

Grain Quality Newsletter

News and Highlights from NC-213: Marketing and Delivery of Quality Grains and BioProducts Coproducts.

Volume 39:3

NC-213: The U.S. Quality Grains Research Consortium

NC-213 “Marketing and Delivery of Quality Grains and BioProcess Coproducts” Annual Meeting/Technical Sessions/Student Poster Competition

NC-213 – The U.S. Quality Grains Research Consortium

Program-At-A-Glance: (Host Facility and Lodging: Hilton Minneapolis, 1001 Marquette Avenue South, Minneapolis, Minnesota 55403 – 612-376-1000.) The room block will open along with Exchange Registration on October 16th. All reservations are run through GEAPS housing management partner, Experient, so NC-213 attendees will need to reserve their rooms online through them as well. Visit: www.geapsexchange.com.

Tuesday, March 24, 2020:

12:00PM (Noon) - NC-213 Meeting Registration Opens. Poster Display is available in the Minneapolis Convention Center Ballroom Area. Boxed lunches are available. (See registration form for details.) (Gallery Room.)

1:00PM - NC-213 Technical Session Presentations begin. Location: (Gallery Room.)

4:00PM – 6:00PM - NC-213 Poster Showing/Student Poster Competition/GEAPS Networking Gathering/Banquet. Location: (Minneapolis Convention Center Ballroom Area.)

6:00PM - Tentative time for GEAPS President’s Banquet

Wednesday, March 25, 2020:

7:00AM - Continental Breakfast for all registered and paid participants. Location: (Gallery Room.)

8:00AM - NC-213 Technical Session Presentations begin and other Presentations:

Relationship Building, Collaborative Efforts – NC-213 and GEAPS. Mr. Steve Records, Executive Director of Grain Elevator and Processing Society (GEAPS) and Dr. Griffiths Atungulu, Associate Professor & Agricultural/Food Engineer, The University of Arkansas - NC-213 Chair.

Industry Panel Discussion. Discussion to be led by Chuck Hill, AgriGold Hybrids, NC-213 Industry Advisory Committee-Chair.

Buffet Lunch - To include NC-213 Annual Business Meeting. Poster Competition Winner announced. Meeting Adjourned.

NC-213 Welcomes Kaliramesh Siliveru, Kansas State University, as the newest Executive Committee Member in the position of NC-213 Objective Co-Chair

NC-213 has filled a vacancy for the position of Objective 2 Co-Chair; “To improve management and operational systems to increase efficiency, retain quality, enhance value, and preserve food safety in the farm-to-user supply chain.” Below is a list of Responsibilities for each Objective Co-Chair:

- Each Objective is chaired by two Co-Chairs. Each co-chair is elected for a two-year term. Co-Chairs can be reelected for consecutive terms.
- Organize and moderate oral reporting sessions for their objectives at the Annual meeting.
- Facilitate revisions to their objectives in NC-213 five-year work plan.
- Serve on Executive Committee.
- Coordinate communications between administrators and members of that Objective team.
- Participate in Executive Committee meetings, contributing to decisions involving organizational, policy, and meeting topics (Annual meeting).
- Forward newsworthy items identified by researchers at their respective stations to the Administrative Advisor/Coordinator.
- Each Objective Co-Chair will provide at least one item per year for the newsletter, either their own work or a report from someone else within the Objective.
- Serve on the Andersons Grant Review Committee unless a conflict of interest exists.

We are very pleased to welcome Dr. Kaliramesh Siliveru (Kali) to the position of NC-213 Objective 2 Co-Chair. We believe that this is an excellent opportunity for Kali to gain more involvement in the project and to learn and grow, possibly leading to the position of Chair. Please join the Office of the Administrative Advisor/Coordinator in welcoming Kali to this position!

Contact information:
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“Dear Colleagues: Due to many requests, we wanted to update you regarding the next Corn Processing Workshops (CPW). The next CPW will be held the last week in January 2020.

January 27-28, 2020 – Corn Wet Milling and January 29-30, 2020 – New Technologies in Ethanol Production
University of Illinois at Urbana-Champaign, Funk Agricultural, Consumer, and Environmental Sciences Library (Funk ACES)
Urbana, Illinois

Here are some notes to help you plan:

Registration will open in September or October 2019. Future announcements will provide a link to the information and registration page.

We will open registration first to those that want to attend both workshops. We will then open registration for individual workshops. This helps our international participants that want to make the most of their visit to CPW.

We will announce again when registration is about to open, giving additional planning time.

Please let me know if you have any questions. Thank you for your interest.”

Sincerely,

Kent Rausch, Associate Professor, Coordinator, Corn Processing Workshops, University of Illinois at Urbana-Champaign





Student Day Features Education, Interaction with Exhibitors

Student Day at Exchange 2020 will provide our future peers with tremendous access to the world of grain handling and processing operations. Membership Committee Chair Jacob Elder, Proximity Malt, *Mid-Atlantic Chapter*, has worked on the program since 2015, and is encouraged by the annual growth.

“There is a tremendous need to recruit young talent into our industry,” Elder said. “Our goal with student day is to share our industry with a new generation. We want them to meet people currently working in the industry, and get a feel for what their future career could be.”

This year the event includes a panel discussion on how companies work with non-GMO, organics, or less popular grains like canola and the challenges they may face adjusting to demands for these products in the future. For the first time, students will also be attending the Idea Exchange.

“The Idea Exchange is always one of the most popular events at Exchange,” Elder added. “It’s a great opportunity to show them new technology coming into the industry, and gives them something to talk about with exhibitors in the Expo Hall.”

Student Day features multiple touchpoints for incoming professionals to interact with exhibitors. Students will work in small groups to address hypothetical situations they could face in their careers. They will have to seek out solutions in the hall, and present them to judges. GEAPS members are also encouraged to volunteer as hosts for groups of students, and exhibitors are encouraged to volunteer as Expo Ambassadors.

“A lot of times, these young people need a little help breaking out of their comfort zone,” Elder said. “Think about the first time you stepped foot in the Expo Hall. We are looking for exhibitors and attendees to volunteer to help ease students into the flow of the Hall.”



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Interested in helping with Student Day? Here are some ways you can get involved:

1. **Contact schools.** If you have contacts at a technical school, college or university, please invite them to attend – it's free for students and accompanying faculty!
2. **Be an Expo Ambassador.** We direct students to these companies as a starting point in the Expo Hall
3. **Be a host for students.** The Expo Hall can be intimidating. Hosts will take a team of students into the hall and help them find an exhibitor to help with an educational scenario.
4. **Be a judge.** Spend an hour giving students feedback on their scenario findings.



If you have any questions or want to participate in Student Day, please contact Deb Most (763) 999-4302 or deb@geaps.com.

Iowa State University Breaks Ground for New Feed Mill and Grain Science Complex

AMES, Iowa — Iowa State University broke ground Friday, Sept. 13, to mark the start of construction of its \$21.2 million Kent Corporation Feed Mill and Grain Science Complex (name pending approval by the Board of Regents, State of Iowa).

The site will be located on 10 acres of university-owned land southwest of the intersection of Highway 30 and State Avenue in Ames. The complex will include a feed mill tower, feed milling and mixing structures, grain storage bins, warehouse and an educational building with classrooms.

Completion of the complex is expected during the summer of 2021.

Kent Corporation provided the naming commitment of \$8 million in 2017. Other lead commitments for the project were provided by the Iowa Corn Promotion Board, which committed \$4 million; and Sukup Manufacturing Co., which committed \$2 million of in-kind support. In May, a \$2.6 million commitment was made by California Pellet Mill (CPM) of Waterloo.

“The feed, grain and livestock sectors are key to the success of agriculture in Iowa,” said Iowa State University President Wendy Wintersteen. “As a top land-grant university, Iowa State is at the forefront of critical and cutting-edge research, education and extension programs that support these important sectors. The Kent Corporation Feed Mill and Grain Sciences Complex will provide the space, facilities and technology to strengthen our ability to carry out our mission.”

“The Kent Corporation Feed Mill and Grain Science Complex will be a world-class, state-of-the-art facility used by faculty and staff to prepare students, train industry professionals and conduct impactful research that will make Iowa State a recognized leader in support of the feed industry,” said Daniel J. Robison, holder of the Endowed Dean’s Chair in ISU’s College of Agriculture and Life Sciences.

The state-of-the-art facility will extend Iowa State’s mission of education, research, extension and outreach. The new Kent Corporation Feed Mill and Grain Science Complex will enhance ISU teaching programs related to feed technology, grain science and animal nutrition. Classes and short courses will be taught at the complex, research conducted and animal feed prepared. Students and industry trainees will use the complex to learn how to keep the food system secure and sustainable.

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When completed, the new complex will provide hands-on learning experiences for students across majors such as animal science, agricultural biosystems engineering, agricultural business and more. This fall, a new minor in feed technology debuted, developed by faculty in the Department of Agricultural and Biosystems Engineering along with faculty in the Department of Animal Science. The minor will help prepare students to meet a growing demand for highly skilled professionals in the feed and grain industries.

It is expected to reinforce the quality of research by Iowa State faculty, serving as a source for custom-made animal feeds for academic studies.

The facility also will be a hub for continuing education and extension programs for employees in feed milling and grain industries. It will provide extension and outreach programs on topics that include feed technology, grain science and animal nutrition.

These programs will help feed and grain industry workers meet an increasing number of regulatory compliance issues, address biosecurity concerns and gain experience in advanced processing methods.

The new facility will centralize feed production close to the university's animal agriculture teaching and research farms.

The mill will have a capacity of approximately 20,000 tons of feed per year to meet needs of ISU classes, tours, short courses, research diets, internships, small batches and rations for livestock and poultry.

Iowa leads the nation in the amount of animal feed consumed at more than 21 million tons a year. The feed industry in the state represents more than \$20 billion in sales and more than 58,000 jobs in Iowa are connected to the industry.

Contacts:

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Brandi Snyder, Iowa Corn Public Relations Manager, 515-225-9242, bsnyder@iowacorn.org

Scott Anderson, California Pellet Mill, 319-464-8225, AndersonS@cpmroskamp.com

Rachel Geilenfeld, Sukup Manufacturing Co., 515-290-1702, rgeilenfeld@sukup.com

Brian Meyer, Iowa State University Agriculture and Life Sciences Communications Service, 515-294-0706, bmeyer@iastate.edu

Karen Simon, Iowa State University Foundation, 515-294-7263, kasimon@foundation.iastate.edu

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Iowa State University Part of Innovative Consortium to Reduce Post-Harvest Loss and Food Waste

AMES, Iowa — Food loss and waste is a global problem that negatively impacts the bottom line of businesses and farmers, wastes limited resources and damages the environment. The Foundation for Food and Agriculture Research (FFAR), The Rockefeller Foundation and Iowa State University today launched the Consortium for Innovation in Post-Harvest Loss and Food Waste Reduction at the 2019 Iowa International Outreach Symposium.

Through this consortium, food loss and waste thought leaders and experts from across the globe will work in tandem with industry and nonprofit organizations to address social, economic and environmental impacts from food loss and waste.

“Feeding a growing global population demands innovation at all levels — from planting to processing to consumption. This consortium will help farmers across the globe use technology to continue using resources efficiently,” said Sally Rockey, FFAR’s executive director. “Optimizing food production practices is critical for ensuring that farmers are profitable, food is plentiful and accessible, and the environment is preserved.”

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Due to the volume of food that is moved globally, food loss and waste affects producers, manufacturers, distributors and end-users. More than 40% of fruits and vegetables in developing regions spoil before they can be consumed. These goods include mangoes, avocados, pineapples, cocoa and bananas, many of which are exported to the United States.

This loss negatively impacts the bottom line for farmers, who are not compensated for their products. Consumers then don't have access to these popular foods. Additionally, food waste forces farmers to use precious natural resources producing food that either never makes it to the supermarket or is otherwise thrown out by consumers due to quality issues, creating a significant drain on environmental resources.

"Our consortium approach will build academic and entrepreneurial capacity of the next generation by engaging researchers and students in multi-national, multi-disciplinary teams in the project identification, planning, and execution phases together with professionals from the private and public sectors," said Dirk Maier, the consortium director and a professor in the Department of Agricultural and Biosystems Engineering at Iowa State, where the consortium will be located.

In 2016, The Rockefeller Foundation launched the YieldWise Initiative aimed at reducing both food loss in developing nations like Kenya, Nigeria and Tanzania, and food waste in developed markets like the United States. In sub-Saharan Africa, YieldWise provides farmers with access to segmented markets, technologies and solutions that curb preventable crop loss and facilitates training that helps them solidify buyer agreements with markets in African communities.

"To nourish, sustainably, nearly 10 billion people by 2050, we must implement a menu of solutions that simultaneously shift diets toward plant-based foods, close the yield gap, and reduce food loss and waste," said Rafael Flor, director, Food, The Rockefeller Foundation. "This is paramount to meeting both the Paris Agreement on Climate Change and the United Nation's Sustainable Development Goal 12. Failing to reduce food loss and waste will make the challenge of achieving a sustainable food future significantly more difficult."

Food loss and waste highlights the inefficiencies in our food system. According to the FAO, nearly 1.3 billion tons of food — costing roughly \$940 billion — are either lost or wasted yearly, generating about 8% of annual global greenhouse gas emissions. Food is lost more at the consumption stage in higher-income countries, while more food is lost at handling and storage stages in lower-income regions.

The consortium will work collaboratively to develop a scalable approach for adoption of the YieldWise model and provide farmers with cost-effective strategies and technologies that link their crop supply to the market demand. This will allow farmers to gain more value from their crops and become more profitable, while also stimulating local economic growth and improving the resiliency of rural communities.

FFAR is contributing \$2.78 million for this three-year project, which partner organizations from around the world are matching for a \$5.56 million project budget. Participating institutions include The Rockefeller Foundation, Iowa State University, USA; University of Maryland, USA; Wageningen University and Research, Netherlands; Zamorano University, Honduras; University of São Paulo, Brazil; Stellenbosch University, South Africa; University of Nairobi, Kenya; Kwame Nkrumah University of Science and Technology, Ghana; and the Volcani Center, Israel.

Foundation for Food and Agriculture Research

The Foundation for Food and Agriculture Research (FFAR), a 501 (c) (3) nonprofit organization originally established by bipartisan Congressional support in the 2014 Farm Bill, builds unique partnerships to support innovative and actionable science addressing today's food and agriculture challenges. FFAR leverages public and private resources to increase the scientific and technological research, innovation, and partnerships critical to enhancing sustainable production of nutritious food for a growing global population. The FFAR Board of Directors is chaired by Mississippi State University President Mark Keenum, and includes ex officio representation from the U.S. Department of Agriculture and National Science Foundation.

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About The Rockefeller Foundation

The Rockefeller Foundation advances new frontiers of science, data, policy and innovation to solve global challenges related to health, food, power and economic mobility. As a science-driven philanthropy focused on building collaborative relationships with partners and grantees, the Foundation seeks to inspire and foster large-scale human impact that promotes the well-being of humanity throughout the world by identifying and accelerating breakthrough solutions, ideas and conversations.

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