

International Association for Cereal Science and Technology

Activity Report

2015



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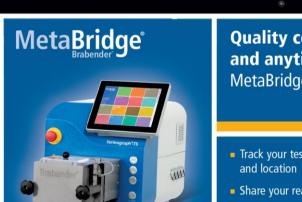
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Foreword

Dear all,

It is a great pleasure for me serving as the President of ICC for 2015-2016. I feel very honoured having taken over this role, along with its corresponding responsibilities.

Over the past ten years, ICC has continued healthy growth and expansion and conquering challenges under the outstanding leadership of the Past Presidents and ICC's Secretary General, to achieve ICC's mission — that of being the pre-eminent international association in the field of cereal science and technology. It is committed to international cooperation through the dissemination of knowledge, conducting research, and developing standard methods contributing to advance innovation, improve food quality, food safety and food security for the health and well-being of all people in the world.

In this regard, I wish to thank my predecessors as ICC President, in particular Joel Abecassis, Marina Carcea, and John Taylor who have contributed much of their time and efforts for the well-being of the Association and from whom I learned so much to become familiar with all the work for my growing involvement with ICC.

Special thanks should go to the outgoing Secretary General, Dr. Roland Poms, who has made outstanding contributions to ICC's growth and visibility for 10 years of serving the Association, and to the great ICC team at the Headquarters in Vienna. Since 1 January 2015 Ms. Michaela Pichler is the new Secretary General of ICC Headquarters. Michaela Pichler, who has a degree from the University of Economics in Vienna, has worked more than 15 years in the agri-policy sector, where - during the last 10 years - she was responsible for the implementation of various international rural development projects mainly in the context of the EU enlargement.

Furthermore I would also like to congratulate Dr. Hamit Köksel from Turkey as the incoming ICC President Elect.

ICC is looking forward to continuing success with this new and young working team to serve our organisation.



Fengcheng Wang
ICC President 2015-2016

Dear all,

When I started my new position as Secretary General, I learned quite quickly that the International Association for Cereal Science and Technology (ICC) provides a unique platform for cereal scientists and technologists around the world, whether in industry, research or academia.

Nevertheless, the nature of the international cereals business is changing and as it does so ICC will have to do change by blending its traditional membership offerings with new faces, services and products.

2015 was a very special year for ICC not only because it was founded 60 years ago, but also because of lots of structural adjustments which are the basis for a new era.

Today, many branches of science require even stronger international collaboration than before and ICC actively pursues the development of links within the worldwide cereals and grains community from its Secretariat based in Vienna.

With this report, we would like to give you a short overview on our activities in the year 2015.

By combining the strength of the old with the challenges and rewards of the new I'm convinced that the ICC can look forward to many more successful years with you as part of the international ICC family.



Michaela Pichler

ICC Secretary General / CEO

ICC – A trusted International Association since 1955

As the International Association for Cereal Science and Technology celebrated 2015 its 60th Anniversary, it is still as active, relevant and important to the international cereal industries as it was when it was inaugurated.

First called the <u>International Association</u> for <u>Cereal Chemistry</u> (ICC), it was founded in 1955 on the occasion of the Third International Bread Congress in Hamburg. ICC's stated main objectives were to develop and standardize investigation methods for cereal grains and cereal-based products. The continuing international trade of grains and the emergence of new growers and producers still require internationally acceptable standard methods for evaluating grains in terms of their physical, chemical and nutritional properties.

Due to its strong country membership base, the ICC provides unique opportunities for cereal scientists and technologists around the world, to collaborate in developing new knowledge on cereal grains and their products, and the methods used in their evaluation.

A key means by which ICC's objectives are achieved, has been and continues to be through the promotion of conferences, symposia, workshops and working parties, all of which bring the international family that is ICC closer together. In more recent times ICC has established a journal – Quality Assurance and Safety of Crops and Foods (QAS) – to augment the dissemination of scientific and technical information to the international community.

As the ICC has achieved another milestone celebration it not only looks back to the eventful past but also into a promising future. The nature of the international cereals business is changing and as it does so, ICC will change with it by blending its traditional membership offerings with new services and products. By combining the strength of the old with the challenges and rewards of the new we hope that the ICC can look forward to many more successful years.

ICC Mission Statement

ICC is the pre-eminent international association in the field of cereal science and technology, committed to international cooperation by disseminating knowledge, conducting research and developing standard methods that contribute to advance innovation, improve food quality, food safety and food security for the health and well-being of all people.

In order to achieve our mission:

- We offer membership to countries, corporations and institutions.
- We hold responsibility for international co-operation and provide a forum for dialogue and appreciation of new ideas to promote the utilisation of cereals.
- We are inspired by the ideals of advancement in cereal science and technology.
- We promote domestic and international trade by providing uniform and internationally approved and accepted testing procedures.

Our ultimate objectives are that we want to:

- Involve all interested countries, institutions and organisations as members.
- Cooperate and exchange views with all institutions and organisations active in cereal science and related fields.
- Attract all the world's cereal scientists and technologists to cooperate with ICC.
- Establish and maintain contacts among cereal scientists and technologists, concerning scientific and technological studies with a view to taking up, promoting and coordinating research activities.
- Organise programmes of lectures and discussions.
- Publicise standards for test methods and similar documents in cereal science and technology and related fields.

ICC Structure and Governance

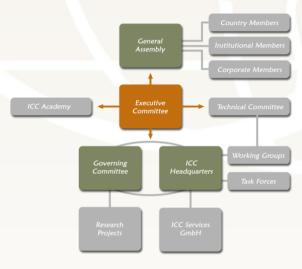


Figure 1

The composition and activities of the ICC are recorded in its **Statutes** which meet the requirements for professional non-profit organizations as the ICC Headquarters is based in Vienna, Austria.

As a fully democratic organization, the main body of the ICC is the **General Assembly** which is composed of representatives from various countries, institutional and corporate members.

This representative body physically meets every two years and has the following tasks: admission of new ICC members as well as termination of membership, appointment of the President Elect, elect the Auditors of the Association, approval of the statement of annual accounts, determination of membership fees and approval of relevant budget, adoption of (draft) standard methods and other documents, amendment of the Statutes.

The General Assembly elects also the members of the **Executive Committee** which is more closely involved with the practicalities of the Association and develops recommendations on ICC activities. It appoints also the **Secretary General** as well as the Technical Director and sets up Working Groups.

A small group of senior ICC officials, the **Governing Committee** meets regularly with the Secretary General to discuss general management aspects.

Two bodies of further importance for the governance structure of the ICC are the <u>Technical Committee</u>, which oversees the development and standardization of existing and new methods and the <u>ICC Academy</u>, which is composed of individuals whose contributions to cereal science and to the advancement of ICC objectives have been recognized by their peers. Particular functions of the Academy are to advise on the conferring of ICC awards to individuals who have made outstanding contributions to cereal science and to contribute with expertise to the development of new ICC activities.

The relationship between the various formal bodies of the ICC and their reporting structures are illustrated above in the figure 1.

ICC - OFFICIALS and COMMITTEES in 2015

President: Dr. Fengcheng WANG, China **President Elect:** Dr. Hamit KÖKSEL, Turkey **Past President:** Dr. Joel ABECASSIS, France

Dr. Meinolf G. LINDHAUER, Germany

Co-Technical Directors: Eng. Amine JBEILY, Lebanon

Secretary General: MSc. Michaela PICHLER, Austria

Honorary Presidents: Mr. Stanley CAUVAIN, UK

Prof. DDr. Ing. Rádomir LÀSZTITY, Hungary

Prof. Dr. Okkyung Kim CHUNG, USA

Mr. Bob CRACKNELL, Australia

Drs. Jan Willem VAN DER KAMP, The Netherlands

Auditors: Dr. Erich GEBHARDT, Germany

Dr. Pierre GÉLINAS, Canada

ICC - Executive Committee:

The ICC Executive Committee comprises

1. The President

Technical Director:

- 2. The President Elect
- 3. The immediate Past President
- 4. The Technical Director
- 5. The members elected by the General Assembly
 - Dr. Martha CUNIBERTI, Argentina
 - Dr. Bin XIAO FU, Canada
 - Dr. Marko JUKIC, Croatia
 - Dr. Sándor TÖMÖSKÖZI, Hungary
 - Dr. Dhan BHANDARI, UK
 - Dr. Floyd DOWELL, USA
- 6. Corporate Member Representatives
 - Dr. Arnaud DUBAT, France
 - Dr. Sigrid HAAS-LAUTERBACH, Germany
- 7. Regional Representatives
 - Dr. Ximena LOPEZ, Chile (South America, Andine Region)
 - Dr. Martha CUNIBERTI, Argentina (South America, South Cone)
 - Drs. Jan Willem VAN DER KAMP, The Netherlands (Europe)













Dr. Awad SOKRAB, Sudan (Africa - North)
Prof. John TAYLOR, South Africa (Africa – South)
Mr. Bob CRACKNELL, Australia (Asia)

8. The Ex officio member MSc. Michaela PICHLER, Austria

ICC - Governing Committee:

The ICC Governing Committee comprises

- 1. The President
- 2. The President Elect
- 3. The immediate Past President
- 4. The Honorary Presidents
- 5. The invited persons

Prof. Dr. Meinolf G. LINDHAUER, Germany

Dr. Floyd DOWELL, USA

Dr. Marina CARCEA, Italy

6. The Ex officio member

MSc. Michaela PICHLER, Austria

ICC - Technical Committee:

The ICC Technical Committee comprises

- 1. The Technical Director or in his absence the President Elect
- 2. The Technical Co-Director
- 3. The Chairs of the Working Groups
- 4. The Technical Committee Members
 - Dr. Mustafa ABDELMONIM, Sudan
 - Dr. Paul ARMSTRONG, USA
 - Dr. Mark BASON, Australia
 - Dr. Charles BRENNAN, New Zealand
 - Mr. Zeki DEMIRTASOGLU, Turkey
 - Mr. Wenping DING, China
 - Mr. Andreas DOSSENBACH, Switzerland
 - Dr. Floyd DOWELL, USA
 - Ing. Arnaud DUBAT, France
 - Dr. Bin Xiao FU, Canada
 - Mr. Sergej GALL, Germany
 - Mrs. Alexandra HUESKEN, Germany

Mrs. Rachel HSU, Chinese Taipei

Prof. Grazina JUODEIKIENE, Lithuania

DI Christian KUMMER, Austria

Dr. Markus LACORN, Germany

DI Alfred MAR, Austria

Mr. Barry McCLEARY, Ireland

Mrs. Leticia MIR, Argentina

Dr. Dubravka NOVOTNI, Croatia

Dr. Assoc. Prof. Maria PAPAGEORGIOU, Greece

Dr. Gabriela PÉREZ, Argentina

Dr. Johan J. PLIJTER, The Netherlands

Mr. Darren ROBEY, Denmark

Mrs. Marie-Francoise SAMSON, France

Dr. Elisabeth SCIURBA, Germany

Prof. Hui SUN, China

Dr. Ashutosh UPADHYAY, India

Dr. Fengcheng WANG, China

Dr. Zeliha YILDIRIM, Turkey

5. The Ex officio member

MSc. Michaela PICHLER, Austria

ICC thanks all ICC Officials and Committee Members who served the Association in 2015!

ICC - Headquarters in 2015

Together with the ICC Committees the team at the ICC Headquarters in Vienna, Austria, supports the activities within ICC and are the primary contact point for all members and friends of ICC:

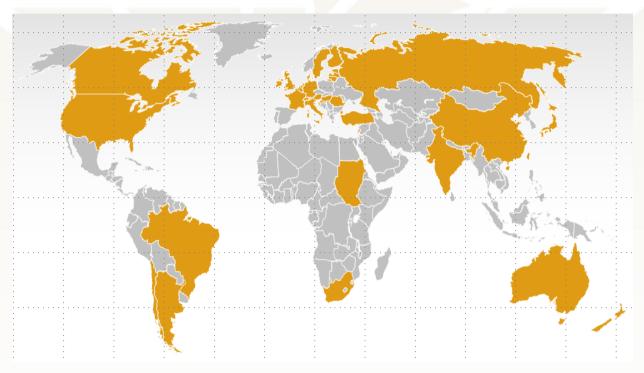
- MSc. Michaela PICHLER, ICC Secretary General
- Sieglinde DICHTL, Office Management and Business Administration
- Sabine GRATZER, Membership and Office Administration, QAS Editorial Management
- Dr. Line FRIIS LINDNER, Project Management and Research
- Ing. Robert ALLERSTORFER, IT Management and Software Development
- Diana ELWIN, Graphic Design

ICC Membership

ICC is a membership-based organisation with the following members in 2015:

27 Country Members

36 Corporate / Institutional Members



Represented in **86** countries with > **8,500** subscribers

Main Membership Benefits are:

- Free online access to all ICC Standard methods for Country Members
- Discounts for *ICC Members* in participation of ICC supported conferences
- Free subscription to the <u>ICC scientific journal QAS Quality Assurance</u> and Safety of Crops & Foods
- Contribution to International Standards and Harmonization Efforts
- Facilitated access to national and international research projects/studies
- Access to an International Network of professionals
- Participation at the ICC Working Groups and Task Forces
- Free notifications of <u>EU Scientific & Regulatory Updates</u> for Country Members
- Hosting an international meeting tailored to local or regional needs in your country, (co-)organized by ICC

Country Membership

ICC Country Membership is open to all countries that aspire to the aims and objectives of ICC as outlined in its Statutes. In order to become a member, one or more public or private institutions or organisations in the country must be willing to play an active role and promote the activities of the Association. Such institutions are also called Country Member Organisations. The annual membership fee varies according to the population of the Member Country, and is divided into three categories with the following amounts as follows:

• Category A with less than 10 million inhabitants: € 2,950.-

• Category B between 10 and 50 million inhabitants: € 4,950.-

• Category C with more than 50 million inhabitants: € 6,950.-

	Full Member Countries 2015							
	Country	Entry year	Category	National Delegate	Deputy National Delegate(s)	Organisation		
1	AR (Argentina)	1963	В	Dr. Chem. Eng. Martha Cuniberti	Dr. Maria José Martinez	National Institute of Agricultural Technology (INTA)		
2	AT (Austria)	1958	Α	DI Alfred Mar	DI Christian Kummer	Austrian Milling		
	AT (Austria)	1936	A	Di Airieu iviai	DI Peter Stallberger	<u>Association</u>		
3	All (Australia)	1050	1050	0 0	D	Mark Bason	Bob Cracknell	Perten Instruments
3	AU (Australia)	1959	В	B Mark Bason Ass. Prof. Dir. Vicky Solah	Ass. Prof. Dir. Vicky Solah	<u>Australia</u>		
4	BE (Belgium)	1958	Α	Dr. Georges Sinnaeve		Walloon Agricultural Research Center		
5	BR (Brazil)	2014	С	Dr. Fernanda Kassab Siqueira	Divanildo Carvalho jr.	Granotec Brazil		
6	CA (Canada)	1958	В	Dir. Stefan Wagener	Bin Xiao Fu	Canadian Grain Commission		
7	CH (Switzerland)	1960	Α	Dr. Fabio Mascher	Cécile Brabant-Hyrondelle	<u>ICC-Switzerland</u>		
8	CL (Chile)	2010	В	Ing. Ximena López	Ing. Agr. Soledad Hidalgo Guerra	Granotec Chile S.A.		

	Full Member Countries 2015						
	Country	Entry year	Category	National Delegate	Deputy National Delegate(s)	Organisation	
9	CN (China)	1990	С	Ruiyuan Wang	Dr. Fengcheng Wang	Chinese Cereals and Oils Association (CCOA)	
10	DE (Germany)	1958	С	Prof. Dr. Meinolf G. Lindhauer		Bundesforschungsanstalt für Ernährung und Lebensmittel - Max Rubner Institut (MRI)	
11	EE (Estonia)	1992	Α	Dr. Mart Nöges		Estonian Control Center of Plant Production	
12	FR (France)	1959	С	Dr. Joel Abecassis	Dr. Monique Axelos	Institut National de la Recherche Agronomique Unité de Technologie des Céréales et des Agropolymères (INRA)	
13	HR (Croatia)	1998	А	Ass. Prof. Marko Jukic	Dr. Daliborka Koceva Komlenic	Faculty of Food Technology and Biotechnology	
14	HU (Hungary)	1962	В	Dr. Sándor Tömösközi	Prof. András Salgó	Budapest University of Technology and Economics (BME)	
15	IE (Ireland)	2008	А	Dr. Barry McCleary		Megazyme International Ireland Limited	
16	IN (India)	2013	С	Dr. Ajit Kumar		NIFTEM (National Institute of Food Technology Entrepreneurship and Management)	
17	IT (Italy)	1960	С	Dr. Marina Carcea	Dr. Ambrogina Pagani	Agricultural Res. Council – Res. Center on Food and Nutrition (CREA AN, formerly INRAN)	

	Full Member Countries 2015						
	Country	Entry year	Category	National Delegate	Deputy National Delegate(s)	Organisation	
18	JP (Japan)	1966	С	Dir. Koji Murakami	Kenichi Sakai	The Flour Millers Association of Japan	
19	LB (Lebanon)	1999	А	Dr. Bassam Frenn	Dr. Amine Jbeily	Industrial Research Institute	
20	LV (Latvia)	1996	Α	Iveta Ozolina		Ministry of Agriculture	
21	NL (Netherlands)	1959	В	Dr. Flip van Straaten	Drs. Jan Willem van der Kamp Dr. Martijn Noort	NBC - Nederlands Bakkerij Centrum	
22	NZ (New Zealand)	2013	А	Dr. Charles Brennan		Lincoln University	
23	RO (Romania)	2000	В	Dr. Nastasia Belc		National Institute of Research & Development for Food Bioresources	
24	SD (Sudan)	1999	В	Dr. Awad Sokrab		Sudanese Standard & Metrology Organization (SSMO)	
25	TR (Turkey)	2002	С	Prof. Hamit Köksel	Feridun Haboglu	Hacettepe University	
26	UK (United Kingdom)	1959	С	Dr. Dhan Bhandari	Prof. Peter Shewry	HGCA (Home Grown Cereals Authority)	
					Dr. Maureen Olewnik	US Department of Agriculture (USDA) -	
27	US (United States)	1958	С	Dr. Floyd Dowell	Dr. Dirk Maier	Agricultural Research Service (ARS) - Center for	
					Prof. Perry K.W. Ng	Grain and Animal Health Research	

Institutional Membership

ICC Institutional Membership is open to research organisations, industry/trade associations, policy makers, (inter)national consortia working in the food and feed sector, universities, publishers, etc. Institutional Membership offers additional benefits (compared to Corporate Membership) and voting rights in the ICC General Assembly. A minimum of two Institutional Members in countries with a population up to 10 million, three in countries with a population up to 50 million and four or more in countries with a population above 50 million in a single country may act as a Country Member if they wish. The annual membership fee has been determined for 2015 with € 2,000. −.

	Institutional Members 2015						
	Country	Name of Institution	Entry year	Type of business			
1	GR (Greece)	ATEITh - Alexander Technological Educational Institute of Thessaloniki	2015 NEW				
2	IN (India)	International Crops Research Institute for the Semi-Arid Tropics	2012	Grain and grain products safety and quality control on the federal level			
3	RU (Russia)	Federal State Institution "Federal Centre of Safety and Quality Assurance for Grain and Grain products"	2010				
4	TW (Chinese Taipei)	Taiwan Flour Mill Association (TFMA)	2010	Research, Analysis, Training			

Corporate Membership

ICC Corporate Membership is open to internationally active companies, enterprises, foundations, cooperatives and organisations promoting the aims of the Association, either by financial or scientific contribution. They have the right to participate in the General Assembly, submit proposals and make motions. Individually they have no active or passive voting rights with respect to the activities of the Association but all Corporate Members collectively they may elect two representatives to vote on their behalf in the General Assembly. A Corporate Member may decide to become an Institutional Member at any time. The annual fee for Corporate Membership has been determined for 2015 with € 1,000. −.

	Corporate Members 2015						
	Country Organisation		Entry year	Type of business			
1	AT (Austria)	Diamant GmbH & Co KG	1996	Raw Materials / Bread Improvers			
2	CH (Switzerland)	<u>Bühler AG</u>	2012	Grain Processing Technology			
3	CH (Switzerland)	ICC Switzerland	1960				
4	CN (China)	Academy of State Administration of Grain	2014	Non-profitable research on grain science			
5	CN (China)	Beijing Academy of Food Sciences (BAFS)	2001				
6	CN (China)	Henan University of Technology	2005				
7	CN (China)	Wuhan Polytechnic University (WHPU)	2005				
8	CN (China)	YiHai Kerry Investment Co., Ltd.	2014	Agrobusiness and food company			
9	DE (Germany)	Brabender GmbH & Co KG	1993	Measuring and Test Instruments			

	Corporate Members 2015						
	Country Organisation		Entry year	Type of business			
10	DE (Germany)	Elementar Analysensysteme GmbH	1999	Development, Manufacturing and Sales of Analytical Instrumentation			
11	DE (Germany)	Haubelt Laborgeräte GmbH	2006				
12	DE (Germany)	Mühlenchemie GmbH & Co KG	2002				
13	DE (Germany)	R-Biopharm AG	2005	Manufacturer of Test Kits for Food and Feed Analysis and Clinical Diagnostics			
14	DE (Germany)	Rietmann GmbH	1992	Supplier for Base Products and Premixes			
15	DK (Denmark)	Foss A/S	2000	Analytical Instruments			
16	DK (Denmark)	Valsemollen A/S	2011	Milling company			
17	FI (Finland)	VTT Technical Research Centre of Finland	2007				
18	FR (France)	BIPEA	2008	Proficiency Testing Schemes Organizer			
19	FR (France)	Chopin Technologies	1992	Manufacturing and Sales of Quality Control Instrumentation for Grain and Flour			
20	IE (Ireland)	Megazyme International Ireland Limited	1994				
21	IE (Ireland)	www.knowmycotoxins.com	2008				
22	LT (Lithuania)	Kaunas University of Technology	2010				
23	NL (Netherlands)	TLR International Laboratories	2013				
24	NL (Netherlands)	U.S. Wheat Associates	1993	Market Development			

	Corporate Members 2015						
	Country	Organisation	Entry year		Type of business		
25	RU (Russia)	Interational Industrial Academy	2015	NEW			
26	RU (Russia)	JSC "Ortus Malgrain"	2015	NEW	Joint Stock Company		
27	RU (Russia)	The Russian Union of Flour Mills and Cereal Plants	2015	NEW			
28	RU (Russia)	VNIIZ - Russian Scientific Research Institute for Grain and Grain products	2012				
29	SE (Sweden)	Perten Instruments Sweden	1992		Laboratory equipment for Quality Control of Grain and Flour		
30	TR (Turkey)	Bastak Food Machine Medical	2013		Producer of flour additives and quality control apparatus		
31	TR (Turkey)	Yücebaş Machine and Analytical Instruments	2010		Production of Instruments for Testing Grain and Flour Quality		
32	UK (United Kingdom)	Stable Micro Systems Ltd.	1996		Developing and Manufacturing of Texture Analysis Systems		

If you are not a member yet, please note that you can sign up at any time by contacting the ICC Headquarters.

ICC Standards and Methods



A major objective which lied at the heart of ICC from its very beginning was to develop internationally-accepted standard methods to facilitate the trade of grains and grain-based food products within and between countries. This continues to be one of the fundamental aims of the Association.

Since its establishment, **over 80 standard methods** have been published by ICC, including several rapid methods. Many older methods have been reviewed and released in light of later developments. In many cases, the establishment of agreed standard methods came from the work of many individual working and study groups involving experts willing to cooperate under the direction of a chair. Their work mainly involved the study, development and evaluation of cereal testing methods and advising on particular problems related to cereal science and technology. These activities are overseen by the Technical Director and Technical Co-Directors.

ICC serves as an independent expert consultant and/or observer to several world and international bodies including the European Committee for Standardisation (CEN), Food and Agriculture Organisation (FAO), International Standards Association (ISO), International Seed Testing Association (ISTA) and United Nations Industrial Development Organisation (UNIDO). In addition, ICC has closed formal collaboration agreements with associations in similar and related disciplines including AACC International. ICC methods have been adopted by other leading SDOs (International Standardization Organizations) such as ISO and CEN, where ICC's specialized focus on cereal-related methods is recognized.

ICC Conferences and Meetings

ICC Conferences

3rd ICC Latin American Cereal Conference (LACC3) and ICC Jubilee Conference – 60 years of ICC, 29 March – 1 April 2015, Curitiba, Brazil



The third ICC Latin American Conference (LACC3) took place in Curitiba, the capital of the state of Paraná and organised by Granotec/Granolab Brazil and co-hosted by the ICC. This conference was also ICC's 60th Anniversary Conference. LACC3 specifically promoted scientific and technological knowledge related to the breeding and production of cereals, cereal safety and

quality and the development of nutritious and health-promoting cereal-based foods.

6th Dietary Fibre Conference 2015, 1-3 June 2015, Paris, France



DF15 - a really stimulating event – this was the main opinion of the over 250 participants from all over the globe from industry, academia and regulatory bodies.

The 6th International Dietary Fibre Conference (DF15), organised in Paris in Les Salons de L'Aveyron from 1-3 June 2015 by INRA - the French National Institute for

Agricultural Research – and ICC – the International Association for Cereal Science and Technology – highlighted in 8 sessions a range of new developments in fibre research, including the role of fibres, in:

- modulating the human gut microbiome and its impact on health, going far beyond the old notions of just lactobacilli and bifidobacteria as beneficial species and selected fibres as prebiotics;
- influencing cognitive functions and mental well-being, where recent research confirms earlier work on beneficial effects of cereal fibres and where mechanistic insights are emerging;

 and reducing constipation - dietary changes towards a higher intake of fibre may result here in considerable health care costs savings (for the UK ~ GBP 125 million per year).

The final Round Table discussion brought up a series of remarks and recommendations:

- Fibre is not fibre the properties and physiological impact of fibres varies widely, even within a single type of fibre, such as pectin. Therefore, a full description of the source, composition and further relevant physical and chemical properties of the fibres studied is essential.
- Priority for research on fibre, the human microbiome and health preferably in multi-disciplinary consortia of science and industry

"How to increase the intake of fibre by consumers with ~ 10 g/day to at least the levels recommended in dietary guidelines". This is the key challenge of the "fibre community" worldwide. Since a wide diversity of fibres is seen as beneficial, both naturally present and added fibres may play a role here.

This provides challenges for food technology and even more for communication to consumers. For the latter creative approaches are needed, going far beyond the attractive presentation of national dietary guidelines on websites. Multimedia approaches, combined with product development, as practised in Denmark, for increasing consumption of wholegrain should be considered.

In addition to the main conference, two pre-conference workshops added value to the DF15. The **PRACTICAL WORKSHOP on the Measurement of Total Dietary Fibre and Available Carbohydrates** organised by *Barry McCleary* (Megazyme International) and *Chris Kelley* (Ankom Technology) and the **MYNEWGUT WORKSHOP** where representatives from the EU-funded MyNewGut Project presented and discussed the project plans and expected results with a broad range of stakeholders.

Before the Round Table discussion, three prizes of 1,000 EUR per recipient were awarded. One ICC-Award for "The Application of Science in Improving Public Health", sponsored by Kellogg's All-Bran, went to *Dr. Talitha Best*, from the CQ University Australia. Two Awards for "Cereal Fibre Research", sponsored by Mondeléz International went to *Yanan Wang*, Agriculture and Agri-Food Canada, and to *Anita Stefoska-Needham*, University of Wollongong, Australia.

The DF15 Organising Committee would like to thank all participants and sponsors for their support.

Joint ICC/AISTEC Conference at the World Expo Milan 2015 "Grains for feeding the world", 1-3 July 2015, Milan, Italy



The ICC/AISTEC Conference "Grains for feeding the world", organised by the Italian Association for Cereal Science and Technology (AISTEC) in collaboration with the International Association for Cereal Science and Technology (ICC), was held at the University of Milan, 1-3 July 2015, with a theme inspired by the broader EXPO theme, "Feeding the planet, energy for life".

The event brought together more than 180 participants from more than 20 countries from around five continents, and provided opportunities for both young and senior scientists and industry representatives for networking and exchanging knowledge about grains and derived products. It also marked the 20th anniversary of the Italian Association which happens to be in conjunction with the 60th anniversary of ICC.

The Conference offered participants an **outstanding scientific programme** with eight scientific sessions and 42 speeches by speakers from all corners of the globe and about 138 posters. It **addressed and attracted the global scientific community**, as well as international stakeholders, to discuss new topics, products and challenges. It enabled a **meeting between science**, **production and marketing**, thanks to the ten exhibitors that actively interacted with participants and contributed to the event with their table top exhibitions of products, equipment and scientific tools, and moreover provided an insight into the state of the art of product innovation and development of the grains world.

A distinctive feature of the ICC/AISTEC Conference was the global approach of handled topics, as well as a wide coverage of grain species from cereals to pseudo-cereals and legumes, wanted by the Chair of the Scientific Committee, Dr. Marina Carcea, and the other 37 members of the national and international Scientific Committees. Outstanding opening lectures conveyed to the scientific programme the shape of an international forum on the latest general key topics, e.g. the world food security issue in terms of role of production, consumption and trade of grains; the importance of the cereal crops and genetic diversity to cope with the multiple challenges of 21st century agriculture; the sustainability of diets without wheat and grains.

The eight scientific sessions drew participants' attention to specific important issues, such as whole grains, gluten-free products, fortification of bakery products, health effects of innovative cereal products, crop and product safety, as well as methods of analysis, regulatory and labelling matters, consumer acceptance, etc. In general, the event indicated that significant progress has been made to guarantee crop sustainability, develop tools to forecast yields and quality, as well as new technologies for producing healthy and safe grain products.

During an award ceremony, chaired by the ICC Secretary General, MSc. Michaela Pichler, and Dr. Chiara Chiriotti of Chiriotti Editori, two prizes were awarded to the two best posters (offered by Chiriotti Editori) that achieved the highest scientific and technical standard, and also displayed innovation and originality, selected from among the poster presentations. The two winning posters dealt with the effect of debranning on T-2 and HT-2 toxin content in durum wheat kernels and milling fractions, and with the protective effect in celiac disease played by a gastrointestinal resistant peptide from Triticum monococcum omega-gliadin.

The Gala dinner at the Morando Bolognini Castle, in Sant'Angelo Lodigiano, a building dating back to the fifteenth century and where participants enjoyed a convivial summer night with plentiful delicious Italian food, left unforgettable memories of the Conference.

The Organisers wish to thank once more all speakers and poster presenters for their valuable contribution to the Conference and for making it an outstanding scientific event! They also wish to thank the Endorsers, Sponsors and Exhibitors for their support and for helping to make "Grains for feeding the world" such a successful event!

ICC Luncheon 2015 at the AACCI Centennial Meeting, 18-21 October 2015, Minneapolis, USA



ICC was happy to welcome many colleagues and friends to the ICC Luncheon 2015 at the AACCI Centennial Meeting in Minneapolis, USA, 21 October 2015 where Fengcheng Wang, Hamit Köksel, Joel Abecassis, John Taylor and Michaela Pichler presented recent activities and achievements, as well as upcoming projects and events of ICC. The Harald Perten Prize 2015 was presented by Jan Perten and rewarded to Prof. Dr. Jan Delcour, Katholieke Universiteit Leuven, Belgium in person. The other awardee,

Prof. Dr. Alberto Edel León, University of Cordoba, Argentina has received the Prize at the ICC Jubilee Luncheon 2015 at the occasion of the 3rd Latin American Cereal Conference in Curitiba, Brazil. The presentation from the Luncheon can be viewed in the attached PDF file.

ICC Supported Conferences and Meetings

2nd International Symposium of Food Science and Human Wellness, 25-26 July 2015, Zhuzhou, Hunan, China



In order to promote the development of food science and drive technological innovation in food industry, also to better protect human health and improve the quality of life, on the basis of successful holding of the past eight international symposiums of Food Science and other conferences on food, the Beijing Academy of Food Sciences and FOOD SCIENCE jointly with TangRenShen Group held the 2nd International Symposium of Food

Science and Human Wellness during July 25th-26th, 2015 in Zhuzhou, Hunan, China.

ICC acted as conference co-organiser and was represented by the ICC President Dr. Fengcheng Wang and ICC Secretary General Michaela Pichler.

The symposium explored in depth the key theoretical research of food sciences and nutritional health involving food biochemistry, food nutriology, food immunology, food functional components and activity evaluation, as well as food safety and toxicology. Through providing an opportunity to communicate advanced experience, lay out the latest research accomplishments, and

construct an industry-university-research cooperation platform, new research ideas and development direction have been provided to both food professionals and producers.

More than 400 professionals and entrepreneurs from universities, research institutes and food industry all over the world attended this symposium to share their knowledge and achievement.

Flour Mill 2015, 21-23 September 2015, Moscow, Russia



From 21-23 September 2015, the 9th Flour Mill 2015 in Moscow (Russia) took place. ICC was invited to participate at this conference, which was organized by the *Ministry of Agriculture* of the Russian Federation, the *Russian Union of Flour Mills and Cereal Plants* and the *International Industrial Academy*.

Executives and experts of national and regional bodies of the flour mills and grain market as well as experts from research & educational institutes and representatives of international companies discussed a wide range of questions, including product quality and safety, market perspectives for grain, flour and cereals, latest technical developments for flour mills and grain producers, innovative tools and methods to implement and control quality management systems, new consumer demands etc.

In the frame of this conference ICC Secretary General, Ms. Michaela Pichler, was able to discuss new cooperation possibilities with the Russian representatives and to strengthen again the Russian engagement in the *International Association for Cereal Science and Technology*. As a result, the Russian Country Membership is currently again under discussion and the *International Industrial Academy*, the *Russian Union of Flour Mills and Cereal Plants*, *Kirov's Mill* and the *Maltcev Alliance Group* confirmed their ICC Membership from 2016 onwards.

ICC visit at China Grain Products R&D Institute, 5-9 October 2015, Taipei, Chinese Taipei



In the beginning of October 2015 the ICC Secretary General, Ms. Michaela Pichler, was invited to visit the ICC Institutional Member Organisations China Grain Products R&D Institute (CGPRDI) representing Taiwan Flour Mill Association (TFMA).

During this expert summit, she had the possibility to meet cereal and grain experts from

academy, industry and research institutes as well as high officials from the government.

She was also invited to join a meeting of the **Council of Agriculture** where she gave a speech on the developments of ICC nowadays and in future.

It was concluded that cereal and grain experts from the represented organisations will contribute to ICC not only by participating different conferences, but also by joining working groups and other ICC activities to further strengthen the connection between the organisations.

The ICC Secretary General visited also the supply chain of rice-based products in east coast and the representative western and Chinese style pastry factories to gain a better picture of the cereal sector.

8th International Congress Flour-Bread '15, 29-30 October 2015, Opatija, Croatia



The <u>Faculty of Food Technology Osijek</u> (<u>PTFOS</u>) and ICC invited to the 8th International Congress *Flour-Bread '15* and the 10th Croatian Congress of Cereal Technologists *Brašno-Kruh '15*, taking

place in Opatija, Croatia, 29 - 30 October 2015.

Following the tradition of previous "Flour-Bread" congresses, the main aim of this event has been to feature the latest advances in cereal science and technology. Conference languages were English and Croatian.

Programme topics have been:

- Breeding and quality of cereal grains
- Grain storage and milling technology
- Analytical and rheological methods
- Baking technology
- Improvers and additives
- Starch and modified starch
- Extrusion and pasta production
- Biscuit and pastry products
- Nutritional quality of cereals
- Cereal food safety
- Cereal based functional foods
- Cereal waste management and renewable energy

Outlook 2016

15th ICC Cereal and Bread Congress, 17-21 April 2016, Istanbul, Turkey



The **15**th **ICBC** will be a 3.5-day event, and the focus of this international congress will be **storage**, **processing/development** and **marketing** of **cereal products** meeting consumers' needs (added values in convenience, taste, nutrition and health, safety and security). As the flagship congress of ICC and Cereal Industry, the 15th ICBC will

bring together leading researchers, scientists, food technologists and industry from around the world.

Further conferences and meetings:

Date	Title	City	Country
18 – 21 Apr.2016	15th ICC International Cereal and Bread Congress (ICBC) 2016	Istanbul	TR (Turkey)
20 Apr. 2016	ICC General Assembly (15:30 - 17:30 p.m.)	Istanbul	TR (Turkey)
06 – 08 July 2016	4th International ISEKI Food Conference "ISEKI Food 2016"	Vienna	AT (Austria)
30 – 31 July 2016	9th International Symposium of Food Science	Shenyang	CN (China)
18 – 19 Oct. 2016	4th International Symposium on Gluten-Free Cereal Products and Beverages	Cork	IE (Ireland)
23 – 26 Oct. 2016	2016 AACC International Annual Meeting	Savannah	US (United States)
26 Oct. 2016	ICC Luncheon 2016	Savannah	US (United States)
28 – 30 Nov. 2016	30th EFFoST International Conference	Vienna	AT (Austria)

ICC Project Activities and Collaborations

International Projects

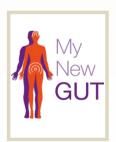
MYCOSPEC (2013-2015) - Fingerprinting technology to detect mycotoxins in foods and liquid foodstuffs - (ICC Services GmbH is partner)



The € 1.5m EU-funded research project MYCOSPEC was launched in November 2013 with the participation of SMEs involved in the cereal business and research centres. The

MYCOSPEC project, coordinated by IRIS, Castelldefels, Spain, aims to develop an innovative system to detect mycotoxins - toxins produced by fungi that infest food crops and processed foods. Food contaminated with mycotoxins can cause both acute and long-term illness. The high potential danger of mycotoxins for humans and livestock gives birth to the need of having strict regulatory controls and makes foodstuff buyers more demanding in terms of rigour and food safety testing. ICC Services GmbH is partner in the MYSCOSPEC consortium and is responsible for dissemination of project results mainly to the benefit of SMEs.

MyNewGut – EU-funded project on "Microbiome influence on energy balance and brain development-function put into action to tackle diet-related diseases and behaviour" launched in 2014



The € 9m EU-funded project MyNewGut will research how the human gut microbiome influences obesity, behavioural- and lifestyle-related disorders and vice versa. It also aims to identify specific dietary strategies to improve the long-term health of the public.

The general objectives of the project are to:

- Expand knowledge of the contribution of the human microbiome to nutrient metabolism and energy balance.
- Identify microbiome-related features that contribute to or predict obesity and associated disorders.
- Understand how the gut microbiome, under the influence of environmental factors, plays a role in the brain, metabolic and immune system development in early life.

• Provide proof-of-concepts of the disease risk and reduction potential of dietary interventions with new food products and (or) ingredients that target the gut microbiome, in humans.

ICC supports the dissemination of project knowledge. To read more, please visit the ICC Webpage or go directly to the project website http://www.mynewgut.eu.

iFAAM (2013-2017) - Integrated Approaches to Food Allergen and Allergy Risk Management (MoniQA is partner, ICC is Third Party)



The world's biggest study of allergies - spearheaded by the University of Manchester – kicked-off on 19 March 2013. The €9 million project builds on an earlier research study and

involves the world's leading experts in the UK, Europe, Australia and US.

Up to 20 million European citizens suffer from food allergy today. However, management of both food allergy by patients and health practitioners and allergens, by industry, is thwarted by lack of evidence to either prevent food allergy from developing or protect adequately those who are already allergic. The European Commission-sponsored research, known as the Integrated Approaches to Food Allergen and Allergy Risk Management (iFAAM) will produce a standardised management process for companies involved in food manufacturing. It will also develop tools designed to enforce these regulations and produce evidence-based knowledge to inform new health advice on nutrition for pregnant women, babies and allergy sufferers. ICC contributes to the project as a third party, supporting the MoniQA Association, which leads a work-package in this project dealing with translating iFAAM developed tools and food allergen management approaches to practice.

CAPSULED (2012-2017) - Cactus Pear (Opuntia ficus-indica L.) for Sustainable Livelihoods in the Ethiopian Drylands



The € 2m UNIDO-OPEC project <u>Cactus Pear (Opuntia ficus-indica L.)</u> for <u>Sustainable Livelihoods in the Ethiopian Drylands</u> (**CAPSULED**), will establish a processing centre as a pilot plant in order to better make use of both Opuntia fruits and the pads (cladodes). Different food and feed products with longer shelf life will be trialled and marketed. Building on experience from

other countries with a long tradition of processing Opuntia and from leading agricultural research institutes, the project will empower youth and women associations for collection, postharvest handling, hygienic food processing and

marketing. This approach will provide poor communities with income generation activities and contributing to food security strategy. On top of that, plantation of Opuntia in the degraded dry lands can help to mitigate land degradation and thus combat the ongoing desertification in the region. ICC is involved in capacity building and project monitoring and evaluation and in website hosting and management as well as in organizing training and scientific workshops at national or regional scale up on the completion of the project.

ICC Cooperations

HEALTHGRAIN Forum established in May 2010



The <u>HEALTHGRAIN Forum</u> was established as an international association and a follow-up to the EU 6th Framework Programme Integrated Project HEALTHGRAIN - "Exploiting Bioactivity of European Cereal Grains for Improved Nutrition and Health Benefits". Its mission is to promote science-based concepts fully

unlocking the health promoting potential in the entire grain food production chain to obtain healthy, convenient and appealing foods. ICC provides support and expertise to the association, as well as the financial administration.

MoniQA Association established in July 2011



MoniQA Association was launched within the EU-funded Network of Excellence on Monitoring and Quality Assurance in the Total Food Supply Chain (MoniQA, 2007-2012). MoniQA facilitates

international research collaborations and contributes to the harmonization of analytical methods for monitoring quality and safety in the food supply chain. ICC was involved in the MoniQA Association till the end of 2015 by hosting its Secretariat in Vienna and being part of the Supervisory Board.

FOODSECURITY.AT Forum established in May 2015

Foodsecurity.at is a network composed of four Austrian institutions working in the whole field of Food Security. ICC facilitates the international integration of the planned activities of the network.

ISEKI-Food Association established in October 2011



The <u>ISEKI-Food Association</u> started its activities as a network after the ISEKI_FOOD_4 project in October 2011. The project was aimed to develop a framework of stakeholders to lead innovation

in food studies education & training tailored to the needs of the industry, promote innovation in the FS&T academic sector and support internationalization of EU Food studies. ICC is involved by hosting and managing the website and supporting different events.

AACCI Collaboration



Together <u>AACCI</u> and ICC have elaborated 2015 the common vision to be the leading global authorities in cereal grain biosciences.

The mission of the future cooperation will be to create together a premier global cereal grain bioscience and technology platform committed to exchanging knowledge, advancing innovation, facilitating research, providing standard methods and promoting collaboration, in order to improve the quality, safety, and security of the grain-based products supply chain world-wide.

Further details will be commonly developed in 2016.

Publications

ICC News Alerts & Press Releases



ICC is periodically sending out Newsletters per e-mail, the so called News Alerts. In 2015 ICC sent around 30 News Alerts to a community of more than 8.500 subscribers. Also around 10 ICC Press Releases have been distributed to the international cereal science and technology community.

ICC Journal - QAS (Quality Assurance and Safety of Crops and Foods)



The focus on grain food quality and safety has resulted in collaboration with Wageningen Academic Publishers for editing a specialized journal targeting those interested in this topic. The official journal of ICC, the Quality Assurance and Safety of Crops & Foods (QAS) is now in its 8th year of publication and growing in stature.

It is an international peer-reviewed journal publishing scientific primary research papers and review papers in the areas of food safety and quality, food security and the technology of crops, cereals and grains. The journal focuses on the research into and development of new analytical tools, the improvement of existing analytical tools, food quality and safety and on the technologies associated with harvesting, storing, processing and manufacture. In 2015 five issues have been published, considering the special issue on Food Safety in Asia at the beginning of the year.

ICC Regulatory Scientific Updates



The Scientific & Regulatory Updates, written by David Richardson, supported by legislative documents, appear about 10 times per year and provide detailed information about legislative changes in the field of nutrition: in the Standing Committee on the Food Chain and Animal Health which regulate

health and nutrition claims in the EU, newly published EFSA scientific opinions, European Commission guidance documents, recommendations, and proposals for legislative changes, Codex Committees, regulatory changes at the level of the

FAO and WHO, as well as nutrition reports and publications. This update is free for ICC Country Members but can be also issued by the general public.

ICC Books of Abstracts



Book of Abstracts: 3rd Latin America Cereal Conference 03/2015

Book of Abstracts: 6th Intern. Dietary Fibre Conference 06/2015

Book of Abstracts: ICC/AISTEC Conference at World Expo

07/2015

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https://www.icc-services.at/store

ICC Promotional material





ICC is constantly promoting its activities through leaflets, brochures and posters, which are present at all major ICC events.

ICC Medals and Awards



New ICC Academy Fellows 2015

Prof. Dr. Fred Brouns, Maastricht University, Netherlands

Professor Brouns was praised in particular for his wide range and continuing activities in providing science based replies in publications, social media activities and new research

projects - to the many myths and fancy stories about the unhealthiness of wheat and gluten.



New Honorary ICC Presidents 2015

Prof. Dr. John Taylor, University of Pretoria, South Africa

Professor Taylor was awarded for his continued contributions to the aims and ideals of ICC, going far beyond ICC's Presidential duties.

New ICC Harald Perten Prize Awardees 2015



Harald Perten was for a long time very committed to the ICC and its work and received international recognition for his achievements. Later on he established the Harald Perten Foundation in Zurich (Switzerland) in 1989, which supports the advancement of cereal science worldwide and provides the financial basis for the Harald Perten Prize and additional

financial support for the ICC. The Harald Perten Prize is rewarded to natural persons for outstanding achievements in science, research, teaching or transmission of knowledge, which serve cereal sciences and technology. It is primarily recognizing practical applications in the areas of starch, gluten and enzymes. It is presented every second year, even years, in connection with ICC Congresses.



Prof. Dr. Alberto Edel León, University of Cordoba, Argentina

Professor León - as leading cereal scientist in Latin America - was awarded for his major achievements in research, teaching and enhancing wide collaborations in Latin America and Spain.



Prof. Dr. Jan Delcour, Katholieke Universiteit Leuven, Belgium

Professor Delcour was awarded for his impressive achievements in cereal science, including fundamental studies and applications in the area of enzymes, and in teaching.

Highlights of 2015







January

Michaela Pichler to succeed Roland Poms as Secretary General of ICC

February

ICC Governing Committee sets up the ICC Milestones and Activities for 2015

March

- 3rd ICC Latin American Cereal Conference (LACC3) and ICC Jubilee Conference – 60 years of ICC, 29 March – 1 April 2015 Curitiba, Brazil
- QAS Special Issue on Food Safety in Asia, Quality Assurance and Safety of Crops & Foods, 2015; 7 (1)

April

- Awards announced at the ICC Jubilee Luncheon 2015
- IGV 20th International Scientific Conference
 "Healthy Grain for a Healthy Diet" in Nuthetal,
 22-23 April 2015 Germany

May

ICC Online Store Boom: strongest order month

June

34

6th International Dietary Fibre Conference, 1-3 June 2015, Paris, France

July

- ICC/AISTEC conference "Grains for feeding the world" on the occasion of the EXPO 2015, 1-3 July 2015, Milan, Italy
- 2nd International Symposium of Food Science and Human Wellness, 25- 26 July 2015, Zhuzhou, China

August

International Grain Quality and Food Security Conference,

3-6 August 2015, Manhattan (Kansas), USA

September

Flour Mill 2015, 21-23 September 2015, Moscow, Russia

October

- ICC Luncheon 2015 at the AACCI Centennial Meeting, 18-21 October 2015, Minneapolis, USA
- ICC on LinkedIn
- Flour-Bread '15, 29 30 October 2015,
 Opatja, Croatia

November

Healthgrain Forum Autumn Meeting, 16-17 November 2015, Wageningen, Netherlands

December

Extended ICC Online Store – 50% special offers





What does ICC mean to its members?

The following comments come from the membership of the ICC as they reflected on the service to the cereals community worldwide:

"ICC is a unique organization with a truly global outreach. Important ICC activities in this century include initiatives in organizing and supporting cereal science conferences in all continents and in (co-)shaping of European Union projects with a global outreach. Through ICC and ICC Conferences I visited and got contacts and friends all over the world - in Europe, North and Latin America, Turkey, Egypt, Sudan, South Africa, Russia, China and Australia."

Drs. J. W. VAN DER KAMP, The Netherlands (2015)

"The relationship with the ICC was a great opportunity for me, for my country and Latin America to be in contact with important scientists of cereals science and technology worldwide. The ICC is a mark in my life because it gave me the opportunity to have new important friends, make known the importance of cereals in this part of the world that not always is known and integrate new countries of Andine Zone and South Cone of Latin American to the ICC family. I am happy for this and hope to continue in the future."

Dr. M. B. CUNIBERTI, Argentina (2015)

"To me, what makes ICC so special is that it actively brings cereal science and technology to the four corners of the world. It is a very moving experience to see the reaction of a person in a developing country when they have the opportunity to meet and talk with the world's leading cereal scientists who have come to share lifetime of expertise."

Prof. Dr. J. TAYLOR, South Africa (2015)

Stay connected with ICC



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edited by: Stanley Cauvain



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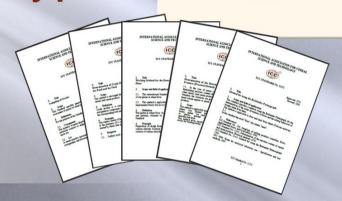


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Printed-Only Publications

Publications that can only be purchased as printed media (book or CD). No electronic versions are available.

ICC Journal - Quality Assurance and Safety of Crops and Foods (QAS)

The official journal of the ICC in cooperation with MoniQA can be purchased online from Wageningen Academic Publishers.





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ICC reaches out to Cereal and Food Scientists, Technologists, institutions and interested individuals, companies, and organisations.

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