the heart of Andhra Pradesh, Visakhapatnam is known for its picturesque beaches and serene landscape, as well as a rich cultural past, which makes it an ideal spot for a fantastic coastal vacation. Surrounded by the Bay of Bengal, Visakhapatnam is popular for its surreal beaches and rich cultural heritage. Visakhapatnam is famous for Hindustan Shipyard, Visakha Steel Plant, known for bauxite resources and apart from these it is famous in defense map locating Eastern Naval wing. Visakhapatnam is a tourist's paradise, known as the 'Jewel of the East Coast', enveloped by towering hills on one side and scenic beaches on other sides. It is well connected by rail route, road ways and air ways. A new campus of Bhabha Atomic Research Centre is coming up in Visakhapatnam. During September the climatic conditions in this region are characterized by a tropical climate. The average annual temperature is 26.9 °C.

ABSTRACT

Guidelines:

- (1) The abstract must be written and submitted in English.
- (2) The abstract should not exceed one page of Letter format (8.5" × 11") in portrait layout with all margins equal to 1".
- (3) The single-spaced text should be typed in normal Times New Roman font being left and right justified. Please use 12pt font size for the main body of text.
- (4) All text, equations, figures, schemes and references (e.g., “[1, 2]” or “[1-3]” after a word or sentence) should be integrated into the one-page abstract. Please do not provide separate graphics files. Figures or schemes cannot exceed one-third of the page. References (not more than five) should follow the format given below.
- (5) The abstract should be submitted as an MS Word file (.docx).
- (6) Abstract must be submitted through the email only; email for abstract submission abstractarirt@gmail.com

Accommodation :

Dr.P.V.Lakshminarayana (HOD), Nuclear Physics department, AU or D. Siva Kumar (Research scholar) Contact details: 9291400345 /9494710509
Emails accommodationarirt@gmail.com pvl.nuclearphysics@gmail.com /siva.duggi990@gmail.com

Registration

Persons desirous of participating in ARIRT-2023, may fill the registration form along with registration fee online payment, submit in the seminar web site <https://www.andhrauniversity.edu.in/arirt2023/arirt2023.html> and send the hard copies along with registration fee details.... to

Prof A.D.P.Rao, Convener, ARIRT-2023, Dept. of Nuclear Physics, Andhra University, Visakhapatnam-530003, A.P.

Registration fee.....

Students/Research Scholars	Rs 500/-
Faculty Members	Rs 1000/-
Others	Rs 2000/-

Important Dates

Abstract submission opens	July 13th 2023
Abstract submission closes	August 31st 2023
Intimation of Acceptance	September 8nd 2023
Early bird registration	September 12th 2023
*Registration Fee increases by INR 500/- after September 12th 2023;	
** Onsite registration is possible. (@ GST and bank charges are extra)	

Souvenir

A book of Souvenir and abstracts will be printed and released at inaugural function of the seminar (@ GST and bank charges are extra)

Advertisements charges:

Back Page:	Rs 40,000/-
Inside of Front page	Rs.30,000/-
Inside of Back page	Rs.25,000/-
Inside of the book	Rs 20,000/-

Exhibition

Industries and related agencies are encouraged to open and run a stall in the exhibition of the seminar on payment of necessary charges to the organizers.

Industries and related units can establish a stall during seminar:
Charges: Rs 40,000/- (@ GST and bank charges are extra)

Sponsorship

Industries and funding agencies are requested for sponsoring of the seminar to meet the expenditure of the event being held.

We are mentioning here some details about the exhibition and sponsorship. You are invited to become a sponsored as one of the following categories.

<u>CATEGORY</u>	<u>INR</u>	<u>DETAILS</u>
Platinum	1,00,000/-	A booth and two complimentary registrations
Diamond	75,000/-	A booth and one complimentary registration
Gold	50,000/-	Two complimentary registrations
Silver	30,000/-	One complimentary registrations

GST and Bank charges Extra. For complete details please contact organizers

Bank Account Details

Account name: Convener ARIRT-2023
Account Number: 42062144381
IFSC Code: SBIN0003170
MICR Code: 530002005

Bank Name: State Bank of India
Branch: AU Engineering campus, branch code 003170,
Andhra University, Visakhapatnam-530003