## **Revitalizing the AACCI Brand**



Robert L. Cracknell AACCI President

AACC International was founded over 100 years ago to advance the understanding and knowledge of cereal grain science across the globe, and I am proud to say we have achieved that goal.

However, like many other successful organizations, we are acutely aware of an everchanging global landscape, and currently face the reality of a need to modify our original brand to stay relevant with the

current and future environment. As you all are aware, our membership today includes not only those involved in cereal grain science, but also food product development and manufacturing, food safety and raw material quality control, human and livestock nutrition, and disease prevention, to name but a few.

To position ourselves for continued growth and sustainability over the next 100 years, the Board of Directors has agreed it is time to revitalize the brand and name for our organization. This task will not happen quickly, nor is the endeavor taken lightly. We are utilizing the expertise of an outside agency to conduct research and interviews with members both past and present to determine what brand best describes who we are as an organization.

Our goal is to be inclusive with respect to all our current and future member's vast professional and academic backgrounds, and in this spirit of inclusiveness, we intend to keep our membership informed of our progress along the way.

We are very excited about the process that will unfold in the months to come, and as we continue to reach out and promote our cause, our new name will cease to be a mere word and become a strong brand, attracting the best and brightest people globally from the broad disciplines uniquely associated with the cereal grain sciences.

## 2017 AACCI Foundation Award Winners Announced

#### **Student Research Leadership Program**

This program, in its second year, is designed to facilitate research in key areas that will impact cereal grain science. Congratulations to the following awardees!

Hadeel Waleed

Alrayyes, South Dakota

State University, for her

project project on "Eval-

uation of AACCI Meth-

od 40.40-01 for Various

Iron"; Davide Bigagnoli,

University of Milan, for

his project on "Develop-

ment of a Method for

Monitoring the Sprout-

ing Process for Grains

Nebraska, Lincoln, for

of Germinated Wheat

Flour as Influenced by

her project on "Physical

and Chemical Properties

and Seeds"; Rachana Poudel, University of

Forms of Enrichment



Hadeel Waleed Alrayyes





Fipin Raipurchit

Rachana Poudel B

Dipin najparonit

the Duration of Germination and Drying temperature"; and Bipin Rajpurohit, South Dakota State University, for his project on "Developing and Correlating Benchtop Flour Testing and Simplified Methods for Dough Evaluation."

Thank you to program sponsors Perten Instruments, Inc., Bay State Milling, the AACCI Milling & Baking Division, the AACCI Foundation, and AACCI International.

#### **Foundation Fellowship**



The AACCI Foundation is proud to focus on providing funds for student members who are excelling and pursuing career paths in cereal grain science and technology. The 2017 AACCI Graduate Fellowship was awarded to Ghanendra Gartaula, University of Queensland, Australia. Gartaula will receive \$2,500 from the Charles Becker Graduate Student Fellowship fund for the 2017–2018 academic year and \$300 from

Ghanendra Gartaula

the Kellogg Graduate Student Fellowship Fund to travel to the AACCI Annual Meeting in San Diego, CA, to pursue academic opportunities outside of his university.

Thank you to everyone who applied to this very competitive program and for the direct support of our members who make this fellowship possible.

### **Cecil F. Pinney Travel Award**



This AACCI Foundation award is presented to an individual establishing a career in grain sci-

ence and technology. Congratulations to Bin Zhang, assistant professor at South China University of Technology in Guangzhou, China, the 2017 recipient of the Cecil F. Pinney Travel Award.



Bin Zhang

# 2017 Best Student Research Paper Finalists

The Best Student Research Paper Competition challenges students to demonstrate superior presentation skills and offers opportunities for students to present their research and interact with the AACCI community at an early stage in their career. Congratulations to the 2017 finalists chosen to participate in the competition taking place at the AACCI Annual Meeting in San Diego, CA, October 8–11, 2017.

Jose Bonilla, Purdue University Ghanendra Gartaula, The University of Queensland Shuxiang Liu, Washington State University Shreeya Ravisankar, Texas A&M University Claudia Vogel, Deutsche Forschungsanstalt fuer Lebensmittelchemie

Thanh P. Vu, University of Massachusetts

# AACCI to Host Session at the 67th Australasian Grain Science Conference



The 67th Australasian Grain Science Conference will be held September 20–22, 2017, in Christchurch, New Zealand. AACCI will host a session during the conference. Scheduled scientific sessions include Grain Breeding, Process Technologies, Global Product In-

novation, Bioactive Components, Dietary Fibres, Starch Modification, Dough Technology, Consumer Perception, and Human Nutrition arranged around the conference theme "Grain Technology for Consumer Nutrition." More information is available online at <u>www.ausgrainscience.org.au/index.php/conference</u> or from Conference Chair Charles Brennan (<u>conference@</u> <u>ausgrainscience.org.au</u>).

## Welcome New Corporate Member

**Emirates Grain Products Co. LLC** 

Contact: Taha Mohammed Merghani PO Box 24275 Port Khalid, Sharjah, U.A.E. Tel: +971 65 028 124 Fax: +971 65 029 190 E-mail: tmerghani@iffco.com

Emirates Grain Products Company (EMIGRAIN) was established in 1995 in Sharjah, U.A.E. The main focus is to take valued foods across boundaries: EMIGRAIN is now the leading manufacturer and marketer of a wide range of (wheat-based) agricultural products. EMIGRAIN has a grain receiving and cleaning system; grain storage silos; and roller-ground wheat flour mill, with flour packaging and storage facilities. Basic finished product categories include Alta, Maida, semolina, bran, and value-added products.

# New NIR Spectroscopy Method Shines Light on New Method for Breeding DON Resistance

#### View research in fully open-access Cereal Chemistry<sup>®</sup> article

Deoxynivalenol (DON), a fungal mycotoxin and by-product of Fusarium head blight (FHB) infections on wheat, creates not only serious economic issues, but affects the health of humans and animals if passed into the food chain. Breeders have been evaluating and selecting FHB-resistant wheat cultivars to mitigate this important issue, but the process has been slow and expensive. Thanks to a new and fully open-access study published in AACCI's *Cereal Chemistry* journal, those working in the cereal grains industry can learn more about a faster, cheaper, and nondestructive measurement technique for the evaluation of FHB and DON in wheat samples.

In the study, "Estimation of the Deoxynivalenol and Moisture Contents of Bulk Wheat Grain Samples by FT-NIR Spectroscopy," authors Peiris, Dong, Davis, Bockus, and Dowell of Kansas State University describe the use of near infrared (NIR) spectroscopy for the rapid evaluation of DON levels in bulk wheat grain samples. This method can be particularly useful for plant pathologists; wheat breeding programs that handle large numbers of grain samples; and NIR spectroscopy researchers and practitioners at DON evaluation laboratories.

NIR spectroscopy offers a fast and easy way to streamline the breeding process, as it helps breeders quickly identify wheat lines that produce grains with both high and low DON levels. Wheat lines that contain high DON levels and have high susceptibility to FHB can be eliminated from programs, while those with lower levels of susceptibility can make it to the next stage of the breeding process.

"Using this method, the DON level in a grain sample can be non-destructively estimated within +/- 8.0 ppm in about 30 seconds," states Kamaranga H. S. Peiris, lead author of the article. "Using this method for prescreening, breeders can evaluate more lines with their available resources."

This is the first study to evaluate the NIR spectroscopy method for estimation of DON in intact grain samples. Peiris hopes more research will be done on the topic to ensure DON levels in grain samples may be determined more accurately and with less error.

"Developing algorithms to better extract the relevant information from the NIR spectra is needed," says Peiris. "Known interference from other traits in the sample can affect prediction accuracies. Moisture content of the grains at the time of analysis can also vary. Thus variations in NIR absorption by the water in grains may affect the performance of this method. Interestingly, moisture content of the grain sample can also be accurately determined by this method concurrently."

View this fully open-access Cereal Chemistry article at: <u>http://aaccipublications.aaccnet.org/doi/full/10.1094/CCHEM-</u> <u>11-16-0271-R</u>

## **Obituaries**

## **Vladimir Rasper**



Vladimir Rasper passed away on April 16, 2017, at the age of 87. Vladimir received both his master's and Ph.D. degrees in chemical engineering from the University of Chemistry and Technology, in Prague, Czechoslovakia. His research specialized in the chemistry and functional properties of specific polysaccharides, analytical techniques in carbohy-

drate analysis, food rheology, and physical testing methods. Vladimir started his career as a professor in the Department of Carbohydrates and Cereals at the University of Chemistry and Technology in Czechoslovakia (1956–1964). He was then recruited to establish a teaching and research program in the area of food chemistry and technology at the University of Legon in Accra, Ghana (1965–1969). Prompted by an unfortunate, yet necessary, defection from Czechoslovakia following the communist takeover in 1968, Vladimir concluded his career in Canada—first as a research fellow in the Department of Food Science at the University of Manitoba, Winnipeg, AB (1969– 1970), and then as a professor in the Department of Food Science at the University of Guelph, Guelph, ON (1970–1994).

Vladimir was an active and dedicated member of AACCI, serving as chair of the AACCI Carbohydrate and Rheology Divisions and of the AACCI Physical and Testing Methods Technical Committee and as president of the AACCI Toronto Chapter and editor-in-chief of *Cereal Chemistry* (1993–1999). In 1990, he was awarded with the AACCI Carl Wilhelm Brabender Award for outstanding contributions to the field of rheology. Given his outstanding service, loyalty, and devotion to the principles and objectives of AACCI and its membership, he was recognized with AACCI's highest award, the William F. Geddes Memorial Award, in 2000. He was also named a Fellow of the Canadian Institute of Food Science and Technology.

Vladimir was an honest, witty, fiercely intelligent, and caring man who loved learning, music, drama, baking, and traveling the world. He was a friend and mentor to many and truly cherished those relationships. Above all though, Vladimir was a loving and generous husband, father, and grandfather. He will be greatly missed by his wife and best friend, Jarka; his son and daughter-in-law, Vlad and Sophie; his granddaughters, Katie and Alex; and his daughter and son-in-law, Dita and Bram. His loss will also be felt in his beloved Prague.

#### John Wilson Lee

John Wilson Lee passed away in May 2017. Wilson was born in Western Australia in 1925 and graduated with a B.S. (Honours) degree from UWA. He worked initially at the UWA Institute of Agriculture with Prof. E. J. Underwood. In 1950 he joined the CSIRO – Dairy Research Section in Melbourne, where he worked on the incorporation of milk solids into bread (which became the popular commercial "milk bread") and was eventually seconded to the Bread Research Institute of Australia.

From 1953 to 1957 he undertook a Ph.D. program at the University of Minnesota in the United States with Prof. W. F. Geddes, following which in 1958 he spent a short period of a couple months at the British Baking Industries Research Association at Chorleywood in the United Kingdom.

The CSIRO Wheat Research Unit (WRU) was established following the passage of the Wheat Research Act in 1957. Wilson was one of the first staff members appointed to the WRU in 1959. His work at WRU included protein formation in the developing wheat grain, gluten synthesis, and protein composition. Wilson retired from the WRU in 1985, bringing to an end 35 years of formal service with CSIRO.

In 1967 Wilson spent a year studying glycoproteins at the Swiss Federal Institute of Technology, Zurich, with Prof. Neukom. Wilson was also a founding member of the RACI Cereal Chemistry Division and served as division secretary (1975– 1976). He was a regular presenter at CCD conferences. Prior to 1974, the administration of the RACI Cereal Chemistry Division was vested jointly between two separate bodies, the Standing Committee and the AGM. To overcome the communication difficulties encountered with this arrangement a committee led by Wilson Lee drafted and submitted a new set regulations that effectively became the new operating model for the division.

Wilson was the recipient of the first RACI Cereal Chemistry Division Guthrie Award in 1974. The Guthrie Address, "Fifty Years of Cereal Chemistry since Guthrie," was most appropriate for the inaugural presentation.

## People

Mian N. Riaz, a member of AACC International and director of the Process Engineering R&D Center, Texas A&M University, received the 2016 Bernard Lown '42 Alumni Humanitarian Award from the University of Maine Alumni Association.

The award is presented to University of Maine graduates who distinguish themselves in their service to humanity. It is named in honor of Nobel Laureate Bernard Lown.

Riaz earned his Ph.D. degree in food science from the University of Maine in 1992. As one of the world's leading authorities on extrusion technology, Riaz has spent his career working to improve the public's understanding of nutrition and food customs. He shares his expertise with developing countries by providing access to extrusion technology that is used to create low-cost foods. This award was given in recognition of his work to reduce food insecurity across the globe.

Riaz has worked in the Texas A&M University system for 24 years and published many books, chapters, and papers on extrusion and related topics. He is a frequent speaker at international and national conferences and meetings and has delivered more than 300 presentations in 55 countries.



## **New Members**

- Barrett, E. M., graduate student, University of Wollongong, Bligh Park, NSW, Australia
- Bravo, A., University of Valladolid, Palencia, Spain
- Buechler, A., student, Purdue University, Jasper, IN, U.S.A.

**Carrera Flores, M. J.,** student, Universidad del Azuay, Cuenca, Ecuador

DePalma, K., University of Idaho, Moscow, ID, U.S.A.

**Dorn, E.,** process engineering manager, Chief Ethanol Fuels, Lexington, NE, U.S.A.

- Hirsch, A. J., West Lafayette, IN, U.S.A.
- Ismail, B., University of Minnesota, St. Paul, MN, U.S.A.
- Keilbach, L., senior R&D manager, The Hain Celestial Group, Lake Success, NY, U.S.A.
- Lalor, E. F., Kerry Group, Naas, County Kildare, Ireland

Mogoginta, J., graduate research assistant, University of Minnesota, St. Paul, MN, U.S.A.

**Orenday-Ortiz, J. M.,** Washington State University, Pullman, WA, U.S.A.

**Oswald, N. E.,** director of food safety, Northeast Foods, Inc., Baltimore, MD, U.S.A.

Perez-Fajardo, M. A., student, Kansas State University, Manhattan, KS, U.S.A.

**Prakash, M.,** bakery scientist, ICL Food Specialties, Ladenburg, Germany

Quintero, C., student, Universidad del Azuay, Cuenca, Ecuador

Quizhpi, P., student, Universidad del Azuay, Cuenca, Ecuador

Rahman, M. M., North Dakota State University, Fargo, ND, U.S.A.

Restrepo, D., student, Universidad del Azuay, Cuenca, Ecuador

**Roberts, A.,** director of food and worker safety, Kennedy Rice Mill LLC, Mer Rouge, LA, U.S.A.

- Sergnese, S., Thorold, ON, Canada
- Sharma, R., research assistant, Iowa State University, Ames, IA, U.S.A.
- Shetty, K., North Dakota State University, Fargo, ND, U.S.A.
- Siddiqi, M., Markham, ON, Canada

Singha, P., South Dakota State University, Brookings, SD, U.S.A.

Smith, C., Pittsburgh, PA, U.S.A.

Soendoro, S., Fullerton, CA, U.S.A.

**Stebbins, B.,** North Dakota State University, Fargo, ND, U.S.A. **Tang, C.,** Mississauga, Canada

**Thomson, M. J.,** professor, Texas A&M University, College Station, TX, U.S.A.

Totten, C., Bryan, TX, U.S.A.

**Trummer, J.,** director R&D, Mi Rancho, San Leandro, CA, U.S.A.

- Vanthournout, A., Lantmännen Unibake, Ganshoren, Belgium
- Vu, T. P., graduate student, University of Massachusetts, Amherst, MA, U.S.A.
- Wang, Q., West Lafayette, IN, U.S.A.
- Weaver, J., corporate QA manager, Shepherdsville, KY, U.S.A.

Xu, S., graduate research assistant, Kansas State University, Manhattan, KS, U.S.A.

- Yeboah-Awudzi, M., Baton Rouge, LA, U.S.A.
- **Zhong, Y.,** graduate research assistant, University of Minnesota, St. Paul, MN, U.S.A.

Zhu, L., Moscow, ID, U.S.A.

## Important AACCI Dates

## July 2017

- 13. Cereals 17 late-breaking abstract deadline
- 15. Cereals 17 early registration deadline
- 21. Cereals 17 Hot Topic submission deadline

### August 2017

**31.** AACCI supported: Towards Affordable and Sustainable Food Supply—Recent Advances and Future Prospects Symposium, Sydney, Australia

#### September 2017

12. Cereals 17 housing deadline

**20–22.** AACCI hosted: AGSA Conference session, Christchurch, New Zealand

**24–28.** AACCI supported: Food Extrusion: Cereals, Protein & Other Ingredients Short Course, Texas A&M, College Station, TX, U.S.A.

### October 2017

**8–11.** Cereals 17: AACCI Annual Meeting, San Diego, CA, U.S.A.

For more information visit **aaccnet.org** 

# 2017 Themes

January-February—Analytical Ad Close: January 20, 2017

March-April—Baked Products Ad Close: March 15, 2017

May-June—Health & Nutrition Ad Close: May 4, 2017

July-August—Processing/Pre-annual Meeting Ad Close: July 10, 2017

September-October—Grains & Pulses Ad Close: September 7, 2017

November-December—Product Development & Innovation Ad Close: November 2, 2017

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# Our industry's personal guide to ISO 22000 food safety management standards

Includes the complete ISO 22000 standard, plus color-coded sections filled with advice from experts in the grain handling, processing, milling, and baking industries. These sections cover...

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- Process engineers
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- Supply chain managers

User's Guide to ISO 22000 Food Safety Management System for the Grain Handling, Processing, Milling, and Baking Industries

ompiled for the Food Safety, Quality, Regulatory (FSQR) Committee of AACC International (AACC) by Charles Hurburgh, Jennifer Robinson, and Scott Jensen

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