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Contact Details

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NATIONAL SEMINAR on

Application of Radioisotopes & Radiation Technology in Agriculture Healthcare, Industry and Environment (ARRTAHIE-2024)

November 21-22, 2024



Organised by

P.G. Department of Physics Khalsa College Amritsar (Punjab) æ **National Association for Applications of Radioisotopes & Radiation** in Industry (NAARRI) Mumbai

in association with **Punjab Pollution Control Board** (Government of Punjab)

ABOUT THE SEMINAR

Radioisotopes and radiation technology 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 process has been made in the areas of radioisotope production and applications of radioisotopes and radiation technology. 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 machine 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, Post Graduate Department of Physics of Khalsa College Amritsar (Punjab) and the National Association for Application of Radioisotopes and Radiation in Industry (NAARRI), Mumbai are jointly organizing a two days National Seminar during November 21-22, 2024. 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

- 1. Radioisotope Production
- 2. Electron Beam Accelerators
- 3. Industrial Applications of Radioisotopes
- 4. Applications of Radioisotopes and Radiation for Food and Agriculture
- 5. Radiation Processing of Materials
- 6. Radioisotopes and Radiation in Healthcare
- 7. Radioisotopes and Radiation for Environmental Remediation
- 8. Radioisotopes and Radiation Technology for Pollution Control.
- 9. Environmental Radiations
- 10. Radiation Monitoring and Radiation Protection
- 11. Radiation Safety and Regulatory Aspects
- 12. Socio-economic Impact of Radiation Technology

Technical sessions include **invited lectures** and **few oral presentations** those contributions fit well with good subject content

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" x 11") in portrait layout with all margins equal to 1".
- 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 sentences) 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: arrtahie2024@khalsacollege.edu.in

ABOUT HOLY CITY AMRITSAR

The city of Amritsar is only 27 km from the international border with Pakistan. The city was founded by the fourth Guru of Sikhs Shri Guru Ramdas Ji in 1577; in his desire to create a central place of pilgrimage. The town was named Amritsar which is a combination of two words; Amrit, 'Nectar', and the 'pool', which means 'Pool of Nectar'. Amritsar is a flourishing industrial town and the premier emporium of Northern India. It has a rich cultural heritage of more than four centuries and is a living symbol of historical traditions of Punjabis. Amritsar is a famous tourist attraction due to the historic Harimandir Sahib (Golden Temple), Jallianwala Bagh, Durgiana Temple and of course the Khalsa College, Amritsar.

KHALSA COLLEGE AMRITSAR AT A GLANCE

Khalsa College Amritsar was established in 1892 with the main objective to spread the benefits of modern education in Humanities, Agriculture, Science and Technology amongst the people of Punjab. The avowed aim of its founding fathers was the eradication of ignorance, illiteracy and social evils bedeviling the Indian society through enlightened, progressive and value-oriented education.

College campus covers an area of over 300 acres and provides latest facilities for higher education. Its building has gained the status of "Heritage" building. The college has been conferred the autonomous status, affiliated to Guru Nanak Dev University Amritsar. College is NAAC Accredited with 'A+' Grade and conferred with 'College with Potential for Excellence' status by UGC and 'STAR STATUS' by DBT. Presently, the college is running 71 post graduate and undergraduate programmes.

ABOUT DEPARTMENT OF PHYSICS

The Post Graduate Department of Physics upholds the tradition of exploring new frontiers of knowledge in 1928, it has the honour to be one of the oldest science departments of the region. The department houses well equipped and separate Laboratories of Condensed Matter Physics, Electronics, Nuclear Physics, Spectroscopy, Optics, Mechanics, Electricity & Magnetism and Computer.

The research facilities have been established in the areas of theoretical physics, plasma, radiation physics, material science and thin film sensors. The department has been recognised as a STAR Department by UGC under College with Potential for Excellence. It has also received financial assistance from the DBT under the STAR scheme, FIST-DST and from UGC under PBSR programme.

The Department has been sanctioned research projects in different fields by various funding agencies. The department offers M.Sc., B.Sc. (Hons.), B.Sc. (Computer Science), B.Voc., Diploma besides B.Sc. (Non-Medical). The students are generally placed in both Government and Private sectors in different Educational Institutes, Research Establishments, Defence and IT Companies after the completion of various courses.

ABOUT NAARI, MUMBAI

National Association for Applications of Radioisotopes & Radiation in Industry (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 radioisotopes and radiation technology. To achieve its objectives NAARRI has been organising 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 organised eight international conferences, the last 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 of applications of radioisotopes and radiation technology.

REGISTRATION

Persons desirous of participating in ARRTAHIE-2024 may fill the registration form https://forms.gle/YbwrBpiDm5QixWxL6 along with the registration fee online payment and send the hard copies along with registration fee details to Dr Harvinder Kaur, Convener, ARRTAHIE-2024, P.G. Department of Physics, Khalsa College, Amritsar-143002.

REGISTRATION FEE

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

IMPORTANT DATES

Abstract submission opens	September 30, 2024
Abstract submission closes	October 15, 2024
Intimation of acceptance	October 20, 2024
Early bird registration	November 10, 2024

*Registration fee increases by INR 500 after November 10, 2024

*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	
Advertisement Charges (GST and Bank Charges are e	extra)
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

Industrialists and agencies are invited to put up stalls and exhibit their products in the exhibition on payment basis. Charges per stall are Rs, 40,000/- (plus GST and Bank Charges).

SPONSORSHIP

Industrialists and funding agencies are requested for sponsoring of the seminar and meet the expenditure of the event being held. The categories of sponsorship and corresponding charges and details are given below

Category	INR	Details
Diamond	1,00,000/-	Two booths and five complimentary registrations
Platinum	75,000/-	One booth and four complimentary registrations
Gold	50,000/-	One booth and two complimentary registrations
Silver	30,000/-	One booth and one complimentary registration

BANK ACCOUNT DETAILS

Account Name: Principal, Khalsa College Amritsar Account Number: 50100311114365 IFSC Code: HDFC0001407 MICR Code: 143240010 Bank name: HDFC Bank Branch: Ranjit Avenue, Amritsar