

SCIENTIFIC REPORT

INTERNATIONAL ORGANIZATION FOR CHEMICAL SCIENCES IN DEVELOPMENT

JOINT IOCD-ISDNP INTERNATIONAL SYMPOSIUM

Natural products: Unlimited resources for the development of drugs, cosmetics and food

25 – 29 February 2008, Mowana Safari Lodge / Chobe River, BOTSWANA

An international symposium on ‘*Natural products: Unlimited resources for the development of drugs, cosmetics and food*’ was recently jointly organized in Botswana by Prof. Kurt Hostettmann (Chairman of the IOCD Working Group on Plant Chemistry and Chairman of ISDNP), and Prof. Berhanu Abegaz (Chairman of the Organizing Committee), University of Botswana, Gaborone.

The symposium was preceded by a two-day workshop on hyphenated HPLC techniques which was held in the Department of Chemistry, Faculty of Science, University of Botswana, Gaborone, Botswana.

For this symposium, the different committees were as follows:

<p>Organizing Committee Chairman : Prof. B. Abegaz, Gaborone, Botswana Vice-Chairman : Prof. K. Hostettmann, Geneva, Switzerland Members : Dr. M. T. Bezabih (Botswana) Dr. G. Kumar (Botswana) Dr. R. Mapitse (Botswana) Dr. A. Marston, Geneva, Switzerland Dr. I. J. Mavunkal (Botswana) Prof. S. Mpuchane (Botswana) Prof. M. Nindi (Botswana) Ms. M. Sejoe (Botswana) Prof. G. S. Singh (Botswana) Prof. N. Torto (Botswana) Prof. J.-L. Wolfender, Geneva, Switzerland</p>	<p>Scientific Committee Chairman : Prof. K. Hostettmann, Geneva, Switzerland Vice-Chairman: Prof. B. Abegaz, Gaborone, Botswana Members: Prof. R.-X. Tan, Nanjing, China Prof. Y.Z. Zhu, Singapore Dr. T.H. Yee, Kingston, Jamaica Prof. J.O. Midiwo, Nairobi, Kenya Prof. M.P. Gupta, Panama</p>
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Scientific program

The aim of the symposium was to bring together scientists from Africa and other areas who are involved in the investigation of African plants. An update was provided on different aspects of research concerning the chemistry, pharmacology and clinical studies of African plants. The lectures included contributions on the current state and future trends of African traditional medicine. Talks on medicinal plants from other regions of the globe were also presented.

The symposium featured 19 plenary lectures from speakers representing Africa and other parts of the world. In addition, there were 42 contributions in the form of oral presentations and 52 posters. About 135 scientists from 40 countries took part in this event. A list of participants and their countries of origin is provided below.

Countries	Nb part.	Countries	Nb part.
South Africa	29	France	2
Botswana	17	Germany	2
Nigeria	15	Uruguay	2
Switzerland	14	Brazil	1
		Burkina Faso	1
Cameroon	5	Cuba	1
Kenya	5	Libya	1
Zimbabwe	5	Madagascar	1
Canada	3	Poland	1
Sudan	3		
Australia	2		
China	2		
Ethiopia	2		

The opening ceremony was chaired by Prof. B. Abegaz and Prof. K. Hostettmann in the presence of the Patron of the symposium, Prof. Totolo, Dean of the Faculty of Science, University of Botswana, local government officials and representatives from OPCW, AFASSA and IFS.

The symposium was divided into 12 sessions featuring plenary lectures and short communications according to the program schedule included with this report. Various issues related to the chemical diversity of African plants, their botany, the bioactivities of their constituents, as well as some pharmacological and clinical investigations were presented. Space for a number of short communications was allocated (42) and participants were able to exchange viewpoints on phytopharmaceutical investigations of African plants during a poster session, in which more than 52 contributions were exhibited. A summary of all contributions is provided in the book of abstracts (annexed to this report).

During the closing ceremony three poster prizes were presented to L. Kerubo (Dept. of Chemistry, University of Nairobi, Kenya), H.A. Ali (Commission for Biotechnology and Genetic

Engineering, Khartoum, Sudan) and M. A. Aderogba (Dept. of Chemistry, University of Botswana, Gaborone, Botswana).

In addition, IOCD Small Research Grants were awarded to Rose Hayeshi (Biochemistry Dept., University of Zimbabwe, Harare, Zimbabwe) and Samuel Chigome (Dept. of Chemistry, University of Botswana, Gaborone, Botswana).

This symposium represented a very important event for the University of Botswana and was given good coverage by the local press and media.

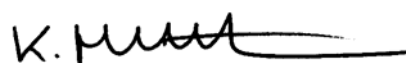
Workshop

A two-day workshop preceded the symposium on 22 and 23 February 2008. This was organized at the Department of Chemistry, Faculty of Science, University of Botswana, Gaborone, Botswana. More than 35 participants from different African universities but also from other countries such as Cuba attended the workshop. Lectures on hyphenated techniques for the dereplication and rapid identification of natural products were given by Prof. Jean-Luc Wolfender. Dr. Emerson Ferreira Queiroz (Sao Paulo, Brazil), a former student of Prof. K. Hostettmann, provided lectures and exercises in structure elucidation from on-line spectroscopic data. Practical demonstrations of LC-MS and LC-NMR were given by both lecturers with the help of Dr. Mehra Bezabih and other colleagues from the University of Botswana as well as Dr Peter Dvorstak (Varian Inc.). A copy of the handouts given at the workshop is provided in annex.

The workshop and symposium went smoothly and it was the first time that the participants could practically work on LC hyphenated systems. The scientific level of the meeting was very high and the participants were extremely pleased by the welcome given to them in Botswana. Participants were given the opportunity to visit the world-famous Victoria Falls and participate in game drives and river cruises.

The next meeting will be held in Cusco or elsewhere in Peru, in October 2009. The symposium will be organised by Prof. K. Hostettmann and Prof. Olga Lock de Ugaz (local organizer from Lima, Peru).

Prof. Kurt Hostettmann



Geneva, 20 April 2008

Annex: Program, Book of Abstracts, Workshop documentation, Certificates of the IOCD small research grants