Science Academies’ Lecture Workshop

on

RECENT ADVANCES IN CHEMICAL SCIENCES

Sponsored by
Indian Academy of Sciences, Bangalore
Indian National Science Academy, New Delhi
The National Academy of Sciences India, Allahabad

Date
13-15 June 2017

Venue
St. Thomas College, Pala

Organised by
Department of Chemistry
St. Thomas College, Pala
Kottayam District, Kerala

ACTIVITY REPORT
A three-day Science Academies’ Lecture Workshop on ‘Recent Advances in Chemical Sciences’, sponsored by Indian Academy of Sciences, Bangalore; Indian National Science Academy, New Delhi and the National Academy of Sciences India, Allahabad, was organised by the Department of Chemistry, St. Thomas College, Pala, Kottayam District, Kerala at St. Thomas College, Pala during 13-15 June 2017. Dr. K. R. Gopidas, Fellow of the Indian Academy of Sciences, Bangalore and Chief Scientist, Chemical Sciences and Technology Division, National Institute for Interdisciplinary Science and Technology (NIIST- CSIR), Thiruvananthapuram was the Convener of the Lecture Workshop. Dr. G.D. Gem Mathew, Associate Professor, Department of Chemistry, St. Thomas College, Pala was the Co-ordinator.

Resource Persons

The following six nationally reputed professors/scientists in Chemistry were the resource persons:

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<th>Resource Person</th>
<th>Affiliation</th>
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<tr>
<td>1.</td>
<td>Prof. (Dr.) Uday Maitra</td>
<td>Dept. of Organic Chemistry IISc, Bangalore</td>
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<td>2.</td>
<td>Prof. (Dr.) R.B. Sunoj</td>
<td>Dept. of Chemistry IIT Bombay</td>
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<td>3.</td>
<td>(Dr.) Aninda J. Bhattacharyya</td>
<td>Solid State and Structural Chemistry Unit IISc, Bangalore</td>
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<td>4.</td>
<td>Dr. Subi Jacob George</td>
<td>New Chemistry Unit JNCASR, Bangalore</td>
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<td>5.</td>
<td>Dr. Joshy Joseph</td>
<td>Photosciences &amp; Photonics, NIIST (CSIR), Trivandrum</td>
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<td>6.</td>
<td>Dr. Kana M. Sureshan</td>
<td>School of Chemistry IISER Thiruvananthapuram</td>
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Inaugural Function

The Lecture Workshop was inaugurated at 11.30 a.m. on 13 June 2017 by H.E. Mar Jacob Muricken, Auxiliary Bishop of Palai and Manager of St. Thomas College, Pala. The Principal of the College, Dr. Joy George, presided over the function. Dr. K. R. Gopidas, Fellow of the Indian Academy of Sciences, Bangalore and Chief Scientist, Chemical Sciences and Technology Division, National Institute for Interdisciplinary Science and Technology (NIIST-CSIR), Thiruvananthapuram and Convener of the Lecture Workshop, delivered the introductory remarks. Dr. Aninda J. Bhattacharyya and Dr. Joshy Joseph. offered felicitations on the occasion. Dr. Sunny Kuriakose, Head, Department of Chemistry welcomed the gathering and Dr. G.D. Gem Mathew, Co-ordinator, proposed the vote of thanks. Prof. (Dr.) I. Ibnuusaud, Director of Institute for Intensive Research in Basic Sciences (IIRBS), Mahatma Gandhi University, Kottayam, who was recently elected as a Fellow of the National Academy of Science India (NASI), Allahabad was felicitated on the occasion.

Technical Sessions

The programme schedule for the technical sessions (attached herewith) was followed without any change. On the first day of the Lecture Workshop (13-6-2017), Dr. Aninda J. Bhattacharyya delivered two lectures on the topic ‘Role of Electrochemistry for Conversion of Waste to Bioelectricity & Chemicals’, while Dr. Joshy Joseph delivered lectures on the topics ‘Introduction to Carbon-based Functional Nanomaterials’ and ‘Graphene-based Hybrid Materials for Bio-sensing Applications’. On the second day (14-6-2017), Prof. (Dr.) Uday Maitra delivered two lecture-demos on the topic ‘Learning Chemistry with Fun’, while Prof. (Dr.) R.B. Sunoj delivered lectures on the topics ‘Introduction to Computational Chemistry’ and ‘Learning Organic Chemistry using Molecular Orbital Theory’. On the third and final day (15-6-2017), the first two lectures was delivered by Dr. Suby Jacob George on the topics ‘Dynamic Supramolecular Polymers’ and ‘How Far We Can Push the Molecular Self-assembly?’ It was followed by two lectures by Dr. K.N. Sureshan on the topics ‘Topochemical Reactions for Synthesis of Biopolymer Mimics’ and ‘Sugar-based Organogels: Synthesis and Applications’. The sessions were all well attended by faculty, research scholars and postgraduate students from various institutes and colleges in Kerala.

Participants

There were about 125 participants on all the three days of the Lecture Workshop. These included 50 participants from the host institution – Department of Chemistry, St. Thomas College, Pala and 25 from Institute for Intensive Research in Basic Sciences (IIRBS), Mahatma Gandhi University. The other participants included teachers and research scholars from other institutes, colleges and higher secondary schools (A list of participants is attached herewith). All the participants were provided with a file, pad and pen as registration material. They were also provided with lunch,
and tea and snacks twice a day. The participants were of the opinion that the topics of lectures were up-to-date and very useful. They also suggested arranging follow-up programmes like Refresher Courses in the future.

Concluding Session

The concluding session was held at 3.45 p.m. on 15-6-2017. The chief guest was Dr. Joy George, Principal of the College. He delivered the valedictory address and presented certificates to the participants Dr. Sunny Kuriakose, Head of the Department of Chemistry welcomed the gathering. Dr. K.R. Gopidas, Convener, offered concluding remarks. Dr. Subi Jacob George gave feedback on behalf of the resource persons and Ms. Aina Elizabeth Antony gave feedback on behalf of the participants. Dr. G.D. Gem Mathew, Co-ordinator, proposed the vote of thanks.

Summary of the Assessment and Feedback Forms

An Assessment and Feedback Sheet was circulated among the participants to get their views on the programme. They were of the opinion that the variety of topics covered in the lectures was very satisfactory and the lectures were informative and useful. They however were of the opinion that the time allotted for discussions with resource persons was inadequate. Most of the delegates also expressed their appreciation of the arrangements like food, hospitality, hall arrangement, audio-visual aids and other infrastructural facilities made available for the programme. Most of the participants wanted follow-up programmes to be organised in the coming years also.

Acknowledgements

The organisers are grateful to the Indian Academy of Sciences (IASc), Bangalore; Indian National Science Academy (INSA), New Delhi and The National Academy of Sciences India (NASI), Allahabad for sponsoring and supporting the programme. The organisers thank the Management and the Principal of St. Thomas College, Pala for making available all the facilities in the college and for providing the local hospitality. Audio-visual facilities like cordless mike set and LCD projector were made available in the air conditioned Golden Jubilee Library hall for the programme. This made the lectures and presentations very effective. They also thank the College Canteen and Pastoral Institute authorities for the food and accommodation arrangements. They are very grateful to all the chief resource persons, especially to Dr. K.R. Gopidas, the Convener. The infrastructural facilities of the College and natural beauty of the campus were widely appreciated by the resource persons and the delegates.

Dr. G.D. Gem Mathew
Co-ordinator