

The International Conferences on Controlled Atmosphere and Fumigation in Stored Products (CAF) are the major international forums for reporting advances in research and development of gaseous treatments for the preservation of stored commodities.

The conferences, which are held every four years, encompass the treatment of broad range of durable and other commodities held in storage utilizing controlled atmosphere or chemical fumigation for the control of pests. Treatment of the products such as cereal grains, legumes, root crops, dried fruits, nuts and vegetables, and other agricultural products including bulbs and flowers are covered by these conferences. However, the CAF conferences do not cover controlled atmosphere treatments for the quality preservation of fresh agricultural products; such research can be displayed in poster session as has been done during the 10th CAF Conference in New Delhi.

The establishment of the International Steering Committee was followed the first Symposium held in Rome in May 1980 organized by Assoreni and the first Co-operative Bulk Handling Limited and the Australian Grain Institute Incorporated. Then the CAF International Permanent Committee emerged from the International Steering Committee in 1983 in Perth, West Australia.

After the first Conference which was an international symposium on controlled atmosphere grain storage, held in Rome, Italy in 1980, the second one, which included fumigation, was held in Perth, Western Australia in 1983. This second symposium was given the title “International Symposium on Controlled Atmospheres and Fumigation” (CAF). Only in CAF 1996 in Cyprus the title of “International Conference on Controlled Atmospheres and Fumigation in Stored Products” was adopted.

The Conferences after CAF Perth, Australia (1983) were in Singapore (1989); Winnipeg, Canada (1992); Nicosia, Cyprus (1996); Fresno, USA (2000); Gold Coast, Australia (2004); Chengdu, China (2008); and Antalya, Turkey (2012).

Over the years the conference objectives have been refined to report on advances in research and development and the current status of controlled atmosphere and fumigation for insect pests, microflora and quality control in stored products.

In the background of the CAF 2016 conference are: a) the phase out of methyl bromide, with the associated continuing requirement for alternatives to replace it; b) the sustainable availability of novel MA technologies; and c) the need to ensure the continued use of phosphine against the pressures of increasing resistance to this valuable fumigant.

This Conference is 10th in the series of the International Conferences on Controlled Atmosphere and Fumigation in Stored Products (CAF). The CAF 2016 is being held in New Delhi, India, from November 6 to 11, 2016. The Conference was jointly organized by the Agricultural Engineering Division of the Indian Council of Agricultural Research and its associated institutions, the Entomological Society of India and Indian Society of Agricultural Engineers in collaboration with members of the CAF International Permanent Committee under the leadership of Dr K. Alagusundaram. The CAF Conference Local Organizing Committees and the Scientific Committees have done a great job in organizing the conference and producing high quality refereed proceedings. The services extended by Dr D. Dhingra and Dr V.V. Ramamurthy in the arrangements of the conference and the technical support provided by Dr Priyanka in preparing the proceedings are highly appreciated.

The organization of the 10th CAF Conference in India coincides with the increased emphasis by Indian government to transition from mainly bag storage system to bulk storage system. Food Corporation of India, Central Warehousing Corporation, State Warehousing Corporations and many private companies are considering large scale implementation for storing grains in bulk and using latest technologies for grain handling, fumigation, aeration and quality monitoring.

Prof. Dr Shlomo Navarro

Chair, CAF International Conferences Permanent Committee

Prof. Dr Digvir S. Jayas

Secretary, CAF International Conferences Permanent Committee

Prof. Dr K. Alagusundaram

Member, CAF International Conferences Permanent Committee and
Chair, Organizing Committee of CAF2016

New Delhi, India, November 2016

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