

# NOTICE

# THIRTY SEVENTH ANNUAL GENERAL BODY MEETING

On Wednesday, April 11, 2018 at 16:00 hrs

Venue

Multi Purpose Hall BARC Training School Hostel (TSH), Anushaktinagar, Mumbai-400094

Note: AGM will start with presentation by IANCAS Awardees at 16:00 hrs

INDIAN ASSOCIATION OF NUCLEAR CHEMISTS AND ALLIED SCIENTISTS (IANCAS)

(Reg. No. MAH/232/1984/GBBSD)

C/o. Radiochemistry Division Bhabha Atomic Research Centre, Trombay, Mumbai - 400 085 Email: secretaryiancas@gmail.com; Website: www.iancas.org

# INDIANASSOCIATION OF NUCLEAR CHEMISTS AND ALLIED SCIENTISTS(IANCAS)

### **Annual General Body Meeting**

The thirty seventhAnnual General Body Meeting (AGM) of the Indian Association of Nuclear Chemists and Allied Scientists (IANCAS) will be held on Wednesday, April 11, 2018 at16:00hrs at Multi Purpose Hall BARC Training School Hostel (TSH), Anushaktinagar, Mumbai-400094.

All members are requested to make it convenient to attend the meeting.

### Announcement of IANCAS Awards 2017 and Presentation byAwardees (at 16:00 hrs).

- a) IANCAS-Dr. M. V. Ramaniah Memorial Award
- b) IANCAS-Dr.Tarun Datta Memorial Award
- c) IANCAS-Prof.H.J.Arnikar Best PhD Thesis Award

### AGENDA

- 1. To read and confirm the minutes of the 36<sup>th</sup>Annual General Body Meeting held on February 7, 2017 at KIIT University, Bhubaneswar, Odisha.
- 2. To read and adopt the Annual Report for the term 2016-2017.
- 3. To approve the Audited Statement of Accounts for the financial year 2016-2017.
- 4. To appoint the Auditors for the financial year 2017-2018 and fix the remuneration.
- 5. To discuss activities of IANCAS regional Chapters
- 6. Announcement of IANCAS election results for the term 2018-2021
- 7. Welcome to the new Executive Committee (EC) by the President
- 8. To discuss the future activities of the Association by President elect.
- 9. Any other matter with the permission of the Chair.

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General Secretary (RaghunathAcharya)

### NOTE:

- a) Any question/suggestion should reach the Secretary, IANCAS on or beforeApril 09, 2018(Email: racharya@barc.gov.in / secretaryiancas@gmail.com)
- b) Members are requested to bring this notice to the meeting.
- c) If there is no quorum, the meeting will be adjourned for half an hour and subsequently the meeting will be held at the same venue irrespective of the quorum.

## AGM will be followed by Dinner for all the Members at TSH.

### **ANNUAL REPORT**

### Dear Members,

I welcome you all to the 37<sup>th</sup>Annual General Body Meeting of IANCAS. It gives me immense pleasure to present brieflythe activities of our Association during the period April 2016 to March 2017.

### **MEMBERSHIP**

The Association has 1752 life members (LMs) and 19 corporate members as on March 31, 2017 with an addition of 53life members during this financial year (2016-17).

### **BRNS-IANCAS WORKSHOPS**

A total of five National workshops: three six days workshops, one three-day and one two-day workshopson "Radiochemistry and Application of Radioisotopes" were organized during this period. The brief reports of three National workshops are given below.

# 1.Report on 92<sup>nd</sup> BRNS-IANCAS National Workshop on "Radiochemistry and Applications of Radioisotopes" held at Rani Channamma University, Belagavi, Karnataka

The 92<sup>nd</sup> BRNS-IANCAS National Workshop on "Radiochemistry and Applications of Radioisotopes" was organized at Rani Channamma University (RCUB), Belagavi, Karnataka, during September 20-26, 2016. Shri.T.V.VittalRao, and Dr. Seraj AAnsari served as Co-ordinator and Practical Coordinator of the Workshop, respectively. Dr. J. Manjanna, Chairman, Dept. of Chemistry RCUB served as the Convenor of the Workshop. The Workshop was attended by a total of 90 participants, comprising of faculties, Research Scholars and M.Sc students from RCUB as well as from other University/ Colleges from Gokak, Bijapur, Shimoga and local colleges of Belagavi. Registered participants were given a set of two books (IANCAS publications) (i) Fundamentals of Radiochemistry and (ii) Experiments in Radiochemistry.

The Workshop was inaugurated by Dr. B. S. Tomar, Vice-President, IANCAS and Director RC & I Group, BARC. Dr. Tomar delivered keynote address on "DAE Program of India and stressed that Nuclear Power isnecessary in view of

diminishing fossil fuels. Dr. S. L. Belagali, Registrar of RCUB who presided over the function delivered presidential remarks and thanked IANCAS for organizing such a theme based Workshop and also informed the audience about the necessity of alternative energy sources including Nuclear Power for energy security of the country. The technical program of the Workshop comprised of 15 Lectures and five experiments. A total of 9 resource persons conducted the workshop. Experiments on G. M. Counter, NaI(Tl) scintillation gamma ray spectrometer, Determination of half-life of <sup>137m</sup>Ba, U-Th separation by solvent extraction and <sup>99</sup>Mo-<sup>99m</sup>Tc generator as a Radiopharmaceutical were conducted. On the final day of the Workshop, a Quiz session was organized based on lectures and experiments; it was highly appreciated by all the participants and organizers. Valedictory function was held on 26<sup>th</sup> September, 2016. Prof. B.S.Sherigara, former Vice-Chancellor, Kuvempu University was the Chief Guest and Dr. A.V. R. Reddy, President, IANCAS, and former Head, Analytical Chemistry Division, was the Guest of Honour. Prof. Sheragara, informed the gathering that IANCAS has been doing a very good services in popularizing Nuclear Sciences and its applications by organizing National Workshops for the benefit of students, research scholars and faculties. Dr. Reddy was happy that IANCAS certificates were distributed to the participants. On behalf IANCAS, Dr Reddy, donated two instruments to RCUB, which will be used for teaching and research purposes. Vote of thanks was given by Dr. J. Manjanna from RCUB and Dr. Seraj A Ansari from IANCAS.

# 2.Report on 93<sup>rd</sup> BRNS-IANCAS National Workshop on "Radiochemistry and Applications of Radioisotopes" held at Department of Physics and Electronics, DAV College, Amritsar

The 93<sup>rd</sup> BRNS-IANCAS National Workshop on "Radiochemistry and Applications of Radioisotopes" was organized at Department of Physics and Electronics, DAV College, Amritsar, during November 15-22, 2016. Dr. R. M. Kadam and Mr. VijuChirayil served as Co-ordinator and Practical Coordinator of the workshop respectively. Prof. Rajesh Kumar, Principal, DAV College, was the patron and Director of the workshop. Dr. Rajesh Kumar, Associate Professor, PG Department of Physics & Electronics, DAV college, Amritsar was the local Convenor of the Workshop.

The Workshop was inaugurated by Professor T.S. Banipal Director Research, GNDU, Amritsar. Welcome address was delivered by Prof. Rajesh Kumar, Principal, DAV College, and Amritsar. Local convener, Dr. Rajesh Kumar, gave an introduction to the college and the courses taught by them. An introduction to the activities of IANCAS was given by Dr. P.C.Kalsi, Ex-BARC, Mumbai. Dr. R.M. Kadam, Workshop coordinator talked about the Theme of the Workshop. Dr. AVR Reddy, President, IANCAS delivered keynote address in which he stressed that nuclear power (being a green energy source) is necessary as an addition to energy mix of the nation in view of diminishing fossil fuels. He also stressed on the objective of the workshop to popularise benefits of nuclear sciences and their applications in the field of radioisotopes, science & technology, food, agriculture and health care. He said such workshops provide a forum for interactions amongst faculty members of science and technology from various academic institutions and DAE research institutes. Dr. Neeru Gupta, local Co-Convener of workshop gave the vote of thanks. Fifty participants from all over Punjab state participated in this workshop. Lectures and the practicals were conducted by the resource persons from DAE. The lectures were held during the morning sessions followed by practical sessions during afternoon. On the final day, a Quiz session was organized based on lectures and experiments conducted, which was liked by all the participants. Valedictory function was held in the afternoon of 22<sup>nd</sup> November, 2016. Prof. R. Mahajan of Chemistry Department, GNDU, Amritsar was the Chief Guest in this function. He gave an overview of the research projects sanctioned by BRNS to GNDU, Amritsar. A few participants gave feedback about the Workshop. On behalf of IANCAS, Dr. P.C. Kalsi and Dr. R.M. Kadam donated two instruments: a GM Counter and NaI(Tl) detector based gamma-ray spectrometer to the Principal of the College. The college was requested to use these instruments in their teaching & research activities. The Principal thanked IANCAS for organizing the workshop at their college. The participation certificates were distributed to the participants by the Chief Guest.

# 3.Report on 94<sup>th</sup> DAE-BRNS-IANCAS National Workshop on 'Radiochemistry and Applications of Radioisotopes' *held at* K.J. Somaiya College of Science and Commerce Vidyavihar, Mumbai *during* January 16-23, 2017

The 94<sup>th</sup> DAE-BRNS-IANCAS National Workshop on 'Radiochemistry and Applications of Radioisotopes' was organized at K.J. Somaiya College of Science and Commerce (KJSSC), Vidyavihar, Mumbai during January 16-23, 2017. Dr. Tapas Das (Radiopharmaceuticals Division) and Dr. DhanadeepDutta (Radiochemistry Division) served as the Workshop Coordinator and Practical Coordinator, respectively. Dr. SugandhaShetye, Dean (Academic Affairs) and Associate Professor, Department of Chemistry, KJSSC was the local convener of the workshop. The workshop was attended by 88 participants (35 from various university/colleges/institutes of India and 53 post-graduate students from the KJSSC). Each registered participant was provided with a set of two books (IANCAS publications) (i) Fundamentals of Radiochemistry and (ii) Experiments in Radiochemistry. Guests present during the inauguration function were Dr. A.V.R. Reddy (President, IANCAS and Ex-Head, ACD, BARC), Shri V. Ranganathan (Hon. Secretary, Somaiya

Vidyavihar) and Dr. R. Acharya (Secretary, IANCAS, RCD, BARC). Dr. Shetye welcomed the participants and Dr. Acharya briefed about the various activities of IANCAS. Dr. Tapas Das informed the participants about the theme of the workshop. Shri V. Ranganathan delivered the inaugural address. Dr. A.V.R. Reddy delivered the keynote address and emphasized the importance of nuclear sciences and radiochemistry in the nuclear energy program of India. He also briefed the participants about the various activities of Department of Atomic Energy (DAE). Mrs. Madahavi Kate, Head, Dept. of Physics proposed the vote of thanks.

The technical program of the workshop comprised of thirteen lectures, one guest lecture (by Dr. B.S. Tomar) and four experiments. A total of fourteen resource persons conducted the workshop. The lectures were held during the morning sessions and the afternoon sessions were reserved for the experiments. Experiments on G.M. Counter, NaI(Tl) Scintillation Detector coupled Gamma Ray Spectrometer, Separation of U-Th by Solvent Extraction and Preparation & Quality Control of <sup>99m</sup>Tc-based Radiopharmaceutical using <sup>99</sup>Mo-<sup>99m</sup>Tc Generator were demonstrated in the practical session. Each experimental session was followed by discussion. A quiz competition, based on the lectures delivered during the workshop, was also organized and it was well-appreciated by all.Valedictory function was held in the afternoon of January 21, 2017. Dr. B.S. Tomar (Vice-President, IANCAS & Director, RC&I Group, BARC) and Prof. Vijay Joshi (Principal, KJSSC) were the Chief Guest and Guest of Honor, respectively. Dr. B.S. Tomar appealed to the participants to inform the students/people about the benefits of nuclear energy and uses of radioisotopes. On behalf of IANCAS, he donated two instruments, 'G.M. Counter' and 'NaI(Tl) Scintillation Detector coupled Gamma Ray Spectrometer' to KJSSC for teaching and research purposes. All the registered participants were given IANCAS certificates. The Workshop was concluded with vote of thanks by Dr. DhanadeepDutta (BARC) & Mrs. Madhavi Kate (KJSSC).

**4.** A three-day Workshop on "Radiochemistry and Applications of Radioisotopes" was held in College of Engineering and Technology (CET), Govt. of Odisha, Bhubaneswar for Science faculties, research scholars and M.Sc. students (total 80 participants) during October 20-22, 2016. Dr. R. Acharya and Dr. A.N. Acharya were the coordinator and Local conveners, respectively. During inauguration distinguished guests present were: Prof. S. Panda, Director, IOP, Prof. A.K. Das, VC, Utkal University (Ex-BARC, Mumbai), Dr. A. Dash, Head, RPhD, BARC, VC of BPUT, Odisha and the Principal, CET. The workshop consisted of one keynote lecture by Dr. A. Dash, five lectures and two practicals. Practicals were conducted by the help of local resource persons from IOP.

**5.** A two-day workshop on "Nuclear Sciences and Applications of Radioisotopes" (for Teachers & Students) was organized during December 23 & 24, 2016 jointly with Goa Vidyaprasarak Mandal's, Dr. Dada Vaidya College of Education, Department of Extension Services and & GVM's Science Center & Astronomical Observatory, Ponda-Goa, Goa. Dr. U.M. Kasar and Shri. Krishna Shetyewere the coordinator (IANCAS) and local convener, respectively. Dr. A.V.R. Reddy was the Chief Guest and delivered key-note lecture. The workshop consisted of four lectures and two practicals. A team of four members conducted the Workshop.

**6. One-day workshop on "Nuclear Sciences and Applications"** at Centurion University of Technology and Management (CUTM), Bhubnaeswar, Odisha was organized for faculties and M.Sc. students on February 11, 2017 (just after NUCAR 2017 Symposium at KIIT University). The workshop was organized with the help from resource persons from IOP for practicals. Prof. S. Panda, Director, IOP (Chief Guest), Dr. A.V.R. Reddy, President, IANCAS and Dr R. Acharya, Secretary, IANCAS were present and delivered lectures in the workshop.

**Local Workshops:** Following local workshops at Mumbai was organized with the help of Shri T.P. Chaturvedi, RCD, BARc & Chairman, IANCAS Local Workshops.

1.One-day workshop on "Nuclear Science and Instrumentation" at Vidyalankar Polytechnic, Wadala, Mumbai was held on 16<sup>th</sup> July 2016. Dr. D.D. Sood, Former Director, RC&I Group, BARC was the Chief Guest and key-note speaker for this program.

2. One-day workshop on "Nuclear Sciences and Applications" at M.D. College, Parel, Mumbai was held on 20<sup>th</sup> August 2016. Dr. B.S. Tomar, Director, RC&I Group, BARC was the Chief Guest and key-note speaker for this program.

3. A two -day workshop on "Nuclear Sciences and Applications" for 11<sup>th</sup> and 12<sup>th</sup> standard Science students (165 Nos.) of AECS-4, Anushaktingar, Mumbai was held on 23 and 30 July, 2016 at M.P. Hall, TSH. Dr. B.S. Tomar, Director, RC&I Group, BARC was the Chief Guest and key-note speaker for this program and Dr. P.K. Pujari, Head, RCD, BARC and Dr S. K. Malhotra, Secretary, AEES were the guests of honour for valedictory function.

# IANCAS Regional Chapters Annual Reports

IANCAS has four regional chapters to carry out IANCAS activities in various educational institutes (Schools, Colleges and Universities): (i) IANCAS-SRC at IGCAR, (ii) IANCAS Tarapur Chapter, (iii) IANCAS-NRC at Amritsar and (iv) IANCAS-ERC, a newly formed chapter at IOP, Bhubaneswar.

# **1.Annual report for 1**<sup>st</sup> **April 2016- 31**<sup>st</sup> **March 2017of IANCAS – SRC :** The Annual Report of the IANCAS southern regional chapter (SRC) report submitted by Dr. R. Kumar, Secretary, IANCAS – SRC is given below.

# Theme Meeting "Plutonium 75"

A three day theme meeting titled "Plutonium 75" was conducted during May 23-25, 2016 at the Sarabhai Auditorium, IGCAR to commemorate the 75th year of the discovery of plutonium 239. The theme meeting consisted mostly of invited talks delivered by senior members of the Department, both serving and retired along with a few scientists from abroad. Senior members from various units of the Department who were responsible for development / commissioning of the various plants also participated in the meeting. The meeting was a program of great success and has become one of the well-cherished programs of the scientific fraternity.

## Seaborg and Curie Memorial Lectures

The thirteenth Seaborg Memorial Lecture was held on the concluding day of the theme meeting Pu75. The lecture on "Plutonium Science for the 21st Century" was delivered by Dr David LClark, LANL, USA. Dr Clark also presented to the Southern Regional Chapter a DVD containing the lastrecorded interview of Dr G T Seaborg. The thirteenth Curie Memorial Lecture was held on 8th November, 2016. Dr C S Mani, Senior Consultant Surgical Oncologist, Dr K Ganapathy, Senior Medical Physicist and Dr P Mahadev, Senior Consultant Radiation Oncologist from the Apollo Specialty Cancer Hospital, Chennai discussed the"Future of protons in radiotherapy". The lectures were well received and generated a lot of interest amongst the audience.

## **College / School Workshops**

The Southern Regional Chapter conducted fifteen workshops on "Radioactivity and the uses of Radiation" in various places in and around Chennai, Coimbatore (T.N), Vijayawada (A.P.), Nellore (A.P), Chenganseri (Kerala), etc. and the list is included below. IANCAS-SRC thanks the IANCAS Main Body for the financial support all the workshops and IGCAR for their support. Details of the workshops conducted by IANCAS-SRC are given below.

## **School Workshops**

- 1 ChinmayaVidyalaya, Anna Nagar, Chennai on 26.04.2016
- 2 Kola SaraswathiViashnav Senior Secondary School, Kilpauk, Chennai on 05.10.2016
- 3 VelammalVidyashram, AmbatturRedhills Road, Surapattu, Chennaion 15.10.2016
- 4 SitadeviGarodia Hindu Vidyalaya, East Tambaram, Chennai on 22.10.2016
- 5 Hindu Senior Secondary School, Triplicane, Chennai on 01.11.2016

## **College Workshops**

- 6 Sathyabama University, Chennai, Tamilnadu during 11.07.2016 and 12.07.2016
- 7 PSG College of Technology, Coimbatore, Tamilnaduduring 29.08.2016 and 30.09.2016
- 8 VikramaSimhapuri University, Nellore, Andhra Pradesh during 09.09.2016 and 10.09.2016
- 9 P B Siddhartha College of Arts and Sciences, Vijayawada, AndhraPradeshduring 27.09.2016 and 28.09.2016
- 10 S B College, Chenganaseri, Kerala during 30.01.2017 a31.01.2017
- 11 N S S College, Chenganaseri, Kerala during 31.01.2017and 01.02.2017
- 12 Assumption College, Chenganaseri, Kerala during 01.02.2017 02 and 02.2017
- 13 MarthomaCollege, Tiruvalla, Kerala on 02.02.2017
- 14 St Aloysius College, Edathua, Kerala on 03.02.2017
- 15 Amrita VishwaVidyapeetam, Ettimadai, Tamilnaduduring 02.03.2017 and 03.03.2017

The response to all the workshops was very impressive and they were all well received by the institutions. IANCAS-SRC records its thanks to the resource persons involved in these workshops, Dr P R Vasudeva Rao, Shri C R VenkataSubramani, Dr R Kumar, Dr R Kumaresan, Dr K A Venkatesan, Shri G V S Ashok Kumar, Dr. A.V.R. Reddy, Smt S Rajeswari and Smt T Prathibha who were keen and dynamic in their participation.

# 2. Annual Report on of IANCAS – NRC (Northern Regional Chapter)

The Northern Chapter of IANCAS conducted the following activities in the year2016-17

**1. A Two Days National Workshop on Radiation Detection and Measurements** was organised at Hindu College Amritsar during March 26-27, 2017. The Workshop was conducted in Five different sessions in which the following Resource persons delivered lectures in this workshop: Prof. Shyam Kumar, Kurukshetra University, Kurukshetra (Haryana),

Dr. P.C. Kalsi, Ex-BARC &EC Member, IACAS, Dr. Sarbjit Singh, Ex BARC, Prof. B.S. Bajwa, G.N.D.U., Amritsar and the practical on G.M. Counter were also conducted by Dr. Sarbjit Singh. About 62 Teachers and Research Scholars from various institutes of Amritsar, Jalandhar, Dinanagar, Gurdaspur, Kapurthala, Bhatinda, Pathankot, FatehgarhSahib,Patiala etc. participated in this Workshop. The local media gave a wide coverage to the workshop.

**2.** A One Day Workshop on Radioactivity and Its Applications was organised in association with Khalsa College Amritsar onMarch 28, 2017. Dr. P.C. Kalsi and Dr. Sarbjit Singh were the resource personsanddelivered lectures and conducted the practicalsin the workshop. About 100 delegates including Teachers, Research Scholars, PG and UG students participated in the workshop.

**3.** A One Day Workshop on Radioactivity and Nuclear Radiation Detection was heldat Akal University, Talwandi Sabo, Bathinda on March 30, 2017. Dr. Sarbjit Singh was the resource person. Three lectures and two practicals were conducted.

# 3. IANCAS-ERC ( A new Chapter) :

Eastern Regional Chapter (ERC) of IANCAS at Institute of Physics (IOP), DAE, Bhubaneswar was formally opened in the month of February 2017 in the presence of Dr. A.V.R. Reddy, Dr. R. Acharya, Prof. S. Panda, Director, IOP (Adhoc Committee President) and Shri Rath, Registrar, IOP.

# **IANCAS Thematic Bulletins:**

Following two thematic Bulletins and one special issue were published during this period with Dr. A. Dash as the Editor. IANCAS thanks all contributors, Editor and Guest Editors of these bulletins.

Volume No.	Title	Guest Editor (s)	Editor
XIII (1)	Production of Radioisotopes	Dr. S. Chakraborty	Dr. A. Dash
XIII (2)	Role of Mass Spectrometry in Chemical Sciences	Dr. M.K. Saxena and Dr. P.G. Jaison	Dr.A. Dash
IANCAS Special Issue during NUCAR 2017	Advanced Analytical Techniques for Forensic Studies	By IANCAS & NUCAR 2017	Dr. A Dash

# Acknowledgements:

IANCAS is indebted to Dr. Sekhar Basu, Chairman, AEC & Secretary, DAE, Shri K. N. Vyas, Director, BARC and Prof. P. Rama Rao, Chairman, BRNS for their continuous support and providing generous financial support to sustain the activities of the Association. Special thanks are due to Dr. Sangeeta, Scientific Secretary, BRNS and PO, BRNS for their constant encouragement. IANCAS thanks its Patron Dr. Anil Kakodkar, former Chairman, AEC for his support and encouragement to the Association. IANCAS acknowledges the dedicated efforts and team work of Workshop Coordinators, Resource Persons, Guest Editors and Contributors of thematic Bulletins, and authors/translators of IANCAS publications. IANCAS also thanks Office Staff as well as supporting staff of Radiochemistry and Isotope Group for their help.

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General Secretary