

**INTERNATIONAL SYMPOSIUM
ON
HERBAL MEDICINE, PHYTOPHARMACEUTICALS AND OTHER NATURAL
PRODUCTS: TRENDS AND ADVANCES
COLOMBO (SRI LANKA), 15-17 JUNE 2005**

***PARTICIPATING COUNTRIES: 15 COUNTRIES (INCLUDING 9 MEMBER
COUNTRIES OF THE CENTRE***

***NUMBER OF PARTICIPANTS: 110 SCIENTISTS AND SENIOR EXPERTS FROM
15 COUNTRIES***

Herbal Medicine is the use of appropriate plants or plant parts for their therapeutic or medicinal value. It is the oldest form of healthcare known to humanity that has been used by all cultures throughout the history. Many drugs commonly used today in the developing countries are of herbal origin and prescription drugs contain at least one active ingredient derived from plant material either obtained from plant extracts or synthesized to mimic a natural plant compound. Many countries have a national regulation on herbal medicines but the legislative control of medicinal plants has not evolved around a structured model. This is because medicinal products or herbs are defined differently in different countries and diverse approaches have been adopted with regard to licensing, dispensing, manufacturing and trading. The growing market for herbal medicines and other natural health care products also demands an extensive research not only for its great healthcare but also for the commercial benefit.

In order to acquaint the researchers, industrialists and academicians who are engaged in natural product work with the recent developments in the field of herbal medicine, the NAM S&T Centre with the approval of its Governing Council organised an international symposium on 'Herbal Medicine, Phytopharmaceuticals and Other Natural Products: Trends and Advances' in Sri Lanka, Colombo during 15-17 June 2005 in association with the Institute of Chemistry, Ceylon, Colombo and the National Science and Technology Commission (NASTEC) of Sri Lanka. The symposium was primarily designed for the specialists and professionals from the government departments, academic institutions, private sectors and manufacturers in the member countries of the NAM S&T Centre and other developing countries with the relevant scientific background and from specific disciplines such as Chemistry, Medicine, Agriculture, Chemical Ecology, Industrial Chemistry, Biochemistry and Biotechnology, who are actively involved in production and application of Herbal Medicine, Phytopharmaceuticals and other Natural Products. The main objectives of the symposium were to enhance knowledge in research of natural products, latest practices, identification methods and bioassay techniques; provide knowledge to industrialists and researchers on recent technological advances in the spices and herbal industries, and provide opportunities for international collaborations of mutual benefit.

110 scientists and senior experts from 15 countries, viz. Bangladesh, Bulgaria, Egypt, Ghana, India, Indonesia, Nepal, New Zealand, Pakistan, Saudi Arabia, Sri Lanka, Syria, UK, USA and Vietnam attended the symposium either as participant or as resource person. The official nominees of Bangladesh, Cuba, Kenya and Zambia, however, were not able to travel to Colombo, but the abstracts of their presentation material were made available at the symposium.

The International Symposium and an exhibition of herbal products by various institutions and industries were held back-to-back with the 34th Annual Session of the Institute of Chemistry, Ceylon. The Symposium began with the ceremonial procession of the Council Members of the Institute and the Graduate Chemists. The welcome address by Dr. Lakshmi Arambewela, President, Institute of Chemistry, and Ceylon during this Inaugural Session was followed by the address of the Chief Guest Prof. Leslie Gunatilaka, Director, Centre for Natural Products Research, University of Arizona, USA and the Guest of Honour Prof. Arun P. Kulshreshtha, Director, NAM S&T Centre. Dr. R.O.B. Wijesekera, Founder Chairman of NASTEC / retired UNIDO Technical Advisor was felicitated and various Awards, Prizes and Certificates were presented followed by the Kandiah Memorial Award 2005 Lecture on 'Content, Bioaccessibility, Bioavailability and Bioconversion of Carotenoids in Some Sri Lankan Fruits and Green Leafy Vegetables' by Dr. (Ms.) U.G. Chandrika from the University of Sri Jayawardenepura in Nugegoda, Sri Lanka. The Inaugural Session ended with the Vote of Thanks by Dr. Sujatha Hewage, President-Elect of the Institute of Chemistry, Ceylon.

The Symposium was spread over eight technical sessions. The Sri Lankan Minister of Science and Technology, Prof. Tissa Vitharana, addressed the first session, in which Dr. R.O.B. Wijesekera delivered the Keynote Address and Prof. Leslie Gunatilaka and Dr. Iqbal Choudhary (Director, HEJ Research Institute of Chemistry, International Centre for Chemical Sciences, Karachi, Pakistan) delivered the Guest Lectures on 'Current Trends in Natural Products Research' and 'Current Trends and Future Approaches in Drug Discovery from Plant Resource', respectively.

During the other sessions, Guest Lectures were delivered by eminent delegates. Dr. P. Pushpangadan, Director, National Botanical Research Institute, Lucknow, India delivered a lecture on 'The Need for Scientific Validation and Standardisation to meet the Primary Healthcare of the Third World in the 21st Century', Prof. Tuley de Silva, Retd. Special Technical Adviser of UNIDO on 'Quality Control Procedures in Herbal Products', Prof. Murray Munro of the University of Canterbury, New Zealand on 'Drugs from Sea? Linking Biodiversity and Bioprospecting with Drug Delivery', Prof. Vijaya Kumar, Dean (Science), University of Peradeniya and Chairman, Industrial Technology Institute, Sri Lanka on 'Botanical Pesticides from Sri Lankan Plants', and Dr. Alan Cork of the University of Greenwich in UK on 'Technology and Application of Semiochemicals in Pest Control Problems and Perspectives'.

Scientific and country status presentations were made by Dr. Ms. Kapka Petkova Kaneva, Chief Expert and Head, Experts Council on Herbal Medicine & Homeopathy and Dr. Tzvetomir Mario Deliyiski, Expert in Bulgarian Drug Agency; Dr. Ahmed A. Hussein, Assistant Professor, Pharmacognosy and Chemistry of Medicinal Plants lab, National Research Center, Dokki, Egypt; Dr. Laud Kenneth N.A. Okine, Director, Centre for Scientific Research into Plant Medicine, Accra; Prof. Dr. Moola

Joghee Nanjan, Director, TIFAC Core in Herbal Drugs, Rock Lands, Tamil Nadu, Dr. Ajit Kumar Saxena, Scientist, Regional Research Laboratory, Jammu, Dr. G. J. Samathanam, Scientist, Department of Science and Technology (DST), Government of India, Dr. S. Narendar, Medical Advisor, Lupin Limited, Mumbai and Dr. C.P. Sharma of India; Dr. Adriana Marthiany Lubis, Head, Clinical Medicine and Community and Assistant Deputy Minister for Research and Technology of Indonesia; Prof. Mangala Devi Manandhar from the Central Department of Chemistry in Tribhuvan University, Kathmandu, Nepal; Dr. Naif Obaid Al-Harbi, Consultant in Central Lab. for Drug and Food Analysis, Ministry of Health, Riyadh. Saudi Arabia; Ms. Gaboile Tiro, Assistant Director, Indigenous Knowledge Systems, Department of Science and Technology, South Africa; Prof. Jehad Harbali, College of Pharmacy, Damascus University, Syria and several scientists from Sri Lanka. Mr. George Yaw Agyemfra, Acting Deputy Director, Ministry of Health, Traditional and Alternative Medicine Division, Accra, Ghana, Dr. A.K. Singh Rawat from National Botanical research Institute, Lucknow, India and Ms. Doan Lan Phuong, Researcher in the Institute of Natural Product Chemistry, Vietnam Academy of Science & Technology could not make their presentation due to the shortage of time. Dr. M. Matiur Rahman, Director, Bangladesh National Herbarium, Dhaka, Mr. Rolando Quert Alvarez, Researcher in the Institute of Technology and Applied Science, Agency of Nuclear Energy, Cuba, Mr. Harrison Macharia from National Council for Science and Technology, Kenya and Dr. Elder M.M. Moonga, Scientific Officer in the Ministry of Science, Technology and Vocational Training (MSTVT), Lusaka, Zambia had submitted their presentation material and were expected to attend the Symposium, but could not come to Sri Lanka due to travel problems.

The foreign participants were invited to attend an Annual Dinner of the Institute of Chemistry, Ceylon at hotel Raja Bojun, during which the President-Elect of the Institute Dr. (Ms.) Sujatha Hewage was inducted and Dr. R.O.B. Vijesekera gave after-dinner speech.

The concluding session was devoted to the discussions on plans for further studies of the herbal drugs and their promotion. Several recommendations were drafted, which are expected to be finalised shortly.