SCIENCE ACADEMIES LECTURE - WORKSHOP ON
MODERN TRENDS IN CHEMISTRY

7TH & 8TH FEBRUARY, 2011

REPORT

A two-day Science Academies Lecture-Workshop on Modern trends in Chemistry was organized by the Department of Chemistry, Lady Doak College, sponsored by the Indian Academy of Sciences, Bangalore, Indian National Science Academy, New Delhi and The National Academy of Sciences, India, Allahabad on 7th and 8th February 2011.

Prof. M. Periasamy, Former Dean, School of Chemistry, University of Hyderabad, Central University P.O. Hyderabad, was the program convener and Dr. S. Vasanth, Head of the Department of Chemistry, Lady Doak College was the program co-ordinator. About 120 participants in and around Madurai, were benefited and enlightened by attending the Lecture-Workshop. Out of which 35 of them were college and university level teachers and 115 were UG / PG students and research scholars from various colleges and Universities.

The program started with an inaugural session, during which Dr. S. Vasanth welcomed the guests of honour and participants, Dr. A. Mercy Pushpalatha, Principal and Secretary of Lady Doak College delivered Inaugural address. Prof. M. Periasamy, highlighted the purpose and importance of such Academy sponsored program.

This was followed by the technical sessions. The program for each day included six technical sessions of 1 hour duration and the sessions were handled by eminent resource persons from different institutions. The lectures given by the speakers covered the following topics:

1. **Prof. M. Periasamy**, Former Dean, School of Chemistry, University of Hyderabad,
Hyderabad

   Topics: **Stereochemical concepts in Organic Reaction Mechanisms and Synthesis**
   Organotitanium reagents for use in the synthesis of bioactive and energy harvesting molecules.
2. **Prof. K. R. Prasad**, Department of Organic Chemistry, Indian Institute of Science, Bangalore  
   Topic: **Recent advances in organic synthesis**

3. **Prof. A.G. Samuelson**, IPC Department, Indian Institute of Science, Bangalore  
   Topic: Reaction mechanisms in **Organometallic Chemistry**  
   Weak interactions in Inorganic Chemistry

4. **Prof. S. Chandrasekaran**, Chairman of the Chemical Sciences Division, Indian Institute of Science, Bangalore.  
   Topic: "**Click Chemistry and Beyond**"  
   "Organic Reactions "**In Water, "On Water and " In the presence of Water**"

5. **Prof. S. Natarajan**, Solid State & Structural Chemistry Unit, Indian Institute of Science, Bangalore.  
   Topic: **Principles and Applications of X-Ray Diffraction**

   Topic: **Pericyclic reactions**  
   Metal mediated C-C coupling reactions (2010 Chemistry nobel prize winning Chemistry)

   The participants gained a good insight into the modern trends in chemistry. After each lecture, relevant and thought provoking questions were raised by the participants and were duly answered by the resource persons. On both the days lunch and refreshments were served to the participants.

   The program ended with reflections from the participants in the feedback session. This was followed by the vote of thanks by Mrs. G. Jayanthi Kalaivani, Assistant professor, Department of Chemistry.
<table>
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<tr>
<td>9.00 am – 9.30 am</td>
<td>Registration</td>
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<td>9.30 am – 10.00 am</td>
<td>Inauguration</td>
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| 10.00 am – 11.00 am | Lecture I  
Prof. M. Periasamy,  
Former Dean, School of Chemistry, University of Hyderabad,  
Central University P.O. Hyderabad.  
**Topic:** Stereocchemical concepts in Organic Reaction Mechanisms and Synthesis |
| 11.00 am – 11.15 am | Tea Break                                                  |
| 11.15 am – 12.15 pm | Lecture II  
Prof. K. R. Prasad,  
Department of Organic Chemistry, Indian Institute of Science, Bangalore  
**Topic:** Recent advances in organic synthesis |
| 12.15 am – 1.15 pm | Lecture III  
Prof. K. R. Prasad,  
Department of Organic Chemistry, Indian Institute of Science, Bangalore  
**Topic:** Recent advances in organic synthesis |
| 1.15 pm – 2.00 pm | Lunch                                                      |
| 2.00 pm – 3.00 pm | Lecture IV  
Prof. A.G. Samuelson,  
IPC Department, Indian Institute of Science, Bangalore  
**Topic:** Reaction mechanisms in Organometallic Chemistry |
| 3.00 pm – 4.00 pm | Lecture V  
Prof. M. Periasamy,  
Former Dean, School of Chemistry, University of Hyderabad  
Central University P.O. Hyderabad.  
**Topic:** Organotitanium reagents for use in the synthesis of bioactive and energy harvesting molecules. |
| 4.00 pm – 4.30 pm | Tea break                                                  |
| 4.30 pm – 5.30 pm | Lecture VI  
Prof. A.G. Samuelson,  
IPC Department, Indian Institute of Science, Bangalore  
**Topic:** Weak interactions in Inorganic Chemistry |

(Program overleaf)
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Prof. S. Sankararaman,  
Department of Chemistry, IIT Madras, Chennai.  
Topic: Pericyclic reactions |
| 3.00 pm - 4.00 pm | Lecture VI  
Prof. S. Sankararaman  
Department of Chemistry, IIT Madras, Chennai.  
Topic: Metal mediated C-C coupling reactions (2010 chemistry nobel prize winning chemistry) |
| 4.00 pm - 4.30 pm | Valedictory |