Getting to Know AACCI: Shima Agah

“Getting to Know AACCI” is a series of member interviews capturing the unique stories of our many volunteers and their journeys with AACCI and in their careers.

Q: What is your current position and what are you currently working on?
A: I am a research and development bakery food scientist with Solvaira Specialties (previously Allied Blending & Ingredients). My job responsibilities include developing and commercializing new ingredients and products in cereal-based products; developing new ingredient technologies and formulation blends; evaluating and approving new and alternative raw materials; evaluating and testing new analytical methodologies for R&D and quality; and providing technical support for sales, quality, operations, and customer accounts.

Q: When and why did you first decide you wanted to work in cereal grain science?
A: During my food science undergraduate program, I worked as an intern in six different food industry fields, including dairy, meat, canning, sugar, beverage, and cereal grains. These internships gave me the chance to find my favorite field within food science and technology. Because cereal grains are staple foods in most countries, as a food scientist I preferred to be involved in the most important sources of people’s foods. Hence, I pursued M.S. and Ph.D. degrees in cereal grain science. I was a research assistant with the Food Science and Technology Department at Shiraz University, examining and analyzing bread and the physical and chemical properties of dough and flour using instruments such as texture analyzers, farinographs, and scanning electron microscopes. During my employment at Shiraz University, I developed and formulated a new product, “Flat Part-baked Bread,” which has been registered with the Invention Registration Office as Invention Registration Book No. 56855. The goal was to develop and optimize new strategies for reducing staling and improving the appearance and sensory properties of flat breads. My Ph.D. research at Texas A&M University was focused on determining the interactive effects of sorghum (cereal) and cowpea (legume) major flavonoids in mixtures and investigating how these effects enhance the bioactive properties of sorghum and cowpea combinations against ROS generation and inflammation. This work will produce an important step in public health, leading to enhanced utility of strategic food combinations in prevention of chronic disease and prediction of therapeutic benefits. The most exciting part of my career was working on my research, which was focused on determining the interactive effects of sorghum and cowpea major flavonoids in mixtures and investigating how they enhance the bioactive properties of sorghum and cowpea combinations against ROS generation and inflammation. This work will lead to enhanced utility of strategic food combinations in prevention of chronic disease and prediction of therapeutic benefits. The goal is to understand how consuming foods together (e.g., cereals and legumes) can favorably influence health outcomes beyond what can be observed by measuring individual components. This is especially important given that cereals and legumes are often consumed together and the health benefits derived from such diets cannot be easily explained by laboratory studies based on individual components. I believe my discoveries will contribute new knowledge on how to enhance the health benefits of grain products.

Q: When did you first join AACCI and why?
A: I joined AACCI in 2012, when I started my Ph.D. studies. I believed joining such a professional association would give me the chance to meet and communicate with people involved in all levels of the food industry and academia, which would give me a better understanding of research fields and current trends for cereal-based products. Moreover, attending scientific sessions and practical workshops regarding new aspects of cereal grains would improve my knowledge and open new perspectives to develop viable options for my future career.

Q: Why did you decide to volunteer with AACCI, and what committees/boards are you currently serving on?
A: I decided to volunteer with AACCI due to my interest in team work. Volunteering also gave me the opportunity to adapt to new environments and effectively communicate with all levels of the organization, including students and professionals. With this experience, I’m learning to work under pressure and handle multiple responsibilities while maintaining a positive attitude. After volunteering for one year, I have been involved in key leadership positions, including vice chair and chair of the AACCI Student Association. I am currently a member of the Nutrition and Milling & Baking Divisions.

Q: What have been the most exciting moments of your career or membership experience so far?
A: The most exciting part of my career was working on my research, which was focused on determining the interactive effects of sorghum and cowpea major flavonoids in mixtures and investigating how they enhance the bioactive properties of sorghum and cowpea combinations against ROS generation and inflammation. This work will lead to enhanced utility of strategic food combinations in prevention of chronic disease and prediction of therapeutic benefits. The goal is to understand how consuming foods together (e.g., cereals and legumes) can favorably influence health outcomes beyond what can be observed by measuring individual components. This is especially important given that cereals and legumes are often consumed together and the health benefits derived from such diets cannot be easily explained by laboratory studies based on individual components. I believe my discoveries will contribute new knowledge on how to enhance the health benefits of grain products.

Q: What have you learned from your membership in AACCI?
A: My membership in AACCI and becoming involved in such a professional food association have given me the opportunity to improve my knowledge of and communication with all levels of food industry organizations, resulting in a better perception of new and current trends for cereal-based products. Furthermore, participating in ingredient sponsored, baking challenges and sessions regarding new strategies for baked products has helped me to keep myself updated and boost my knowledge to develop viable options and products for my current and future career.

Q: What’s next for you?
A: As a research and development food scientist, I am interested in a career that allows me to apply my experience, scientific knowledge, and ability to handle multiple priorities in collaboration with experts in the food industry for proactive innovation and research into solving food processing challenges and developing viable options and products for businesses and consumers. As a team member, I would like to apply my leadership skills, coupled with reliability, to be a highly efficient team player and make a positive contribution to the team’s goal.
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