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Dr. Y.K. Bhardwaj, Editor & Scientific Officer, RTDD, BARC

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Radiochemistry

Prof.(Dr.) B.S. BAJWA

LOCAL ORGANIZING COMMITTEE

Division.

BARC.

CHIEF PATRON

Prof.(Dr.) Jaspal Singh Sandhu

Honorable Vice Chancellor, Guru Nanak Dev University, Amritsar

WORKSHOP DIRECTOR

WUKKSHUP DIKECTU

Mob.- 9914116916 WORKSHOP CONVENOR

Dr. Inderpreet Kaur <u>inderpreet11@vahoo.co.in</u> 84276 62766

PARTICIPATION

- Online Form & Other details are available on our website www.hrdcgndu.org. There is no registration fee for this Workshop.
- The participants will be provided free hospitality (boarding & lodging).
 TA (upto 3rd AC Train/Deluxe Bus, on production of ticket will be paid to the outstation teaching faculty only.
- Applications are invited from Faculty Members/Research Scholars of Universities/Colleges/Institutes to enroll for the programme. Preference will be given to those teachers working in Universities or Colleges under Sections 2(f) and 12 B of the UGC Act, 1956.

In case of number of participants increase than 50, selection on the basis of their experience in teaching & research in this field

Department of Physics & Faculty Development Centre (FDC)
GURU NANAK DEV UNIVERSITY, AMRITSAR









9769126161:

101th DAE BRNS-IANCAS NATIONAL WORKSHOP on

Radiochemistry & Applications of Radioisotopes



Faculty/ of Universities/Colleges/Institutes/Research Scholar Feb 17-23, 2020



Organized by

Indian Association of Nuclear Chemists & Allied Scientists (IANCAS) C/O Radiochemistry Division BARC, Trombay, Mumbai 400085 Web: www.iancas.org.in Faculty Development Centre
Department of PHYSICS,
Guru Nanak Dev University, Amritsar
Under the Scheme of
Pandit Madan Mohan Malviya National
Mission on Teachers and
Teaching (PMMMNMTT)
Department of Higher Education, MHRD,

Government of India

About the University

Guru Nanak Dev University

was established at Amritsar on November 24, 1969 to mark the 500th birth anniversary of Sri Guru Nanak Dev Ji. It is both a residential and an affiliating University. In conceiving the future course of the University, the objectives enshrined in the Guru Nanak Dev University Act 1969, emphasized that the new University would make provision for imparting education and promoting research in the humanities, learned professions, sciences, especially of applied nature and technology. The University has risen to 16th rank in the top 50 universities of the country, as per recent survey conducted by 'India Today' and has achieved 11th Position, out of the 500 universities, in Publications in Science. The University has won the highest sports Award in the country, the Maulana Abul Kalam Azad Trophy, for a record of 21 times.

Faculty Development Centre

Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT), an initiative of MHRD, Govt. of India, is envisaged to address all issues related to teachers, teaching, teacher preparation and professional development. Under this scheme Faculty Development Centers (FDCs) have been established to create and strengthen the institutional mechanisms at the center and in the states for augmenting training and discipline wise capacity building of faculty. As per the notification of UGC, all short and long-term capacity-building programmes for teachers/faculty in different pedagogic and discipline-specific areas being conducted by Faculty Development Centre (FDCs), under the PMMMNMTT scheme shall be considered for fulfillment of the requirements as laid down in Career Advancement Scheme.

About the workshop

Founded in 1981, the Indian Association of Nuclear Chemists and Allied Scientists (IANCAS) (www.iancas.org.in) became popular with conducting National Workshops at University/ College level targeting the academia and a one-day school Workshops for School and College students.. This workshop, as a part of DAE-BRNS, will provide a forum for mutual interaction among faculty members and scientists from various educational institutions and research organizations. Eminent scientists specialized in topics related to nuclear chemistry, nuclear physics, nuclear reactors, production and application of radioisotopes and health and safety aspects will be the resource persons of the workshop. The lectures will be supplemented by Laboratory experiments for the benefit of the participants. In addition, special session will also be held on research funding opportunities in basic and nuclear sciences for the benefit of participants associated with teaching and research.

Lecture topics

Lectures

- 1. Radioactivity and Decay
- 2. Nuclear structure -Stability
- 3. Interaction of radiation with matter
- 4. Radiation detection and Measurement
- 5. Nuclear fission & Nuclear reactors
- 6. Solid State Nuclear Track Detection: Theory and Applications
- 7. Production of Radioisotopes
- 8. Application of Radioisotopes in Health care and Agriculture
- 9. Application of Radioisotopes in Industry and Research
- 10. Radiation chemistry
- 11. Nuclear Waste Management

Practical experiments

- GM Counter A Gas Filled Detector:
 Plateau and Dead Time & Measurement of environmental Radioactivity
- 2. Gamma-ray Spectrometry using NaI(Tl) Detector
- 3. Shielding Experiment using NaI(Tl) Detector
- 4. Solid State Nuclear Track Detection

Daily Schedule

Each day, duration of the Sessions :
Pre-lunch→ Lectures : Post- lunch→ Practical