# Kerala Academy of Sciences, Thiruvananthapuram

Report of the Academy presented before the Annual General Body held on 4<sup>th</sup> April 2008 at Mascot Hotel, Thiruvananthapuram.

Respected President, esteemed fellows and members of the Academy,

On behalf of the executive council, let me present before you the report on activities of the Academy for discussion and approval.

The Academy during its General Body on 14<sup>th</sup> November 2005 at Mascot Hotel, Trivandrum, elected six office bearers and six members to the executive council. The executive council which met on 6<sup>th</sup> December 2005 nominated four more members to the executive council. Annual report and audited accounts were presented and approved by the AGM.

Nine executive council meetings were held subsequently to discuss various programmes for implementation.

Four ordinary members and 29 life members joined the Academy during the period of this report, the total number of life members being 212 at present.

A website, <u>www.keralaacademyofsciences.net</u>, for the Academy was started on an experimental basis. All necessary information about the Academy and complete list of all members are included in the site. Members are quested to visit the site and offer their comments.

Generation of a special fund for an own building of the Academy was initiated during this period.

The Academy expressed its condolences at the sad demise of Dr. A N Nampoothiri, a distinguished Fellow of the Academy.

The major activities undertaken during this period are described below:

## Workshop on Formulation of Research Projects for Funding

A series of workshops on "Effective formulation of research projects" were organised by the Academy at different centres across the State with financial support from KSCSTE. The format of the workshop included lectures by experts followed by group discussion and interactive sessions. The topics included formulation of research projects, funding agencies and thrust areas of research,

opportunities in different branches, instrumentation facilities and case reports. The target group included young investigators from research institutions and teachers from colleges and universities. The first workshop in this series organised at the Kannur University was inaugurated by Prof. Kunjikkannan, PVC, Kannur University on 3<sup>rd</sup> February 2006 and was coordinated by Prof. Haridas from Kannur University. The second workshop was held at Calicut University and was coordinated by Prof. K. K. Aravindakshan. This was followed by workshops at Catholicate College, Pathananmthitta, SH College Thevara, College of Veterinary and Animal Sciences, Kalpetta, Sri Krishna College, Guruvayoor, S N College, Cherthala, S N College, Kollam and the last one on 4<sup>th</sup> December, 2007 at College for Women, Trivandrum. The workshop at S N College, Kollam was inaugurated by Prof. Balaraman, former V.C, CUSAT and those at SN College, Cherthala and at Womens College, Trivandrum were inaugurated by Dr. E P Yesodharan, EVP, KSCSTE.

Resource persons for the workshops included Dr. Jacob Philip, Dr. Oommen V Oommen, Dr. G M Nair, Dr. K N Rajasekharan, Dr. Prakash Kumar, Dr. Sheeja George, Dr. C S P Iyer and Dr. K K Aravindakshan. Over 400 potential investigators participated in these workshops. As a follow up of these workshops several young investigators have been in contact with the resource persons and other members of the Academy seeking advice on formulation of projects, defence of project proposals, support for use of instrument facility etc. A few of them also joined the Academy as life members.

### Science Day Celebrations

National Science Day, 2006 was celebrated on 28th February 2006 with a lecture by Dr. P. Pushpangadan, former Director, NBRI, Lecknow.

National Science Day, 2007 was celebrated by organizing a seminar on 28th February, 2007 at the Botany Seminar hall of University of Kerala with the theme, "More crop per drop". The seminar was inaugurated by Dr. S. Edison, Director, CTCRI, Trivandrum and Dr. Babu Mathew, Agricultural University, Vellayani gave the Keynote address.

National Science Day, 2008 was celebrated with a lecture on "Preventive, Predictive and Personalised Medicine" by Prof Jin-Xiong She, Atlanta Georgia USA, on 27<sup>th</sup> February, 2008.

### **Discussion Meetings**

The Academy organised a discussion meeting on "Indo – US agreement on nuclear technology" on 27<sup>th</sup> January 2007 at Hassan Marikkar Hall in association with Swadeshi Science Movement and Space Engineers Association. Dr. P.K. Iyengar, former chairman of atomic energy commission, Dr. A.D. Damodaran, former director of RRL and Dr. M.K. Ramachandran Nair, VC of University of Kerala participated.

#### **Special Lectures**

On 27th May, 2006, the Academy in association with the Association of British Scholars organised a lecture by Prof. Thomas J. Thekukara, Professor, Texas University, USA on "Effects of Diabetes on Long Term Survival" at the British Council Library Hall.

A lecture by Dr. Russell A. Mittermeier, President, Conservation International, Washington DC, USA on "Global Biodiversity Conservation: Hotspots, Wilderness Areas, and Mega Diversity Countries" was organized on 24<sup>th</sup> November, 2006 at University of Kerala in association with the Biochemistry, Botany and Zoology, Departments of University of Kerala and IIITM.

A Talk on "Recent Advances in Vaccinology" by Dr. Y. Udaya Bhaskara Rao was arranged on 21st April, 2007 at the Botany Seminar Hall, University of Kerala in association with the Department of Zoology of University of Kerala.

Dr. Michael A Cremo, research associate at Bhakthivedanta Institute, California specialising on history and philosophy of science gave a lecture under the auspices of the Academy at the Botany Seminar Hall, University of Kerala, critically looking at the Darwin's Theory of evolution from the archaeological data, on 9th May, 2006.

### Nehru Centenary Lecture

Nehru Centenary Lectures were organised on 17<sup>th</sup> November, 2006 and 14<sup>th</sup> November 2007. The lectures were delivered by Prof. V.N. Rajasekharan Pillai, Vice Chancellor, IGNOU and Dr. Anil Bharadwaj, Scientist, SPL, VSSC, respectively.

#### Lectures by Bhatnagar Awardees

Three scientists from Kerala, Dr. George Thomas (RRL), Dr. A. Ajayaghosh (RRL) and Dr. Anil Bharadwaj (VSSC), were awarded Bhatnagar prize during the period of this report. The academy together with the Trivandrum Chapters of Society for

Polymer Science India and High Energy Materials Society of India felicitated these scientists by arranging lectures by them.

### Symposia and Seminars

A one day symposium on "Nutrition, chronic diseases and ageing" was organised on 29<sup>th</sup> July, 2006 at the Department of Biochemistry, University of Kerala in collaboration with Dept. of Biochemistry and Zoology, University of Kerala and Division of Clinical Sciences, University of Sheffield, UK. One of the major recommendations of the meeting was to promote low fat, low calorie fibre and micronutrient rich diet to reduce incidence of chronic life style related diseases.

The Academy sponsored a two day seminar on Neutraceuticals organised by Prof. K. T. Augusti, the founder secretary of the Academy at Kannur University during December 3-4, 2006. One of the major recommendations of the seminar was to promote neutraceuticals for healthy living and disease prevention and management.

A seminar on "Emerging and Re-emerging Diseases in Kerala" was organised in association with KSCSTE on 27<sup>th</sup> October, 2007. The seminar was inaugurated by Dr EP Yesodharan, Executive Director, KSCSTE. Dr Priya Abraham, CMC, Vellore, Dr Sara Varghese, Medical College, Trivandrum, Dr. Sreekumar, RGCB, Trivandrum and Dr. C. C. Kartha, SCTIMST, Trivandrum gave lectures. The speakers warned against the possible re-emergence of infectious diseases like Dengue fever, Chikun Gunya, Japanese Encephalites and Leptospirosis and recommended for the development of quick diagnostic tests and top priority for vector control measures.

#### Kerala Science Report

As the State has completed 50 years since its formation, the EC felt it appropriate to have a critical look at the state of science education and research in Kerala. The EC constituted a committee with Dr. CS P lyer as Chairman and Dr. K N Rajasekharan as convenor to prepare a report on Kerala Science and to recommend an action plan for promoting Science in the State. The committee has prepared a draft report incorporating a number of recommendations.