

Curriculum Vitae

Akinbode A. Adedeji Ph.D., CQE-ASQ

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CURRENT POSITION

Associate Professor (July 2020 – Date)

Biosystems and Agricultural Engineering Department, College of Agriculture and Environment,
University of Kentucky.

CURRENT RESEARCH PROGRAMS

1. Sustainable food processing: alternative grains and food waste value-addition – protein and starch property characterization, process development for value-added products: plant-based proteins, extruded product, milk alternatives, bourbon waste to high fiber foods, etc.
2. Non-destructive (hyperspectral and acoustic sensing) methods for food quality assessment and safety assurance.
3. Appropriate technology development for developing countries: post-harvest technology and food processing technology development, energy-efficient drying systems.

Specific Research Focus - Food Engineering: Underutilized grain (proso millet and hemp seed) value-addition (protein and starch content characterization, baking quality, malting quality and extrusion process development), food (bourbon) waste conversion to value-added products (high fiber products; protein extraction), abiotic stress effect on functionality change in food macromolecules and bioactive compounds accumulation, non-invasive characterization of foods using hyperspectral imaging and acoustic emission – machine learning approach, and non-thermal processing (pulsed UV light, cold plasma, and ultrasonication) of foods.

EDUCATION

- 2019 - 2022 Masters of Business Administration (MBA candidate). Member, Phi Sigma Pi
University of Kentucky, Lexington KY, U.S.A. CGPA: 3.9/4.0
- 2005 - 2010 Doctor of Philosophy in Bioresource (Food Process) Engineering
McGill University, Montreal, Canada. CGPA: 3.5/4.0
- 1998 - 1999 Master of Science (Ph.D. Grade*) in Food Technology
University of Ibadan, Oyo State, Nigeria.
- 1990 – 1995[#] Bachelor of Technology (*Hons and magna cum laude*) Food Engineering
Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

Hons – degree completed within minimum years allotted. *Magna cum laude* – top 5% of my class. * - Implies Ph.D. could be completed in 2 years based on the overall performance average. [#] - Degree completed in seven years because faculty labor unrest prolonged a 5-year program.

PROFESSIONAL EXPERIENCE

- **Associate Professor of Food Engineering.** (July 1, 2020 – present). Biosystems and Agricultural Engineering Department, University of Kentucky.

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- **Assistant Professor of Food Process Engineering.** (July 2014 – June 2020). Biosystems and Agricultural Engineering Department, University of Kentucky.
- **Research Associate.** (July 2013 to June 2014). Department of Bioresource Engineering, McGill University, Canada.
- **Post-Doctoral Research Associate.** (Sept. 2011 to June 2013). Grain Science and Industry Department, Kansas State University, Manhattan, KS, USA.
- **Post-Doctoral Fellow.** (July 2011 to August 2011). Genie des Procédés Agroalimentaire Département, Ecole Nationale Vétérinaire, Agroalimentaire et l'Alimentation (ONIRIS), Nantes, France.
- **Assistant Professor/Senior Lecturer.** (June 2010 – Jan 2012). Department of Food Science and Engineering, Ladoke Akintola University of Technology (LAUTECH), Ogbomoso, Nigeria.
- **Graduate Research Assistant.** (Sept. 2005-May 2010). Bioresource Engineering Department, McGill University, Canada.
- **Sessional Instructor.** (Fall 2008). Bioresource Engineering Department, McGill University, Canada.
- **Faculty [Graduate Assistant to Lecturer I]** (Oct. 1998 – May 2010). Department of Food Science and Engineering, LAUTECH, Ogbomoso, Nigeria.
- **Laboratory Assistant** (May 1989 – September 1990). Mycology Lab, National Horticultural Research Institute (NIHORT), Ibadan, Nigeria.

LICENSURE, CERTIFICATION & PROFESSIONAL TRAINING CERTIFICATES

- LeanCor **Lean Six Sigma Green Belt** Certification May 2021
- LeanCor **Fundamental of Project Management** Certification August 2019
- **Certified Quality Engineer (CQE).** American Society for Quality (ASQ). Certification #: 59722 (Dec 2012)
- **Registered Food Engineer.** Council for Regulation of Engineering in Nigeria (COREN). (2005 – Present). License #: R.11,709
- Advanced Food Safety Training Certification (TrainCan) (95%) 2013 - 2018
- Certificate in Basic Business Skills (MiniMBA), McGill Uni., CA Feb – June 2010

AWARDS, FELLOWSHIPS, AND RECOGNITIONS

Adedeji's Awards and Fellowship

1. John Clark Award, Canadian Society for Bioengineering (CSBE). A prestigious Food Engineering Award. CSBE-CIGR Virtual Conference, Quebec City, CA. May 11 – 14, 2021.
2. Fellow, James B. Beam Institute for Kentucky Spirits (2020 – present).
3. Associate Editor's Recognition - Transactions of ASABE Journal. December 2020
4. Wethington Award, University of Kentucky. May 2020, 2021.
5. "A Teacher that Made a Difference". University of Kentucky College of Education. April 18, 2020
6. Accepted into The Honor Society of Food Science and Technology *Phi Tau Sigma* (July 12, 2019 to date)
7. Outstanding Reviewer, Transactions of ASABE Journal - 2018
8. Outstanding Associate Editor, Transactions of ASABE Journal - 2016
9. Winner, "International Society of Food Engineers (ISFE) book of the month" award. March 2016.
10. Carnegie Fellowship, Carnegie African Diaspora Fellowship 2016

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11. Evangelina Villegas Excellence in Research Award for a Post-Doctoral Research Associate, Grain Science & Industry Dept. Kansas State University April 2013
12. Hugh Baily Award, Best Graduating Student in my college McGill Uni. 2009/2010
13. Runner up, Food Engineering Division paper competition IFT 2009
14. Graduate Student Award, , McGill University, CA Jan 2007 to May 2010
15. Alma Mater Travel Award, McGill University, CA Summer 2007 and 2009
16. Graduate student waiver award, McGill University, CA Fall 2006

Honors and Awards by my Students and Scholars

1. Lauren Doyle, Winner, 2021 Engineering Summer Undergraduate Research Fellowship (ESURF) Recipient (\$1,900), University of Kentucky.
2. Dr. Alfadhl Al Khaled, 2nd place and People's Choice awards at the 2020 UK GradResearch 3MT competition.
3. Felix Akharume (Ph.D. candidate), winner, Student Oral Presentation Competition (Processing System Technical Community) at ASABE AIM 2019 in Boston, MA.
4. 2nd place by Jonathan Lott and Kristian Bolden (High School Students), students of Carter G. Woodson Academy, Fayette County, KY. At the Kentucky State and District Science Fairs 2019.
5. Best Oral Presentation by Francis Agbali (MSc) at the 2nd International Conference on Food Safety and Security, Saint George Hotel and Conference Centre, Pretoria Republic of South Africa. October 17, 2018.
6. Outstanding MSc Student, Gamma Sigma Delta honor society of College of Agriculture at the University of Kentucky. Manjot Singh (MSc.), Graduated December 2016.

Recognition

1. I performed the ritual of call into the Order of the Engineers (Ring Ceremony) in the US at ASABE meeting 2015 in New Orleans.
2. On October 24, 2014, I performed the ritual of the calling of an Engineer in Canada with a presentation with an "Iron Ring" symbolic of commitment to the *Esprit de Corp* of engineering profession in Canada and everywhere I work.

RESEARCH GRANTS (Total: \$1, 918,273; UK: \$1,195,945) to date

(*Principal Investigator; ¹Federal, ²State, ³External/Private, ⁴International, ⁵University of Kentucky, ⁶Non-competitive)

CURRENT GRANTS (Total: \$1, 550,567; UK: \$865,739)

Nationally Competitive

1. Rachel Schendel, **Akinbode Adedeji**, and Tyler Barzee. Transforming Distillers' Spent Grains into Novel Food Ingredients with Prebiotic and Antioxidant Characteristics. USDA-NIFA Foundational and Applied Science Program, Novel Foods and Innovative Manufacturing Technologies-Priority Area (A1364). 08/01/2022 – 07/31/2024. **\$276,500**. (Type: Research). Effort in the Project: 15%.
2. Brenda Ortiz (Auburn), **Akinbode Adedeji** and others (Kati W. Migliaccio and Yiannis Ampatzidis (University of Florida); Alex Thomasson (Mississippi State University); Di Tian, Yin Bao, and Nedret Billor (Auburn University); Carlos Rodriguez Lopez (University of Kentucky), Susan Duncan (Virginia Tech University), Cranos Williams and Benjamin Reading (North Carolina State University), Thanos Gentim and Luciano Shiratsuchi (Louisiana State University), Tim Young and

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Becky Trout Fryxell (University of Tennessee), Gopal Kakani (Oklahoma State University), Gary Allen Thompson, Jeyamkondan Subbiah, and Neelendra Joshi (University of Arkansas), Joe Mari Maja (Clemson University), Juan A. Landivar and John C. Tracy (Texas A&M AgriLife Extension), Khaled M. Rasheed (University of Georgia)). Conference Grant from USDA NIFA - A1521 program area. Envisioning 2050 in the Southeast: AI-driven innovations in agriculture". **\$50,000**. 10/01/2021 – 09/30/2022

3. ^{1*}**Adedeji, A.A.**, Villanueva, R., and Donohue, K. Machine learning and sensor data fusion approach for nondestructive multivariate classification of codling moth infested apples. USDA-NIFA Foundational and Applied Science Program, Agricultural Engineering Priority Area (A1521). 05/01/2019 – 3/31/2022. **\$473,989**. (*Type: Research*). Effort In the Project: 65%
4. ¹Susan McKay (UMaine), Susan McKay (UMaine), Helen Joyner (Oregon State University), **Akinbode Adedeji** (University of Kentucky), Buddhi Lamsal (Iowa State University), Girish Ganjyal (Washington State University), Haibo Huang (Virginia Tech), Amy Blackstone (UMaine), and Laura Millay (UMaine). Enhancing Learning Outcomes in Food Engineering and Processing Courses for Non-Engineers Using Student-Centered Approaches. USDA Higher Education Challenge (HEC) Grants. Role: co-PI. 06/01/2019 – 06/30/2022. Amount **\$747,328** (as co-PI: \$75,000). (*Type: Research*). Submitted: May 8, 2018. Effort In the Project: 10%

Other (State, Industry, Private) (Nil)

Internal UK Grants (Nil)

5. ^{5*}**Adedeji A. A.** Development of machine learning models to predict proximate content of different cultivars proso millet nondestructively. Research Activity Award (RAA), College of Agriculture, Food and Environment (CAFÉ), University of Kentucky. PI. Amount: **\$2,750** (CAFÉ RAA, \$2k; BAE, \$750). 10/01/2021/ - 09/30/2022. (*Type: Research*). Effort contributed to the Project: 50%
6. College of Engineering Research Incentive Grant. Two \$250 totaling **\$500** for research support of two BAE juniors (Julia Loeb and Lauren Doyle) taking 395 (special problems in biosystems engineering) with me in fall 2021.

GRANTS PENDING

Nationally Competitive

1. **Akinbode Adedeji**, Nicholas Watson, Peng Wang, Ahmed Rady and Hezekiah Babatunde. DSFAS-AI: Machine learning Backed Nondestructive Detection of Allergens within the Food System. USDA-NIFA Foundational and Applied Science Program, Data Science for Food and Agricultural Systems (DSFAS) Priority Area (A1541). 06/01/2022 – 5/31/2025. **\$650,000**. (*Type: Research*). Effort in the Project: 45%.

Others (State, Industry, Private)

2. Hildebrand, D., Kachroo, P., and **Adedeji, A.A.** Differentiation of U.S. full-fat soybeans – characterization and processing. U.S. Soybean Export Council, USSEC. 01/10/2022 – 03/31/2022. **\$71,440**. (*Type: Research*). Effort in the Project: 6%.

Internal UK Grants

Nil

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GRANTS IN PREPARATION

Nationally Competitive (Nil)

1.

COMPLETED GRANTS (\$365,306)

Nationally Competitive

1. ^{1*}**Adedeji, A.A.** Harnessing wind energy to improve grain safety from aflatoxin. Amount: **\$14,956**. United States Environmental Protection Agency (EPA P3 Phase I). Role: PI. 11/01/2017 – 10/31/2018. (*Type: Research*). Effort in the Project: 100%
2. ^{1*}**Adedeji, A.A.** and Adedokun, S. T. Extrusion Processing for value-added production of food and feed. USDA-AFRI Foundational Program, FASE Equipment grant. Role: PI. Total Amount: \$153,626 (**\$50,000** from USDA; ²**\$25,000** from College of Agricultural, Food and Environmental Sciences, University of Kentucky; ²\$78,626 from my start-up). 2015-2016. (*Type: Equipment*). Effort in the Project: 90%.

Others (State, Industry, Private)

3. ⁵**Adedeji A. A.** Use of LED lights to optimize barley malt diastatic (fermentation) power and bioactive compounds for food production (bourbon, pastries, bread, ready-to-eat-expanded snack). Amount: **\$12,500** + \$12,500 cost-share by BAE department = **\$25,000**. Kentucky Small Grain Growers Association. Plus matching grant from Biosystems Engineering Department. Submitted: October 2019/November 2020. (*Type: Research*). Effort In the Project: 100%
4. ^{3,6}**Adedeji, A.A.** Impact of extrusion process in natural color extracts from sweet sorghum. February, 2019. A project conducted for Redleaf Co. KY. Amount: **\$2,880**. (*Type: Fee-for-Service/Research*). Effort in the Project: 50%
5. ^{3,6}**Adedeji, A.A.** and Adetola O. Thermo-physical characterization of new cassava cultivar products. Amount: **\$300**. 01/15/18 – 06/15/18. (*Type: Research*). Effort in the Project: 50%
6. ^{3,6}**Adedeji, A.A.** and Mohammad, Y. Nonthermal methods to tenderize goat meat. Amount: **\$800**. January – September 2017. (*Type: Research*). Effort in the Project: 60%
7. ^{3,4*}**Adedeji, A.A.** and Falade, K. Carnegie African Diaspora Fellowship Program (CADFP). Institute of International Education (IIE), United States International University-Africa (USIU-Africa), and Carnegie Corporation of New York (CCNY). Role: PI. May- June 2016. Amount: **\$10,000**. (*Type: Extension/Outreach*). Effort in the Project: 80%
8. ^{3*}**Adedeji, A.A.** Application of hyperspectral imaging system for detection of adulterants in foods. Burroughs Wellcome Fund (BWF) Grant. Role: PI. Amount: **\$6,760**. June 2015 – February 2016. (*Type: Training*). Effort in the Project: 100%

Internal UK Grants

9. Lauren Doyle and **Adedeji, A.A.** Engineering Summer Undergraduate Research Fellowship (ESURF). Awarded summer of 2021. Amount: **\$1,900**. Nondestructive Testing Apple Project.
10. ^{5*}**Adedeji A. A.** Barley malting power increase. Research Activity Award (RAA), College of Agriculture, Food and Environment (CAFÉ), University of Kentucky. PI. Amount: **\$6,000** (CAFÉ RAA, \$3k; BAE, \$3k). 10/01/2019/ - 09/30/2020. (*Type: Research*). Effort contributed to the Project: 50%
11. ⁵Felix Akharume and **Adedeji A. A.** Application of ultra-sonication in combination with pulsed ultraviolet light treatments on the microbiological, physical and chemical quality of non-dairy milk

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- from soybean-proso millet blend. Role: PI. Amount: **\$2,500**. Food Connection at UK Student Opportunity Grants. 07/01/2019/ - 06/30/2020. (*Type: Research*). Effort In the Project: 50%
12. ⁵**Adedeji A. A.** and Shi, J. Optimizing barley malt diastatic (fermentation) power and bioactive compounds for food (bourbon) production using LED lights. Role: PI. Amount: **\$2,500**. Food Connection at UK Student Opportunity Grants. 07/01/2019/ - 06/30/2020. (*Type: Research*). Effort in the Project: 70%.
 13. Shi, J. and **Adedeji, A.A.** Multi-shot micro-pyrolyzer to enable new research capacities, Multistate Research Support Competition, CAFE Research Office, **\$37,575** (\$10,000 awarded from CAFE and \$5,000 match from BAE department). 2018.
 14. ⁵**Adedeji, A.A.** Cost-share for service maintenance of Discovery Hybrid Rheometer in the Food Engineering Lab by Dr. Harmon's student from Animal Science department. Amount: **\$820**. October 29, 2018. Effort In the Project: 50%
 15. ⁵**Adedeji, A.A.**, and Shi, J. Acquisition of a digital droplet PCR for food-feed-fiber-energy-water related research, teaching and extension. College of Agriculture, Food and Environment (CAFÉ) Multistate Research (Equipment) Support Competition. Submitted: May 7, 2018. Role: PI. Amount: **\$87,643.60** (CAFÉ: \$77,643.69; Cost-Share: \$10,000). 05/2018/-09/2018. (*Type: Equipment*). Effort In the Project: 50%
 16. ⁵**Adedeji, A.A.**, and Woomey, J. Value-added use for wastes from bourbon and beer production in Kentucky using extrusion. Role: PI. Amount: **\$5,000**. University of Kentucky Food Connection Student Opportunity Grant. 07/01/2017/ - 06/30/2018. (*Type: Research*). Effort In the Project: 60%
 17. ⁵**Adedeji, A.A.**, Mains, M., Welch, M., and Pekarchik, K. Extrusion process for making healthy snacks: A 4-H Workshop. Amount: **\$950**. Charles E. Barnhart Fund for Excellence, CAFE University of Kentucky. Role: PI. 2016. (*Type: Extension/Outreach*). Effort In the Project: 90%
 18. ⁵**Adedeji, A.A.** and Giaretta, A. Optimizing deep-fat frying of sweet potato – effect of pretreatment and freezing rate. University of Kentucky Food Connection. Role: PI. Amount - **\$3,995**. May 2015 – June 2016. (*Type: Research*). Effort In the Project: 60%
 19. ⁵**Adedeji, A.A.** eLearning Innovation + Design Lab. Amount: **\$4,000**. Center for Education, Learning and Teaching (CELT) University of Kentucky. May 2015 – April 2016. (*Type: Training*). Effort In the Project: 100%

GRANTS NOT FUNDED: PI (27) or Co-PI (12) of 37 grant proposals submitted (since 2014) that were not funded for a total of 24.67 million dollars.

HATCH/MULTI-STATE GRANT

1. ⁶S 1090. AI in Agroecosystems: Big Data and Smart Technology-Driven Sustainable Production. October 2021 – September 2026. **Adedeji, A.A:** Principal Investigator.
2. ⁶NC 1023. Engineering for food safety and quality. KAES KY005042. October 2020 – September 2025. **Adedeji, A.A:** Principal Investigator.
3. ⁶S1084: Industrial Hemp Production, Processing, and Marketing in the U.S. 2018-2022. **Adedeji, A.A:** Participant, member of the proposal development team: Principal Investigator.
4. ⁶NC 1023. Engineering for food safety and quality. KAES KY005042. October 2015 – September 2020. **Adedeji, A.A:** Principal Investigator. Completed.

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Disclosure of Invention and Patent

1. Photon-induced accelerated enzymes and bioactive compounds accumulation in barley during malting. Lead Inventor: Adedeji A.A.; co-inventor: Al Khaled Al Fadhl. **Provisional Patent** filed July 12, 2021. Application #: 63/220,724
2. Vibro-Acoustic Sensing of Apple Infestation. **Full Patent** filed: July 12, 2021. Application #: 63/220,871.
3. Wind turbine for forced air generation to enhance drying rate. Filing – May 20, 2018. Conclusion – Released to PI.
4. Detection and classification of codling moth infested apples using inherent acoustic emission signal. Filing August, 2017. Conclusion – Released to PI.

PUBLICATIONS

Peer Reviewed Journal and Extension Articles, and Book Chapters: Pre-2014 (**22**), 2014 to 2019 (**20**), 2019 to date (**17**), **62 in total**.

(*Corresponding author; underlined – publication from supervised undergraduate and graduate students, visiting scientists and postdoctoral researchers; JIF – Journal impact factor; JC-Journal citation count as of November 2021 [1,282]). [Google Scholar Citations](#); [Researchgate Page](#)

Book Chapters (5)

62. **Adedeji, A.A.**, Ekramirad, N., Khaled, Y.A., and Parrish, C.A. (2022). Acoustic emission and near-infrared imaging for nondestructive apple quality detection and classification. *In* Nondestructive Quality Assessment Techniques for Fresh Fruits and vegetables (Eds. P.B. Pathare and M.S. Rahman). Springer. Accepted October, 2021.
61. Oyeyinka, S.A., Kayitesi, E.K., Diarra, S.S., and **Adedeji, A.A.** (2021). Bambara groundnut starch. *In* Food and Industrial Applications of Bambara Groundnut (*Vigna subterranea*). Springer Nature. (Eds. S.A. Oyeyinka and B.I.O. Adeomowaye). ISBN 978-3-030-73920-1. Published August 2021.
60. Kehinde, B.A., Panghal, A., Kumar, S., **Adedeji, A.A.**, Garg, M.K., and Chhikara, N. (2020). Nanocapsules as potential antimicrobial agents in food. CRC Press – Taylor and Francis Group. Published Dec 2020.
59. **Adedeji, A.A.** and Ngadi, M.O. (2011). Physicochemical changes of foods during frying: *In* Novel evaluation techniques and effect of process parameters. *In* (Devahastin, S. eds.). Published by Taylor & Francis group. Chapter 2. Pp 41 – 67. Print ISBN: 978-1-4200-8241-8. eBook ISBN: 978-1-4200-8242-5. **JC: 3**
58. Ngadi, M.O., **Adedeji, A.A.** and Kassama, L. (2009). Microstructural changes during frying of foods. *In* Advances in Deep Fat Frying of Foods (Sahin, S Eds.) Published by Taylor & Francis Group. Chapter 8. Pp 169 – 200. Print ISBN-13: 978-1420055580; eBook ISBN 9780429138812 [DOI](#). **JC: 20**

Peer Reviewed Extension Publication (2)

57. Akharume, F., Vijayakumar, P., Montross M., and ***Adedeji, A.A.** (2018). *Dehydrating Fruits and Vegetables for Home Use*. CCD-PFS-3. Lexington, KY: Center for Crop Diversification, University of Kentucky College of Agriculture, Food and Environment. Available: <http://www.uky.edu/ccd/foodsafety/drying-home>. **Role:** Idea modification and editing.
56. Vijayakumar, P. P. and **Adedeji, A.A.** (2017). *Measuring the pH of Food Products*. Published by University of Kentucky – College Agriculture, Food and Environment Cooperative Extension Service. *UK Extension Publication*. ID- 246. **Role:** Idea formulation, writing and editing.

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Peer-Reviewed Publications (55)

2021

55. Rady, A., Watson, N., and ***Adedeji, A.A.** (2021). Feasibility of utilizing color imaging and machine learning for adulteration detection in minced meat. *Journal of Agriculture and Food Research*. Accepted December 2, 2021. **JIF:1.59; JC: nil**
54. Watson, N.J., Bowler, A.L., Rady, A., Fisher, O.J., Simeone, A., Escrig, J., Woolley, E. and **Adedeji, A.A.** (2021). Intelligent sensors for sustainable food and drink manufacturing. *Frontiers in Sustainable Food Systems*. Accepted October 1st, 2021. **CiteScore: 2.4. JC: nil**
53. Ekramirad, N., Al Khaled, Y.A., Donohue, K., Villanueva, R., Parrish, C.A., and ***Adedeji, A.A.** (2021). Development of pattern recognition and classification models for the detection of vibro-acoustic emissions from codling moth infested apples. *Postharvest Biology and Technology* 181, 111633 **DOI. JIF: 5.537 – Q1; CiteScore: 7.9; JC: nil**
52. Al Khaled, Y.A., Parrish, C. and ***Adedeji, A.A.** (2021). Emerging non-destructive approaches for meat quality and safety evaluation. *Comprehensive Reviews in Food Science and Food Safety*. 1–26 **DOI. JIF: 12.811 - Q1; JC: 5.** Accepted May 11, 2021
51. Pure, A.E., Yarmand, M.S., Farhoodi, M., and **Adedeji, A.A.** Microwave treatment to modify textural properties of high protein gel, applicable for as dysphagia food. *Journal of Texture Studies*. **DOI. JIF: 3.223 – Q2; JC: 1.** Accepted May 6, 2021
50. Akharume, F., Aluko, R., and ***Adedeji, A.A.** (2021). Modification of plant proteins for improved functionality: A Review. *Comprehensive Reviews in Food Science and Food Safety* 20:198-224. **DOI. JIF: 12.811 - Q1; JC: 21**
49. Woomer, J and ***Adedeji, A.A.** (2021). Current applications of gluten-free grains - A review. *Critical Reviews in Food Science and Nutrition* 61(1), 14 – 24. Accepted: January 7, 2020. **DOI. JIF: 11.176 - Q1; JC: 17**

2020

48. Adeyanju, J.A., Olajide, J.O., Oke, E.O., and **Adedeji, A.A.** (2020). Mathematical modelling and numerical simulation of mass transfer during deep-fat frying of plantain (*Musa paradisiacal* aab) chips (*ipekere*). *Acta Universitatis Cibiniensis. Series E: Food Technology* 24(2), 247 - 256. **DOI. JIF: 2.00; JC: 1**
47. Rahman, M.F., Iqbal, A., Hashem, M.A. and **Adedeji, A.A.** (2020). Quality assessment of beef using computer vision technology. *Food Science of Animal Resources* 40(6), 896-907. **DOI. JIF: 2.622 – Q3; JC: 2**
46. Ai, B., Li, W., Woomer, J., Li, M., Pu, Y., Sheng, Z., Zheng, L., **Adedeji, A.A.**, Ragauskas, A.J., Shi, J. (2020). Natural deep eutectic solvents mediated extrusion for continuous high-solid pretreatment of lignocellulosic biomass. *Green Chemistry* 22, 6372-6383. **DOI. JIF: 10.182 – Q1; JC: 16**
45. ***Adedeji, A.A.**, Ekramirad, N., Rady, A., Hamidisepehr, A., Donohue, K., Villanueva, R., Parrish, C.A., and Li, M. (2020). Non-destructive technologies for detecting insect infestation in fruits and vegetables under postharvest conditions: A critical review. *Foods* 9(7), 927. **DOI. JIF: 4.350 – Q1; JC: 12**
44. Rady, A., and ***Adedeji, A.A.** (2020). Application of hyperspectral imaging and machine learning methods to detect and quantify adulterants in minced meats. *Food Analytical Methods* 13(4), 970–981. **DOI. JIF: 3.366 – Q2; JC: 15**
43. ***Adedeji, A. A.** (2020). Challenges and discovery of best practices for teaching engineering to food science majors – my experience over my first five years at the University of Kentucky. *Journal of*

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Food Science Education – Letter to the Editor 19(1), 7-9. Accepted October 31st, 2019. [DOI](#). JIF: 0.51 – Q4; JC: 1.

42. Akharume, F., Santra, D and *Adedeji, A.A. (2020). Physicochemical and functional properties of proso millet storage protein fractions. *Food Hydrocolloids* 108, 105497. [DOI](#). JIF: 9.147 – Q1; JC: 10

2019

41. Woomer, J., Singh, M., Vijayakumar, P.P. and *Adedeji, A.A. (2019). Physical properties and organoleptic evaluation to determine consumer acceptance of millet based gluten-free bread from proso millet. *British Food Journal* 122(2), 547-560. [DOI](#). JIF: 2.102 – Q3; JC: 3.

Pre-tenure Publications (40)

40. Rahimi, J., Adedeji, A.A. and Ngadi, M.O. (2019). The influence of batter formulation and pre-drying time on inter-particle space fractions of a coated meat analog. *Journal of Texture Studies* 50(6), 474–481. [DOI](#). JIF: 1.902 – Q2; JC: 1.
39. Rady, A, Giaretta, A., Ruwaya, M., Dev, S., and *Adedeji A.A. (2019). Pretreatments and freezing rates effect on physical, nutritional and microstructural properties of fried sweet potato. *Transactions of ASABE* 62(1), 1-15. [DOI](#). JIF: 1.118; JC: 4.
38. Chambers, E., Maughan C., Padmanabhan, N., Alavi, S. and Adedeji, A. (2019). Sensory Analysis of 20% solids fortified blended porridge. *British Food Journal* 121(2), 633 - 641. [DOI](#). JIF: 2.102 – Q3; JC: 4.

2018

37. Adeyanju, J.A., Olajide, J.O., Oke, E. O., and Adedeji, A. A. (2018). Modelling of moisture loss and oil uptake during deep-fat frying of plantain (Dodo). *Arid Zone Journal of Engineering, Technology and Environment* 14(SPi4), 51-61. e-ISSN 2545-5818. [URL](#). JIF: nil.
36. Rady, A., Sugiharto, S., and *Adedeji, A.A. (2018). Evaluation of carrot quality using visible-near infrared spectroscopy and multivariate analysis. *Journal of Food Research* 7(4), 80-93. [DOI](#). Accepted in May 2018. JIF: 0.77 – Q4; JC: 4.
35. Singh, M., *Adedeji, A.A., and Santra, D. (2018). Physico-chemical and functional properties of nine proso millet cultivars. *Transaction of ASABE* 61(3), 1165-1174. [DOI](#). JIF: 1.118; JC: 4
34. Li, M, Ekramirad, N., Rady, A., and *Adedeji, A.A. (2018). Application of acoustic emission and machine learning to detect codling moth infested apples. *Transaction of ASABE*, 61(3), 1157-1164. [DOI](#). JIF: 1.118; JC: 19
33. Adedeji, A.A., and Ngadi, M. (2018). Impact of freezing method, frying and storage on fat absorption kinetics and structural changes of parfried potato. *Journal of Food Engineering* 218, 24 – 32. [DOI](#). JIF: 3.625 – Q1; JC: 19
32. Rady, A., and *Adedeji, A.A. (2018). Assessing different processed meat adulterants using visible/near-infrared spectroscopy. *Meat Science* 136, 59 - 67. [DOI](#). JIF: 3.483 –Q1; JC: 53

2017

31. Zhu, L., Adedeji, A.A., and Alavi, S. (2017). Effect of germination and extrusion on physicochemical properties and nutritional qualities of extrudates and tortilla from wheat. *Journal of Food Science* 82(8), 1867-1875. [DOI](#). JIF: 2.018 – Q2; JC: 11
30. Ekramirad, N., Rady, A., *Adedeji, A.A., and Alimardani, R. (2017). Application of hyperspectral imaging and acoustic emission techniques for apple quality prediction. *Transactions of ASABE* 60(4), 1391-1401. [DOI](#). JIF: 0.975; JC: 11

Curriculum Vitae

29. [Rady, A.](#), [Ekramirad, N.](#), *[Adedeji, A.A.](#), Li, M., and Alimardani, R. (2017). Hyperspectral imaging for detection of codling moth infestation in GoldRush apples. *Postharvest Biology and Technology* 129, 37 - 44. [DOI](#). JIF: 3.112 – Q1; JC: 42
28. [Singh, M.](#), and *[Adedeji, A.A.](#) (2017). Characterization of hydrothermal and acid modified proso millet starch. *LWT – Food Science and Technology* 79, 21 – 26. [ROI](#). JIF: 3.129 – Q1; JC: 36
27. [Adedeji, A.A.](#), Joseph, M.V., Plattner, B and Alavi, S. (2017). Physicochemical and functional properties of extruded sorghum based bean analog. *Journal of Food Process Engineering* 40(2). [DOI](#). JIF: 1.955 – Q3; JC: 1
26. [Adedeji, A.A.](#), Suhr, E., Bhadriraju, S. and Alavi, S. (2017). Drying characteristics of bean analog - a sorghum based extruded product. *Journal of Food Processing and Preservation* 41(2). [DOI](#). JIF: 1.51 – Q3; JC: 7
25. [Adedeji, A.A.](#), Zhou, Y, Fang, Y., Davis, A., Fahrenholz, A. and Alavi, S. (2017). Utilization of sorghum ingredients and its co-product in aquatic animal feed production. *Aquaculture Research* 48(3), 883–898. [DOI](#). JIF: 1.475; JC: 16

2016

24. [Adeyanju, J.A.](#), Olajide, J.O., and [Adedeji, A.A.](#) (2016). Development of optimum operating conditions for quality attributes in deep-fat frying of dodo produced from plantain using response surface methodology. *Food and Nutrition Sciences* 7(14), 1423 – 1433. [DOI](#). JIF: 1.40 – Q3; JC: 5
23. [Adeyanju, J.A.](#), Olajide, J.O., and [Adedeji, A.A.](#) (2016). Optimisation of deep-fat frying of plantain chips (*Ipekere*) using response surface methodology. *Journal of Food Processing & Technology* 7(5), 584 – 589. [DOI](#). JIF: 2.30; JC: 12
22. [Ekramirad, N.](#), *[Adedeji, A.A.](#) and Alimardani, R. (2016). A review of non-destructive methods for detection of insect infestation in fruits and vegetables. *Innovation in Food Research* 2(1), 6 – 12. [URL](#). JIF: Not Available; JC: 13

2014 - 2015

21. [Adedeji, A.A.](#), Alakali, J., & Ngadi, M.O. (2014). Characterization of thermophysical properties of *Afzelia* (*Afzelia africana*) seed. *American Journal of Nutrition and Food Science* 1(3), 57-63. [DOI](#). JIF: 1.22; JC: nil.

Peer-Reviewed Publications, Pre-2014 (20)

2012 - 2013

20. Abioye, A.O., Abioye, V.F., Ade-Omowaye, B.I.O. and [Adedeji, A.A.](#) (2013). Kinetic modeling of ascorbic acid loss in baobab drink at pasteurization and storage temperatures. *Journal of Environmental Science, Toxicology and Food Technology* 7(2), 17-23. e-ISSN: 2319-2402. JC: 13
19. Rahimi, J., Singh, A., Adewale, P.O., [Adedeji, A.A.](#), Ngadi, M.O., and Raghavan, V. (2013). Effect of carboxymethyl cellulose coating and osmotic dehydration on freeze drying kinetics of apple slices. *Foods* 2(2), 170-182. [DOI](#). JC: 14
18. [Adedeji, A.A.](#), Alakali, J., Adewale, P.O., and Ngadi, M.O. (2012). Thermophysical properties of *Deterium microcapum* seed flour. *LWT- Food Science and Technology* 47(2), 233 - 237. [DOI](#). JC: 5

2011

Curriculum Vitae

17. Akanmu, O.A. and **Adedeji, A.A.** (2011). Physicochemical properties and drying characteristics of pre-treated okra slices. *Nigerian Food Journal* 29(1), 46 – 51. eISSN: 0189-7241. [DOI](#). **JC: nil**
16. **Adedeji, A.A.**, and Ngadi, M.O. (2011) Porosity determination for coatings of deep-fat fried chicken nuggets using pycnometer. *International Journal of Food Science and Technology* 46(6), 1266–1275. [DOI](#). **JC: 25**
15. **Adedeji, A.A.**, Lui, L., and Ngadi, M. O. (2011). Microstructural evaluation of deep-fat fried chicken nugget batter coating using confocal laser scanning microscopy. *Journal of Food Engineering* 102(1), 49 - 57. [DOI](#). **JC: 47**
14. **Adedeji, A.A.**, and Ngadi, M.O. (2011). Microstructural properties of deep-fat fried chicken nuggets coated with different batter formulation. *International Journal of Food Properties* 14(1), 68 - 83. [DOI](#). **JC: 36**
13. **Adedeji, A.A.**, and Ngadi, M.O. (2011). Microstructural characterization of deep-fat fried breaded chicken nuggets using X-ray micro-computed tomography. *Journal of Food Process Engineering*, 34(6), 2205 - 2219. [DOI](#). **JC: 22**

2010

12. **Adedeji A.A.**, and Ngadi, M.O. (2010). Characterization of pore properties of deep-fat fried chicken nuggets breading coating using mercury intrusion porosimetry technique. *International Journal of Food Science and Technology* 45(11), 2219 - 2226. [DOI](#). **JC: 11**
11. Wang, Y., Ngadi, M.O., and **Adedeji, A.A.** (2010). Shrinkage of chicken nuggets during deep-fat frying. *International Journal of Food Properties* 13(2), 404 – 410. [DOI](#). **JC: 16**

2009

10. Ngadi, M.O., Wang, Y., **Adedeji, A.A.**, and Raghavan, G.S.V. (2009). Effect of microwave pretreatment on mass transfer during deep-fat frying of chicken nugget. *LWT*. 42, 438-440. [DOI](#). **JC: 66**
9. **Adedeji, A.A.**, and Ngadi, M.O. (2009). 3-D Imaging of deep-fat fried chicken nuggets breading coating using X-ray micro-CT. *International Journal of Food Engineering* 5(4), Art. 11. [DOI](#). **JC: 26**
8. **Adedeji, A.A.**, Ngadi, M.O., and Raghavan, G. S. V. (2009). Kinetics of mass transfer in microwave precooked and deep-fat fried chicken nuggets. *Journal of Food Engineering* 91(1), 146-153. [DOI](#). **JC: 119**
7. Gachovska, T. K., **Adedeji, A.A.**, and Ngadi, M.O. (2009). Influence of pulsed electric field energy on the damage degree in alfalfa tissue. *Journal of Food Engineering* 95(4), 558 – 563. [DOI](#). **JC: 31**

2008

6. **Adedeji, A.A.**, Gachovska, T.K., Ngadi M.O., and Raghavan, G.S.V. (2008). Effect of pretreatments on drying characteristics of okra. *Drying Technology* 26(10), 1251 – 1256. [DOI](#). **JC: 115**
5. Gachovska, T.K., **Adedeji, A.A.**, Ngadi, M., and Raghavan, G.V.S. (2008). Drying characteristics of pulsed electric field treated carrot. *Drying technology* 26(10), 1244 – 1250. [DOI](#). **JC: 49**
4. Dev, R.S.S., Padmini, T., **Adedeji, A.A.**, Raghavan, G.S.V., and Garipey. Y. (2008). A comparative study on the effect of chemical, microwave, and pulsed electric pretreatments on convective drying and quality of raisins. *Drying Technology* 26(10), 1238 – 1243. [DOI](#). **JC: 61**

2003 - 2007

Curriculum Vitae

3. Olajide, J.O., **Adedeji, A.A.**, Ade-Omowaye., B.I.O. Otunola, E.T. and J.A. Adejuyitan. (2006). Potentials of high intensity electric field pulses (HELP) to food processors in developing countries. *Nutrition and Food Science* 36(4), 248 – 258. [DOI](#). **JC: 5**
2. Oyelade, O.J., **Adedeji, A.A.**, Owonikoko, A., and Akande, E.A. (2003). Design and construction of a manually operated double face meat mincer. *Journal of Science, Engineering and Technology* 11(3), 5792-5804. **JC: 1**
1. Falade, K.O., **Adedeji, A.A.** and Akingbala, J.O. (2003). Effect of soybean substitution for cowpea on physical, compositional, sensory and sorption properties of *Akara* Ogbomoso. *European Food Research and Technology* 217(6), 492-497. [DOI](#). **JC: 23**

Book Chapters (5)

1. **Adedeji, A.A.**, Ekramirad, N., Khaled, Y.A., and Parrish, C.A. (2021). Acoustic emission and near-infra red imaging for nondestructive apple quality detection and classification. *In* Nondestructive Quality Assessment Techniques for Fresh Fruits and vegetables (Eds. P.B. Pathare and M.S. Rahman). Springer. Submitted July 7, 2021.
2. Oyeyinka, S.A., Kayitesi, E.K., Diarra, S.S., and **Adedeji, A.A.** (2021). Bambara groundnut starch. *In* Food and Industrial Applications of Bambara Groundnut (*Vigna subterranea*). Springer Nature. (Eds. S.A. Oyeyinka and B.I.O. Adeomowaye). ISBN 978-3-030-73920-1. Published August 2021.
3. Kehinde, B.A., Panghal, A., Kumar, S., **Adedeji, A.A.**, Garg, M.K., and Chhikara, N. (2020). Nanocapsules as potential antimicrobial agents in food. CRC Press – Taylor and Francis Group. Published Dec 2020.
4. **Adedeji, A.A.** and Ngadi, M.O. (2011). Physicochemical changes of foods during frying: *In* Novel evaluation techniques and effect of process parameters. *In* (Devahastin, S. eds.). Published by Taylor & Francis group. Chapter 2. Pp 41 – 67. Print ISBN: 978-1-4200-8241-8. eBook ISBN: 978-1-4200-8242-5. **JC: 3**
5. Ngadi, M.O., **Adedeji, A.A.** and Kassama, L. (2009). Microstructural changes during frying of foods. *In* Advances in Deep Fat Frying of Foods (Sahin, S Eds.) Published by Taylor & Francis Group. Chapter 8. Pp 169 – 200. Print ISBN-13: 978-1420055580; eBook ISBN 9780429138812 [DOI](#). **JC: 20**

Peer Reviewed Extension Publication

1. Akharume, E., Vijayakumar, P., Montross M., and **Adedeji, A.A.** (2018). *Dehydrating Fruits and Vegetables for Home Use*. CCD-PFS-3. Lexington, KY: Center for Crop Diversification, University of Kentucky College of Agriculture, Food and Environment. Available: <http://www.uky.edu/ccd/foodsafety/drying-home>. **Role:** Idea modification and editing.
2. Vijayakumar, P. P. and **Adedeji, A.A.** (2017). *Measuring the pH of Food Products*. Published by University of Kentucky – College Agriculture, Food and Environment Cooperative Extension Service. *UK Extension Publication*. ID- 246. **Role:** Idea formulation, writing and editing.

Papers Submitted for Peer Review Publication

1. Ekramirad, N., Khaled, Y.A., Doyle, L., Loeb, J., Donohue, K.D., Villanueva, R., and ***Adedeji, A.A.** Nondestructive detection of codling moth infestation in apples using pixel-based NIR hyperspectral imaging with machine learning and feature selection. *Foods Journal*. Submitted November 14, 2021.
2. Parrish, C.A., Ekramirad, N., Khaled, Y.A., Eberhart, P.S., Donohue, K., Villanueva, R., and ***Adedeji, A.A.** Effects of noise reference integration on deep learning models for codling moth infestation detection. *IEEE Transactions on Instrumentation and Measurement*. September 12, 2021
3. Akharume, E., Ashutosh Singh, Konstantin Korotkov, and ***Akinbode Adedeji**. *In silico Analysis and Molecular Dynamic Modeling of Three-dimensional Structure of Glutelin type-B 5-like Proteins*

Curriculum Vitae

from Proso Millet: Effects of Temperature and Electric Field. *Food Chemistry: Molecular Sciences Summer 2021*

4. Ayinde, F.A., Henshaw, F.O., Eromosele, C.O., Bolaji, T.O., Alavi, S. and **Adedeji, A.A.** Effect of extrusion variables on some chemical and functional properties of thermo-extrudates from selected varieties of sesame. *Scientific African*. July 17, 2021.
5. Akharume, F. and ***Adedeji, A.A.** Effects of high-power ultrasound on the in-vitro digestibility, rheological and functional properties of proso millet prolamin and glutelin protein fractions. *Food Research International*. September 2021.
6. ***Adedeji, A.A.** and Vijayakumar, P.P. The propensity of SARS-CoV-2 virus spread through the agricultural produce supply chain. *Food Protection Trends*. Submitted November 21, 2021.
7. ***Adedeji, A.A.** Value-added agricultural by-products for food sustainability. *Transactions of ASABE – Special Issue on Circular Agriculture*. Submitted August 3rd, 2021.
8. Akharume, E., Chaton, C., Korotkov, K. and ***Adedeji, A.A.** Cloning, Expression, and Purification of His-tagged Glutelin type-B 5-like Protein Isoform from Proso Millet in *Escherichia coli*. *Transaction of ASABE*.
9. Adedokun, T. O., Matemu, ***Adedeji. A.A.**, Hoeglenger, O., and Mlyuka, E. Evaluation of functional attributes and storage stability of novel beverages from a blend of Baobab, Pineapple, and Black-plum fruits. *Heliyon*. July 2021.

Papers under Internal Review for Peer Review Publication

1. Adetola, O.A., Olalusi, A.P., and ***Adedeji, A.A.** Optimization of formulation and extrusion processing conditions for the development of pasta from wheat and cassava composite flour. *LWT*
2. Zhu, L., Snider, L., Vu, T. H., Reddy, D.G.P., Herald, T., Al Khaled, Y.A., **Adedeji, A.A.**, Alavi, S. Effect of whey protein concentrate on rheology of gluten-free doughs and their performance in cookie applications. *Journal of Food Science and Wellness*.
3. Okeke, A., Rady, A., Watson, N., Kim, D-Y., and ***Adedeji, A.A.** Evaluation of Fourier Transform Infrared (FTIR) Spectroscopy Method Coupled with Machine Learning Approaches for Detection and Quantification of Cross-Contact of Gluten-Rich and Gluten-Free Flours. *Journal of Food Engineering*.
4. Okeke, A., Rady, A., Watson, N., Kyomuhangi, A., and ***Adedeji, A.A.** Fourier Transform Infrared (FTIR) Spectroscopy with Machine Learning Approaches for Detection and Quantification of Wheat Flour Contamination in a Non-Gluten Bread. *Biosystems Engineering*
5. ***Adedeji, A.A.**, Khamis, M., Singh, M., and Woomer, J. Rheological, microstructural and baking properties of proso millet gluten free formulations. *Journal of Food Engineering*. Spring 2021.
6. Adetola, O. A., Olukunle, O. J., and ***Adedeji, A. A.** Hydrothermal and acid modification of different types of cassava (*Manihot esculenta*) starch. *Food Hydrocolloids/Food Chemistry*.

Papers Being Prepared

1. Rady, A., and ***Adedeji, A.A.** Sensor data fusion for minced meat authentication. *Journal of Food engineering*. Fall 2021.
2. Woomer, J. and ***Adedeji, A.A.** Impact of spent grain type, particle size and inclusion levels on physico-chemical properties of high fiber expanded extruded proso millet. Spring 2021.
3. Felix Akharume, Youling L. Xiong, and ***Akinbode Adedeji**. Effects of transglutaminase in product formulation on physico-textural properties of protein rich extruded snacks. Summer 2021.
4. Felix Akharume, Ashutosh Singh, Konstantin Korotkov, and ***Akinbode Adedeji**. *In-silico* modeling of glutelin type-b 5-like from proso millet seed storage protein: effects of temperature and pressure. Summer 2021

Curriculum Vitae

5. Alimardani, R. and ***Adedeji, A. A.** Internet of Things Application in the Food Industry – A Review. Summer 2021.
6. Akharume, F., Woomer, J. and ***Adedeji, A.A.** Physico-functional and microstructural properties of extruded proso millet (X-ray micro-CT) – Fall 2021
7. ***Adedeji, A.A.** and Singh, M. Flow behavior and baking qualities of GF bread, the effect of millet cultivar. *LWT*. Summer/Fall 2021.
8. ***Adedeji, A. A.** Food Analog – A novel nutrient delivery mechanism (Review Paper). *Food Engineering Review*. Spring 2022.

CONFERENCE PAPERS AND PRESENTATIONS (85)

Non-Peer Reviewed Papers in Conference Proceedings (30 in total; 2014 - Date (14))

1. Ekramirad, N., Al Khaled, Y.A., Donohue, K., Villanueva, R., Parrish, C.A., and Adedeji, A. A. (2021). NIR Hyperspectral Imaging with machine learning to detect and classify codling moth infestation in apples. A paper in the proceeding and presented (poster) during On-Demand Simulated Live Session at 2021 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 12 – 15, 2021. Paper #: 2100066.
2. Al Khaled, Y.A., Ekramirad, N., Donohue, K., Doyle, L., Villanueva, R., Parrish, C.A., and Adedeji, A. A. (2021). Effects of low-intensity heat stimulation on ultrasonic acoustic emission detection of codling moth larvae activities in apples (On paper: [Vibro-acoustic emission and heat stimulation effect on the detection of codling moth larvae in apples](#)). A paper in the proceeding and presented (poster) during On-Demand Simulated Live Session at 2021 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 12 – 15, 2021. Paper #: 2100070
3. Olatunde, S.O., Olaniyi, R.N., **Adedeji A.A.**, and Akande, I.A. (2020). Effect of different drying methods on proximate and vitamin C composition of okra. Presented at the 44th Annual conference of the Nigerian Institute of Food Science and Technology (NIFST) held at the D'Podium International Event Centre, Ikeja, Lagos State, between 14th and 15th October, 2020. Reference #: AB-059. Oral
4. Akharume, F., Korotkov, K, and **Adedeji A.A.** (2020). Characterization of recombinant glutelin Type-B 5-like protein from proso millet. A paper in the proceeding and presented during the PRS Community Showcase Live Session at 2020 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 13 – 15, 2020. Paper #: 2000272. Oral.
5. Ekramirad, N., Donohue, K., Villanueva, R., Parrish, C.A., and **Adedeji, A. A.** Low frequency signal patterns for codling moth larvae activity in apples. A paper in the proceeding and presented (poster) during On-Demand Q&A oral session at 2020 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 13 – 15, 2020. Paper #: 2001028. Oral. **Citation: 5.**
6. Adetola, O.A., Olukunle, O.J., and **Adedeji, A.A.** (2020). Effect of Extrusion Conditions on Pasta Quality from Wheat Flour and Cassava starch. A paper in the proceeding and presented (poster) during On-Demand Q&A oral session at 2020 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 13 – 15, 2020. Paper #: 2000202. e-Poster
7. Adetola, O.A., Olalusi, A.P, and **Adedeji, A.A.** (2020). Physicochemical, pasting and thermal properties of different types of starch. A paper in the proceeding and presented (poster) during On-Demand Q&A oral session at 2020 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 13 – 15, 2020. Paper #: 2000201. e-Poster

Curriculum Vitae

8. Okeke, A.G., and **Adedeji, A.A.** (2020). Design of light-emitting diodes (LEDs) powered chamber for study of optimization of barley malt diastatic (fermentation) power and bioactive compounds for food production. A paper in the proceeding and presented (poster) during On-Demand Q&A poster session at 2020 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 13 – 15, 2020. Paper #: 2000206. e-Poster
9. Okeke, A.G., and **Adedeji, A.A.** (2020). Fourier-Transform Infrared (FTIR) spectroscopy and machine learning methods to detect and quantify cross-contact of gluten-rich and gluten-free flours. A paper in the proceeding and presented (oral) at 2020 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 13 – 15, 2020. Paper #: 2000207. Oral
10. Akharume, F., Xiong, Y.L., and **Adedeji A.A.** (2019). Effects of Transglutaminase in product formulation on physico-textural properties of protein rich extruded snacks. A paper presented (oral) at 2019 Annual International Meeting of American Society of Agricultural and Biological (ASABE) held in Boston, MA from July 7 – 10, 2019. Paper #: 1900306. Oral. **Citation: 1**
11. Adetola, O.A., Olukunle, O.J., and **Adedeji A.A.** (2019). Acid and hydrothermal modification of different types of cassava (*Manihot esculenta*) starch. A paper presented (oral) at 2019 Annual International Meeting of American Society of Agricultural and Biological (ASABE) held in Boston, MA from July 7 – 10, 2019. Paper #: 1900660. Poster
12. Adeyanju, J.A., Olajide, J.O., Oke, O.E., and **Adedeji, A.A.** (2018). Modelling of moisture loss and oil uptake during deep-fat frying of plantain (dodo). A paper presented (oral) at and published in the proceeding of the 12th CIGR Section VI International Symposium, held at the International Institute of Tropical Agriculture (IITA), Ibadan, Oyo State, Nigeria from 22–25 October, 2018. Paper #: 198-212. Oral.
13. **Adedeji, A.A.**, Singh, M., Woomer, J., and Akharume, F. (2018). Proso millet application in the development of gluten free products. A paper presented at and published in the proceeding of the 3rd International Symposium on Broomcorn Millet held in Fort Collins Colorado from August 8 – 12, 2018. Session #:5. Page 81. Oral
14. Rady, A., Sugiharto, S., and **Adedeji, A.A.** (2017). A nondestructive method to evaluate carrot quality using visible-near infrared spectroscopy. A paper published in the proceeding of American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Spokane Washington, July 16-19, 2017. Poster presentation. Paper #: 1700412.
15. Singh, M. and **Adedeji, A.A.** (2016). Physico-chemical and functional properties of Proso millet starch. A paper published in the proceeding of American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Orlando, Florida, July 17-20, 2016. Oral presentation. Paper #: 162460194.
16. Thiam, M., Le-Bail, A., Abadie, J., **Adedeji, A.A.** and Havet, M. (2011). Congelation sous champs électrique applique a de la viande (Freezing under electric field applied to meat). *Revue Generale du Froid et du conditionnement d'air*. Pp. 40 – 42.
17. Le-bail, A., Orłowska, M., Havet, M., **Adedeji, A.**, Abadie, J., Beaufort, A., Bourdin, G and Cardinal, M. (2011). Refrigeration applied to seafood: recent developments and applications. A paper presented at FAO's Fisheries and Aquaculture Dept. Expert meeting of Fish technology, utilization and quality assurance in Africa, Mahé held at Seychelles, 21st - 25th Nov. 2011. Oral Presentation.
18. Le-Bail, A., Havet, M., Orłowska, M., and **Adedeji, A.** (2011). Recent advances in food freezing. A paper presented at European Federation of Food Science and Technologists (EFFoST) Annual Meeting held at Technische Universität, Berlin Germany. November 9 – 11, 2011.
19. **Adedeji A.A.**, Lui, L, and Ngadi M. O. (2010). Confocal laser scanning microscopy imaging of deep-fat fried batter coating. 17th World Congress of CIGR, Quebec City, Canada, June 13-17, 2010. Paper No. 1207.

Curriculum Vitae

20. Abdel-Nour, N., Ngadi M. O., and **Adedeji A.A.** (2010). Effect of thermal pre-treatment and batter composition on fat absorption in deep-fat fried batter. 17th World Congress of CIGR, Quebec City, Canada, June 13-17, 2010. Paper No. 1218.
21. **Adedeji, A.A.** and Ngadi, M. O. (2008). The use x-ray micro-CT for characterization of microstructural properties of deep-fat fried breaded chicken nuggets. A paper (084618) presented at American Society of Agricultural and Biological Engineers (ASABE) annual conference Held at Providence, Rhode Island, USA from June 29th – July 2nd, 2008. Oral presentation. Paper No.: 084610.
22. **Adedeji, A.A.** and Ngadi, M. (2007). 3-D Imaging of breaded deep-fat fried foods using x-ray micro-CT. A paper presented at 3rd CIGR conference held at Naples, Italy from September 24-26, 2007.
23. Ngadi, M. O., T. K. Gachovska, **Adedeji, A. A.** and Raghavan, G.S.V. (2007). Drying kinetics of pulsed electric field treated carrot pieces. Paper # 076009, presented at the Annual International meeting of American Society of Agricultural and Biological Engineers at Minneapolis, USA from 17-20 June, 2007.
24. Dev, R.S., Thumula, P., **Adedeji, A.**, Raghavan, G.S.V. Gariepy, Y. (2007). Effects of chemical, microwave and pulsed electric pre-treatments on convective drying of grapes. Paper # 072323 at the Annual International meeting of American Society of Agricultural and Biological Engineers at Minneapolis, USA from 17-20 June, 2007.
25. Gachvoska, T., **Adedeji, A.A.**, Ngadi, M. and. Raghavan, G.S.V. (2006). Drying Characteristics of Pulsed Electric Field Treated Carrot. A paper presented at NABEC conference held at Montreal, QC, Canada. July 30th - August 2nd 2006. Paper number 06-049.
26. **Adedeji, A.A.**, Adelegan, H. A., Odugbenro, P. O., Oyelade, O. J., Olajide, J. O. and Abioye, A. O. (2004). Effect of particle size distribution on physical and sensory properties of soy-substituted *Akara* Ogbomoso. A Paper in the Proceedings of the 28th Annual Conference / Annual General Meeting of the Nigerian Institute of Food Science and Technology, Held at Conference Centre, University of Ibadan, Ibadan, Oyo State Nigeria, from 12th – 14th October, 2004. Pp. 178 – 179.
27. Abioye, A.O., **Adedeji, A.A.**, Odugbenro, P.O. and Adedibu, A.O. (2004). Application of Peleg's equation to water absorption during soaking of Jack bean in "kaun" solutions. A Paper in the Proceedings of the 28th Annual Conference / Annual General Meeting of the Nigerian Institute of Food Science and Technology, Held at Conference Centre, University of Ibadan, Ibadan, Oyo State Nigeria, from 12th – 14th October, 2004. Pp. 186 – 187.
28. Oyelade, O. J., **Adedeji, A.A.** and Adigun, O. J. (2003). Computer-Aided Model Design of Storage Microclimate for Agricultural Produce. A Paper presented at the 22nd annual conference of Nigerian Mathematical Society (NMS), held at Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria, from 10th-13th June, 2003.
29. Ade-Omowaye, B.I.O, Olajide, J.O., Abioye, A.O. and **Adedeji, A.A.** (2003). Potential Applications of osmotic dehydration in Nigerian food processing. A Paper Presented at the First National Drying Symposium, held at Crab Park Hall, University of Port-Harcourt, Port-Harcourt, Rivers State, Nigeria. 21st- 23rd October 2003.
30. Olajide, J.O., Oyelade, O. J., Tunde-Akintunde T. Y. and **Adedeji, A.A.** (2003). Design and construction of a cabinet tray dryer. Nigerian Drying Symposium. Held at Port Harcourt from 21st to 23rd October, 2003.

Conference Abstracts and Presentations (57 in total; 2014 – Present (34))

1. Akharume, F. and **Adedeji, A. A.** (2021). Determination and *In-silico* Characterization of the Three-dimensional Structure of glutelin Type-B 5-like protein from proso millet using molecular dynamic modeling. A paper presented (oral) during the 2021 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 12 – 15, 2021. Paper #: 2100144

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2. Akharume, F., Ashutosh, S., Korotkov, K and **Adedeji, A. A.** (2021). An investigation of temperature and static electric field effects on the glutelin Type-B 5-like protein from proso millet using molecular dynamic modeling. A paper presented (poster) during the 2021 Annual International Virtual Meeting of American Society of Agricultural and Biological (ASABE) held online from July 12 – 15, 2021. Paper #: 2100145
3. **Adedeji A.A.** and Woomer, J. (2020). Characteristics of Extruded Products Developed from Spent Grain and Proso Millet. Kentucky Local Food Systems Summit held at the Gatton Student Center on February 26, 2020. Poster
4. Agbali, F., and **Adedeji A.A.** (2019). Analytical estimation and experimental validation of wind energy utilization using turbine for mechanical aeration of small scale ear corn drying. A paper presented (poster) at 2019 Annual International Meeting of American Society of Agricultural and Biological (ASABE) held in Boston, MA from July 7 – 10, 2019. Paper #: 1901683. Poster.
5. Adetola, O.A., Olalusi, A.P., and **Adedeji A.A.** (2019). Physicochemical properties of pasta derived from extrusion of durum wheat and cassava flour. A paper presented (poster) at 2019 Annual International Meeting of American Society of Agricultural and Biological (ASABE) held in Boston, MA from July 7 – 10, 2019. Paper #: 1900659. Poster.
6. Woomer, J. and **Adedeji A.A.** (2019). Extrusion for value-added utilization of spent grains from bourbon distilling and craft beer brewing. A paper presented (oral) at 2019 Annual International Meeting of American Society of Agricultural and Biological (ASABE) held in Boston, MA from July 7 – 10, 2019. Paper #: 1900335. Oral.
7. Agbali, F., **Adedeji, A.A.**, Aroh, A., and Ramadan, I. A. (2018). Aflatoxin contamination of grain in sub-Saharan Africa: Public health implication, Application of novel postharvest technologies and the role of policy in adoption. Presented at the 2nd International Conference on Food Safety and Security, Saint George Hotel and Conference Centre, Pretoria RSA on October 17, 2018. Oral.
8. Akharume, F., **Adedeji, A.A.** and Korotkov, K. V. (2018). *In-vitro* digestibility, structural particulars and physico-chemical properties of proso millet flour proteins. A poster presented at the American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Detroit, Michigan from July 29 – August 1st. 2018. Paper #: 1801689. Oral
9. Woomer, J., and **Adedeji, A.A.** (2018). Effect of extrusion operating conditions on physico-chemical and functional properties of extruded proso millet. A poster presented at the American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Detroit, Michigan from July 29 – August 1st. 2018. Paper #: **1801272**.
10. Woomer, J., and **Adedeji, A.A.** (2018). Effect of bourbon distiller's spent grain (DSG) addition level and particle size on physico-chemical and functional properties of a millet-based extruded snack. An oral paper presented at the American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Detroit, Michigan from July 29 – August 1st. 2018. Oral presentation. Paper #: 1801278. Oral.
11. **Adedeji, A.A.** Mohammad, Y., and Agbali, F. (2018). High pressure treatment for tenderization of semimembranosus and biceps femoris muscles from goat. A poster presented at the American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Detroit, Michigan from July 29 – August 1st. 2018. Oral presentation. Paper #: 1801724
12. **Adedeji, A.A.** Mohammad, Y., and Agbali, F. (2018). Effect of microwave heating on characteristics of Semimembranosus and Biceps femoris muscles from goat. A poster presented at the American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Detroit, Michigan from July 29 – August 1st. 2018. Paper #: 1801721. Poster

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13. Li, W., Chen, X., Das, L., **Adedeji, A.A.**, Shi, J., 2017 Renewable Energy & Energy Efficiency (RE3) Workshop, "Effect of pretreatment methods on biohydrogen production from industrial hemp," Poster, National, KY, United States. (May 22, 2017). Poster.
14. Agbali, F., Woomer, J., and **Adedeji, A.A.** (2017). Determination of the effect of extrusion parameters on the properties of ready-to-eat expanded millet snack enriched with arthropod (cricket) flour. A paper presented at the American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Spokane Washington, July 16-19, 2017. Oral presentation. Paper #: 1700371. Oral.
15. Li, W., Woomer, J., **Adedeji, A.A.** and Shi, J. (2017). Ultrasound-assisted enzymatic transesterification of waste cooking oil. A paper presented at the American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Spokane Washington, July 16-19, 2017. Poster presentation. Paper #: 1701449.
16. Woomer, J., Singh, M, and **Adedeji, A.A.** (2017). An organoleptic evaluation to determine consumer acceptance of millet based gluten free breads. A paper presented at the American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Spokane Washington, July 16-19, 2017. Poster presentation. Paper #:1700370.
17. Singh, M., and **Adedeji, A.A.** (2017). Rheological and Baking Properties of Millet Based Gluten-Free Formulations. A paper presented at Institute of Food Technology (IFT) Annual International Meeting, Food Engineering Division Poster Session. Held in Las Vegas, Nevada USA June 25 – 28, 2017.
18. Li, W., Chen, X., Das, L., & **Adedeji, A.A.** and Shi, J. (2017). Effect of pretreatment methods on biohydrogen production from industrial hemp. RE3 Workshop held in Muhammad Ali Center, Louisville, KY. From May 21 – 24, 2017. Poster
19. Singh, M., and **Adedeji, A.A.** (2016). Physical, rheological and baking properties of proso millet cultivars. A paper presented at the American Association of Cereal Chemist International Annual Meeting held in Savannah, Georgia from October 23 – 26, 2016. Poster presentation.
20. Singh, M., and **Adedeji, A.A.** (2016). Hydrocolloids effect on rheological and baking properties of proso millet composite dough. A paper presented at the American Association of Cereal Chemist International Annual Meeting held in Savannah, Georgia from October 23 – 26, 2016. Oral
21. Rady, A., and **Adedeji A.A.** (2016). Assessing different processed meat adulterants using visible/near-infrared spectroscopy. A paper presented at Conference of Food Engineering held at Nationwide and Ohio Farm Bureau 4-H Center College of Food, Agricultural, and Environmental Science Campus. The Ohio State University from September 12 – 14, 2016.
22. **Adedeji, A.A.**, and Singh, M. (2016). Value-added utilization of millet for food, feed, fiber and energy. A paper presented at Conference of Food Engineering held at Nationwide and Ohio Farm Bureau 4-H Center College of Food, Agricultural, and Environmental Science Campus. The Ohio State University from September 12 – 14, 2016. Oral
23. Rady, A., and **Adedeji A.A.** (2016). Application of Hyperspectral Imaging Technique to Detect Adulteration in Processed Meats. A paper presented at American Society of Agricultural and Biological Engineers (ASABE) annual conference held at Orlando, Florida, USA from July 17 – 20, 2016. Poster presentation. Paper No.: 162460193. (Oral).
24. Rady, A., Giaretta, A., **Adedeji, A.A.** and Ruwaya, M. (2016). Optimizing deep-fat frying of sweet potato (*Ipomoea batatas*): effect of pretreatment and freezing rate. A paper presented at Institute of Food Technology (IFT) Annual International Meeting, Food Engineering Division Poster Session. Held at Chicago, IL USA July 16 – 19, 2016. (Poster).
25. Li, M., Ekrimirad, N., Rady, A., **Adedeji, A.A.**, Alimardani, R., & Solmon, H. (2016). Detection of codling moth infested apples using multivariate analysis of acoustic emissions. A paper presented

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- at Institute of Food Technology (IFT) Annual International Meeting, Food Engineering Division Poster Session. Held at Chicago, IL USA July 16 – 19, 2016. (Short Oral/Poster).
26. Ekramirad, N., Rady, A., Li, M., Adedeji, A.A., Alimardani, R., & Patwardham A. (2016). Acoustic emission technique for detection of Codling moth infested apples. A paper presented at American Society of Agricultural and Biological Engineers (ASABE) annual conference Held at Orlando, Florida, USA from July 17 – 20, 2016. Paper No.: 162460815. (Oral).
 27. Ekramirad, N., Rady, A., Adedeji A.A., Alimardani, R., Bessin, R., & Strang, J. (2016). Hyperspectral Imaging for Detection of Codling Moth Infestation and Prediction of Quality in Gold-Rush Apples. A paper presented at American Society of Agricultural and Biological Engineers (ASABE) annual conference Held at Orlando, Florida, USA from July 17 – 20, 2016. Poster presentation. Paper No.: 162461836. (Poster).
 28. **Adedeji, A.A.,** Alavi, S., and Matthew, F. (2014). Micronutrient fortified extruded rice kernels: impact of processing and formulation on physico-chemical attributes. American Association of Cereal Chemists International (AACCI). Holding at Providence, Rhode Island USA October 5 – 8, 2014. Paper No. P-147. (Poster).
 29. Joseph, M., Zhu, L., **Adedeji, A.A.,** Gwirtz, J., Thiele, S. and Alavi, S. (2014). Adaptation of conventional wheat flour mill to refine sorghum, corn and cowpea grains. American Association of Cereal Chemists International (AACCI). Holding at Providence, Rhode Island USA October 5 – 8, 2014. (Poster).
 30. Chijioke, E., **Adedeji, A.A.,** Danbaba, N. and Ngadi, M. (2014). Effect of Steaming on Physical and Thermal Properties of Parboiled Rice from Nigeria. A paper presented at the American Society of Agricultural and Biological Engineering (ASABE) annual conference Held at Montreal, Canada from July 13 – 16, 2014. Poster presentation. Paper No.: 141913047. (Poster).
 31. Alejandro, M. M., **Adedeji, A.A.** and Ngadi, M. (2014). Development of an objective freshness index for an American variety of eggplant (*Solanum melongena* L. cv. Traviata). A paper presented at American Society of Agricultural and Biological Engineering (ASABE) annual conference Held at Montreal, Canada from July 13 – 16, 2014. Poster presentation. Paper No.: 141913457 (Poster).
 32. Alakali, J. S., Eze, S. O., Adewale P.O., **Adedeji, A.A** and. Ngadi, M. O. (2014). Dynamic and steady flow behavior of *Deterium microcarpum* gum solutions. A paper presented at American Society of Agricultural and Biological Engineering (ASABE) annual conference Held at Montreal, Canada from July 13 – 16, 2014. Paper No.: 141909304. (Poster).
 33. Zhu, L., Desam, G. P. R., Herald, T.J., **Adedeji, A.A.,** and Alavi, S. (2014). Effect of whey protein concentrate on dough rheology and tortilla quality parameters in corn and sorghum. Institute of Food Technology (IFT), Food Engineering Division Poster Session. Held at New Orleans, LA USA. June 21 – 24, 2014. (Poster).
 34. Joseph, M., Zhu, L., **Adedeji, A.A.,** and Alavi, S. (2014). Physico-chemical properties of Fortified Blended Foods developed using extrusion. Institute of Food Technology (IFT), Food Engineering Division Poster Session. Held at New Orleans, LA USA June 21 – 24, 2014. (Poster).
 35. Joseph, M., **Adedeji, A.A.,** and Alavi, S. (2013). Novel delivery mechanism for nutrition using sorghum based extruded pre-cooked 'beans'. Institute of Food Technology (IFT), Food Engineering Division Poster Session. Held at Chicago, IL USA. July 13 – 16, 2013. Poster No. **031-15**.
 36. Padmanabhan, N., **Adedeji, A.A.,** Zhu, L., and Alavi, S. (2013). Physicochemical properties of newly developed extruded sorghum-soy blends for US Food Aid programs. Institute of Food Technology (IFT), Food Engineering Division Poster Session. Held at Chicago, IL USA. July 13 – 16, 2013. Poster No. **031-22**.
 37. **Adedeji, A.A.,** Padmanabhan, N., Zhu, L., and Alavi, S. (2013). Digestibility and micronutrient retention of fortified extruded sorghum-soy blends. Institute of Food Technology (IFT), Food

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- Engineering Division Poster Session. Held at Chicago, IL USA. July 13 – 16, 2013. Poster No. **135-06**.
38. Zhu, L., **Adedeji, A.A.**, and Alavi, S. (2013). Utilization of germinated wheat in extruded Products – digestibility, biofunctional compounds, and sensory analysis. Institute of Food Technology (IFT), Food Engineering Division Poster Session. Held at Chicago, IL USA. July 13 – 16, 2013. Poster No. **135-07**.
 39. Zhou, Y, Fan, X., Davis, D.A., **Adedeji, A.A.**, and Alavi, S. (2013). Growth of juvenile pacific white shrimp *litopenaeus vannamei* fed diets containing different level of sorghum co-product (ddgs) using extrusion and pelleting methods. World Aquaculture Society held at Nashville Tennessee, USA. February 21 – 25. Paper Number **114**. Oral presentation.
 40. Padmanabhan, N., Joseph, M., **Adedeji, A.**, Zhu, L., and Alavi, S. (2013). Novel Nutrition Delivery Mechanisms and Strategic Partnerships for Implementation in US Food Aid Programs. Universities Fighting World Hunger Summit 2013. Held at Kansas City Sheraton Overland Park Hotel at the Convention Center from March 2-4, 2013. Session 6. Oral presentation.
 41. Joseph, M., **Adedeji, A.**, Alavi, S., Maichel, E, and Plattner, B. (2012). Development and characterization of a sorghum based, pre-cooked bean like product using extrusion. Kansas State University Graduate Student Research Forum. November 6, 2012. **Pp 38**. Poster.
 42. Maughan, C., Padmanabhan, N., **Adedeji, A.**, Alavi, S., and Chambers IV, E. (2012). Descriptive analysis of corn-soy blend and sorghum-soy blend products at 20% solids. Kansas State University Graduate Student Research Forum. November 6, 2012. **Pp 42**. Poster presentation.
 43. Padmanabhan, N., **Adedeji, A.**, Maughan, C., Chambers IV, E., and Alavi, S. (2012). Extrusion of novel sorghum-based fortified blended food for infants, young children and adults. Kansas State University Graduate Student Research Forum. November 6, 2012. **Pp 43**. Poster.
 44. Alavi, S, A. **Adedeji, A.A.**, Joseph, M., and Plattner, B. (2012). Innovations in extrusion—Configuring a multi-operation, low-shear, semicold process for novel and nutritious products. American Association of Cereal Chemists International (AACCI). Held at Hollywood Florida USA September 30 - October 3. Paper No. - **48-S, CFW 57:A15**. Oral Presentation.
 45. Padmanabhan N., **Adedeji, A.A.**, Olson, V., Chambers, E and Alavi, S. (2012) Novel sorghum-based fortified blended food for infants, young children, and adults. American Association of Cereal Chemists International (AACCI). Held at Hollywood Florida USA September 30 - October 3. Paper No. - **55-O, CFW 57:A27**. Oral Presentation.
 46. **Adedeji, A.**, Yangen, Z., Davis, A. and Alavi S. (2012). Utilization of sorghum co-product (DDGS) in aquatic feed production. American Association of Cereal Chemists International (AACCI). Held at Hollywood Florida September 30 - October 3. Paper No. - **CFW 57:A31**. Poster presentation.
 47. **Adedeji, A. A.**, Joseph, M., Plattner, B., and Maichel, E. and Alavi, S. (2012). Novel sorghum based bean like product—bean analog. American Association of Cereal Chemists International (AACCI). Held at Hollywood Florida September 30 - October 3. Paper No. - **CFW 57:A32**. Poster presentation.
 48. Alavi, S and **Adedeji, A.A.** (2012). Value-Added Utilization of Grain Sorghum and Its Co-Products via Extrusion. Presented at the 29th Sorghum Research and Utilization Conference - Great Plains Sorghum Conference held at Kansas State University International Grains Program Conference Center. August 28 – 30, 2012. Oral presentation.
 49. **Adedeji, A. A.** and Ngadi, M. (2011). Shelf-life extension in preformed pizza using pulsed ultraviolet light. NABEC 2011. Held at Burlington Vermont, USA. July 24 – 27, 2011. Paper No. 11-061. Oral presentation.
 50. Rahimi, J., Mofidi, S., Adewale, P., **Adedeji, A.**, Singh, A., Ngadi, M.O. and Raghavan, G.S.V. (2011). Textural properties of freeze-dried apple slices as coated by CMC and osmo-dehydrated in sugar

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- solution. Paper number 11-041. Northeast Agricultural and Biological Engineering Conference, NABEC 2011 (July 2011), South Burlington, VT, USA. Paper number 11083. Oral Presentation.
51. Rahimi, J., **Adedeji A. A.**, Abdel-Nour, N. and Ngadi, M. O. (2010). Porosity and shrinkage of batter coating during deep-fat frying. NABEC 2010. Held at Geneva, Pennsylvania, USA. July 18 – 21, 2010. Paper No. 10-038. Oral Presentation.
 52. **Adedeji, A. A.** and Ngadi, M. (2009). Influence of batter formulation on physical and microstructural properties of deep-fat fried chicken nugget coatings. Presented at annual international meeting of Institute of Food Technology (IFT) at Anaheim, California USA. June 6 – 10, 2009. Paper No. 255-02. Poster presentation.
 53. Lui, L, Ngadi M. O., **Adedeji A.A.**, Prasher, S. O. and Garipey, C. (2009). Predicting intramuscular fat content of pork using hyperspectral imaging technique. Presented at annual international meeting of Institute of Food Technology (IFT) at Anaheim, California USA. June 6 – 10, 2009. Paper No. 254-02. Poster presentation.
 54. **Adedeji, A.A** and Ngadi, M. O. (2008). Microstructural characterization of deep-fried breaded products using X-ray micro-computed tomography. A presented at International Congress of Engineering and Food held at Vina Del Mar, Chile from April 20 – 24, 2008. Paper number M06. Poster presentation.
 55. **Adedeji, A.A.** and Ngadi, M. O. (2008). Use of confocal laser scanning microscopy in the study of breaded food microstructures. A paper (08-040) presented at Northeast Agricultural and Biological Engineering Conference (NABEC). Held at Aberdeen, Maryland, USA between 27th - 30th July, 2008. Oral presentation.
 56. **Adedeji, A.A.** and Ngadi, M. (2007). Pore characteristics of chicken nuggets breading coating. A paper presented at NABEC conference held at Wooster, Ohio, USA July 29th - August 1st 2007. Paper number 07-013. Oral presentation.
 57. **Adedeji, A.A**, M. Ngadi, M. and. Raghavan, G.S.V. (2006). Effect of Microwave Precooking on Mass Transfer of Deep Fat Fried Chicken Nuggets. A paper presented at NABEC conference held in Montreal, QC, Canada. July 30th - August 2nd 2006. Paper number 06-023. Oral presentation.

INVITED TALK /PRESENTATION

1. **Adedeji A. A.** (2021). Keynote Speaker at the Planetary Session on Foods by National Science Foundation Graduate Research Traineeship (NRT) Symposium, 2021, December 9, 2021. The Age of 'ALT Proteins': Impact on Water and Energy Conservation.
2. **Adedeji A. A.** (2020). Teaching and Learning Challenges under COVID-19: Lessons from Developed Countries, Professors and Students Perspective. An invited virtual presentation during Obafemi Awolowo University's Webinar Series given to an audience of Vice-Chancellors (Presidents), administrators and professors of public and private universities in Nigeria. July 28, 2020.
3. **Adedeji A. A.** and Ngadi, M. O. (2013). Microstructural characterization of foods using x-ray micro-computed tomography. SYMPOSIUM on Food as Porous Media: Novel Approaches to Improved Understanding and Optimization of Processes. Institute of Food Technology (IFT) Meeting. Held at Chicago, IL USA. June 13 – 16, 2013. Paper No. 045-01.

PROJECT REPORT AND UPDATE PRESENTATIONS

1. **Adedeji A.A.** (2021). Kentucky Small Grain Growers Association (KySGGA). Project report on 2019 funded project and proposal for a new one titled: "Light energy induced accelerated production of barley malt hydrolytic enzymes and bioactive compounds for food production processes".

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2. **Adedeji A.A.** (2019). Station Report on Research Projects presented on October 21, 2019 during the USDA NC1023 multistate meeting held at New Mexico State University, Las Cruces, New Mexico.
3. **Adedeji A.A.** (2017). Station Report on Research Project presented on December 4 -6, 2017 during the NC1023 multistate USDA meeting held at Washington State University, Pullman, Washington.
4. **Adedeji A.A.** (2016). Station Report on Research Project presented on October 17, 2016 during the NC1023 multistate USDA meeting held at Oregon State University, Corvallis, Oregon.
5. **Adedeji A.A.** (2016). My eLearning Journey. eLII Round 2 Faculty Community Ignite Presentation. Held in Niles Gallery - Lucille Fine Arts Library, University of Kentucky on April 6, 2016.
6. **Adedeji A.A.** (2015). eLII Buzz: Volume 3|Cohort 2 Presentation on Pedagogical Techniques Implementation In Blended and Online Courses. Held in David Marksbury Building, University of Kentucky on November 17, 2015.
7. **Adedeji A.A.** (2015). Station Report on Research Project presented on October 26, 2015 during the NC1023 multistate USDA meeting held at Madison Wisconsin near University of Wisconsin.
8. Ekramirad, N and **Adedeji, A.A.** (2015). Non-destructive detection of insect infestation in apples using acoustic and hyperspectral imaging techniques. A presentation made in the department of Biosystems and Agricultural Engineering, University of Kentucky on September 25, 2015.
9. Giarretta, A., Rady, A and **Adedeji A.A.** (2015). Optimization of deep-fat frying of sweet potato – effect of pretreatment and freezing rate. A presentation made in the department of Biosystems and Agricultural Engineering, University of Kentucky on July 24, 2015.
10. **Adedeji A.A.**, and Ngadi M. O. (2014). Fat absorption kinetics and structural changes during finish frying of potato strips. A presentation made at McCain Foods project meeting held at McGill University Macdonald campus on February 14, 2014.
11. **Adedeji, A.A.**, Cortbaoui, P and Ngadi (2014). Examining the influence of oven type and temperature distribution on pink coloration of St-Hubert chicken grills. A research project report submitted to Rôtisseries St-Hubert Ltee. June 5, 2014.
12. **Adedeji, A. A.** A report summary of keynote address and sessions presentations during the Sixth McGill Global Conference on Food Security held on October 8 – 9, 2013.
13. **Adedeji, A. A.** and Alavi, S. (2012). PATH Ultra Rice – Product Improvement Project. A preliminary and project update report submitted to Program for Appropriate Technology in Health (PATH) between April and August, 2012.
14. **Adedeji, A.A.** and Alavi, S. (2012). Utilization of sorghum ingredients and co-products in aquatic animal feed production. A report submitted to United Sorghum Check-Off Program on January 30, 2012.
15. Padmanabhan, N., **Adedeji, A.A.**, Maichel, E, Plattner, B and Alavi, S. (2012). Novel sorghum based food products for infants, young children and adult nutrition. A Final report submitted to Kansas State Grain Sorghum Commission on April 15, 2012.
16. Padmanabhan, N., **Adedeji, A.A.**, Maichel, E, Plattner, B and Alavi, S. (2011). Novel sorghum based food products for infants, young children and adult nutrition. A mid-year report submitted to Kansas State Grain Sorghum Commission on November 23, 2011.
17. **Adedeji, A. A.** and Alavi, S. Pilot-scale studies for optimization and production of oat and multi-grain flakes. (2011). A report submitted to PepsiCo Co. USA on November 21, 2011.

WORKSHOPS FACILITATED, TECHNICAL PAPERS AND INVITED COURSE PRESENTATIONS

1. **Adedeji A.A.** (2019). A project proposal presentation to Kentucky Small Grain Growers Association (KySGGA) on a project titled: “Use of LED lights to optimize barley malt diastatic (fermentation) power and bioactive compounds for food production”.

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2. **Adedeji A.A.** (2020). Virtual State Fair, University of Kentucky College of Agriculture, Food and Environment (CAFÉ). Corn Extrusion from Bourbon and High-Tech Agriculture. August 22, 2020.
3. **Adedeji A.A.** (2020). Local to international perspective of food processing, packaging and distribution. A virtual lecture presented to Food Systems and Society, DHN 605 class in fall 2020, in the Department of Dietetics and Human Nutrition, University of Kentucky.
4. **Adedeji A.A.** and Agbali, F. (2019). *A System Designed to Harness the Power of the Wind Energy for Effective Drying of Agricultural Products*. A workshop held for Elementary School kids from Capital Day School, Frankfurt, KY on April 23, 2019 from 10 – 11:30 AM.
5. **Adedeji A.A.** (2016, 2017 & 2018). *Introduction to Food Engineering*. Presented to Introduction to Food Processing Class (FSC 107) Food Science department at University of Kentucky. November 15, 16 & 17, 2016, 2017 & 2018, respectively.
6. **Adedeji A.A.** (2018). *So That's How They Make It - Engineering New Foods from Millet and Spent Grain* - University of Kentucky Food Connection Food@Lunch Invited talk given on November 8, 2018.
7. **Adedeji A.A.** (2017). *How snacks and breakfast cereal are made using extrusion*. A 4-H Teen Conference workshop held in Biosystems and Agricultural Engineering Department on June 13 - 14, 2017
8. **Adedeji A.A.** (2015, 2016). *Extrusion Processing Technology*. Presented to Introduction to Food Processing Class (FSC 103) Food Science department at University of Kentucky. November 17&18, 2015 & 2016.
9. **Adedeji A.A.** and Pekarchik, K. (2015, 2016). *How to make yummy yogurt at home*. A 4-H Teen Conference workshop held in Biosystems and Agricultural Engineering Department on June 14 - 15, 2016.
10. **Adedeji AA.** (2016). *Approach to writing a winning research grant proposal*. Faculty of Engineering and Technology, Ladoko Akintola University of Technology, Ogbomoso Nigeria. May 31, 2016.
11. **Adedeji A.A.** (2016). *My academic journey*. A seminar organized by Department of Food Technology, University of Ibadan as part of my Carnegie Fellowship to the department. May 11, 2016.
12. **Adedeji A. A.** (2016). *Developing Teaching Statement and Research Portfolio*. A seminar organized by Department of Food Technology, University of Ibadan as part of my Carnegie Fellowship to the department. May 18, 2016.
13. **Adedeji A. A.** (2016). *Submission for Change*. A seminar organized by department of Food Technology, University of Ibadan as part of my Carnegie Fellowship to the department. May 25, 2016.
14. **Adedeji A. A.** (2016). *What is Food Engineering?* Introduction to Food Processing Class (FSC 102) at University of Kentucky. April 13, 2016.
15. **Adedeji A. A.** (2016). *Food Engineering Program in Biosystems and Agricultural Engineering department at University of Kentucky*. A seminar given on January 29, 2016 during BAE department Graduate Recruitment Weekend.
16. **Adedeji A. A.** and others (2015). *Feedback on Implementation and Observations from Skills gained in the Training*. eLII – Panel Discussion held at David Marksbury Building University of Kentucky on November 19, 2015. 4 – 6 PM.
17. **Adedeji A.A.** (2015). *Cassava Initiatives in Africa. A presentation made to Senior Seminar Class (BAE 400)*, Biosystems and Agricultural Engineering Department University of Kentucky. Fall 2015. November 2, 2015.
18. **Adedeji, A.A.** and Shi, J. (2015). Presentation to Kentucky Small Grain Growers Association (KYSGGA) to defend a proposal on *Fundamental Understanding of Millet Functionality as Ingredient in Human Food Applications and Biofuel Production*. July 30, 2015.

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19. **Adedeji A.A.** (2014). *Agricultural produce value addition through processing*. A research seminar made during faculty interview in Biosystems and Agricultural Engineering department at University of Kentucky, March 27 2014.
20. **Adedeji, A.A.** and Alavi, S. (2013). Introduction to extrusion processing and alternate extrusion technologies. KSU-Pakistan Aquaculture Short Course. Held at International Grain Program Center (IGP), Kansas State University, Manhattan KS, USA. February 18, 2013.
21. **Adedeji, A.A.** and Alavi, S. (2013). Value-Added Utilization of Grain Sorghum and Its Co-Products via Extrusion. Presentation made to a group of young sorghum growers undergoing leadership training courtesy – United Sorghum Checkoff Program (USCP). Held at Bioprocessing and Industrial Value Added Program (BIVAP), Kansas State University, Manhattan KS, USA. November 27th, 2013.
22. **Adedeji, A.A.** and Alavi, S. (2012). Value-Added Utilization of Grain Sorghum and Its Co-Products via Extrusion. Presentation made to the group of ADM senior management team visiting Grain Science and Industry department. October 16th, 2012. Held at International Grain Program Center (IGP), Kansas State University, Manhattan KS, USA.
23. Joseph, M., **Adedeji, A. A.** and Alavi, S. (2012). Development & Characterization of sorghum based, pre-cooked bean like product using extrusion. Presented at the Grain Science and Industry Graduate Students 5th Annual Symposium. Held at International Grain Program Center (IGP), Kansas State University, Manhattan KS, USA.
24. Padmanabhan, N., **Adedeji, A.** Alavi, S., Maichel, E., Plattner, B., Lindshield, B., Procter, S. and Chambers, E. (2011). Novel Sorghum-Based Fortified Blended Foods for Infants, Young Children and Adult Nutrition. Dept of Grain Science and Industry, Kansas State University, Manhattan, KS. Presented at the Grain Science and Industry Graduate Students 4th Annual Symposium. Held at International Grain Program Center (IGP), Kansas State University, Manhattan KS, USA.
25. **Adedeji, A.A.** (2011). Food Engineering in Nigeria – Challenges and Prospects. A paper presented at the annual meeting of National Association of Food Science and Technology Students, Ladoko Akintola University of technology Chapter, Ogbomoso, Nigeria.
26. **Adedeji, A.A.** (2011). Starch/poly vinyl alcohol/ Na⁺MMT based biodegradable nanocomposites using melt extrusion. Authors – Alavi, S., Sandeep, K. P. and Zhong, X. USDA-NIFA Project Director’s meeting at Arlington Virginia. October 23 - 26, 2011.

MEDIA MENTION 2014 - Date

1. College of Agriculture, Food and Environment. UK’s Adedeji receives prestigious John Clark Award from Canadian Society of Bioengineering. <https://news.ca.uky.edu/article/uk%E2%80%99s-adedeji-receives-prestigious-john-clark-award-canadian-society-bioengineering>. August 30, 2021.
2. CSBE Announcement of my John Clark Award: <https://www.csbe-scgab.ca/2021-award-recipient/>; <https://publications.mcgill.ca/macdonald/2021/06/16/awards-and-kudos/>
3. ASABE Resource May, 2020. Finding a better way to detect worms in apples. May/June, 2020 edition of ASABE Resource Magazine. <https://bt.e-ditionsbyfry.com/publication/?i=658885>
4. Fruit Growers News. Kentucky studies detection of worms in apples. <https://fruitgrowersnews.com/article/kentucky-studies-detection-of-worms-in-apples/>. Published October 10, 2019.
5. University of Kentucky News, UKNOW. UK Researchers Studying Ways to Detect Worms in Apples. https://uknow.uky.edu/research/uk-researchers-studying-ways-detect-worms-apples?i=244491&sfmc_sub=169446024&l=20203_HTML&u=7559033&mid=10966798&jb=0

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6. College of Engineering UK NEWS, October 2, 2019: <https://www.engr.uky.edu/research-faculty/research/2019/uk-researchers-studying-better-ways-detect-worms-apples>
7. College of Agriculture, Food and Environment NEWS: <https://news.ca.uky.edu/article/uk-researchers-studying-better-ways-detect-worms-apples>. September 25, 2019 | By: Katie Pratt
8. Morning Ag. Clips. Student project could international impact. Published on April 5, 2018. <https://www.morningagclips.com/?s=Student+project+could+international+impact>
9. UKNOW. UK Student Project has Potential to Make International Impact. <https://uknow.uky.edu/student-and-academic-life/uk-student-project-has-potential-make-international-impact> April 6, 2018.
10. UK College of Agriculture, Food and Environment. <https://www.youtube.com/watch?v=gEKr3qtiHCE>
11. University of Kentucky, College of Engineering News and Events and Seed Today. University of Kentucky Student Project Has Potential To Make International Impact. <http://www.seedtoday.com/article/142279/university-of-kentucky-student-project-has-potential-to-make-international-impact>. April 9 & 23, 2018.
12. How A Wind Turbine Made In Ky. Could Be A Game Changer For Nigerian Farmers by Roxanne Scott, 89.3 WFPL (National Public Radio, Louisville, KY). <https://wfpl.org/how-a-wind-turbine-made-in-ky-could-be-a-game-changer-for-nigerian-farmers/>

TEACHING

Undergraduates and Graduate Courses

AEN 340 - Principles of Food Engineering. Improved by adding 5 Lab classes, and teaching materials. Since Fall 2014 to date.

HON 395 – Research Project Credit, (Spring, 2018 & 2020: Megon Davisson and Ivory Simon-Okube)

BAE 400 – Senior Seminar class Fall 2017 to 2020

BAE 402 – Senior Design: 2016/2018; 2018/2019

BAE 450 – Undergraduate Student Independent Study (Summer 2015, Spring 2018)

BAE 549 – Bioprocess Engineering. Since Fall 2015 to date.

BAE 750 – Special BAE Problems Credit (Spring 2016: Manjot; Fall 2016: Francis & Melody; Spring 2017: Francis Agbali & Joseph Woomer; 2019 Spring, Felix Akharume).

STUDENT ADVISORSHIP (8 Graduate students, 2 Post-doctoral scholars, 8 visiting scientists, 9 undergraduate students and 2 high schoolers)

Post-Doctoral Scholars:

1. Al Fadhl Yahya Khaled, Ph.D. Post-Doctoral Scholar. March 2020 – July 2021. Nondestructive detection of codling moth infestation in apples. A USDA-NIFA funded project.
2. Ahmed Rady Ph.D. (Post-Doctoral Scholar), March 2015 – October 2016. Detecting adulterants in processed meat using non-destructive methods – hyperspectral imaging. Assistant Professor at Alexandria University, Egypt.

Graduate student advisorship

Current:

1. Nader Ekramirad (Ph.D.) BAE Fall 2019 – Fall 2021/Spring 2022. Nondestructive methods development for insect infestation detection and classification in apples.

Graduated students:

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2. Felix Akharume (Ph.D), BAE Fall 2017 – Summer 2020. Structural determination, physico-chemical characterization, and molecular dynamic modelling of proso millet storage proteins for enhanced functionality.
3. Abuchi Okeke (MSc), BAE Spring 2019 – Summer 2020. Rapid method for the detection of gluten in raw and processed foods.
4. Francis Agbali (MSc), BAE Fall 2015 – Spring 2019. Design and testing of a wind energy harnessing system for forced convective aeration of grain in low wind speed, warm and humid climates. Best oral presentation at 2nd International Conference on Food Safety, Pretoria, South Africa October 2018.
5. Joseph Woomer (MSc), BAE Fall 2016 – Fall 2018. Valorization of proso millet and spent grain for extruded snack development.
6. Manjot Singh (MSc.), BAE 2015 – 2016. Physicochemical, Rheological and Baking properties of proso millet. Graduated December 2016. Outstanding MSc Student, Gamma Sigma Delta (College of Agriculture, Food and Environment Honor's) Society. Currently works for Bunge, USA.

Visiting scientists hosted:

1. Prof. Reza Alimardani, visiting scientist on sabbatical from the University of Tehran. January 10 – March 11, 2020. Project: State of the Art on Internet of Thing (IoT) Application in Agricultural Production and Food Processing.
2. Hosted Dr. Babatunde Ogunsina of the Department of Agricultural and Environmental Engineering, Faculty of Technology, Obafemi Awolowo University, Ile Ife, Nigeria from June 20 – 21, 2019.
3. Hosted two Korean Scientists (Drs. Youngwook Seo and Young Hee Lee) from the National Institute of Agricultural Sciences, RDA, Korea on February 11, 2019.
4. Mr. Olufemi Adetola (Visiting faculty and Ph.D. student from Federal University of Technology, Akure, Nigeria). Jan – July 2018.
5. Dr. Yarmand (Visiting Professor from University of Tehran, Iran). Feb – Sept 2017. Goat meat tenderization, using novel approach – microwave and high pressure treatment.
6. Ms. Xiao Chen (Visiting MSc student from Henan University, China). July 2016 – April 2017. Food waste conversion to bio-energy (bio-hydrogen).
7. Dr. Nader Ekramirad (Visiting Ph.D. student from University of Tehran), April - September 2015. Non-destructive methods for assessing insect larvae damage in apples. Graduated Nov 2016.

Undergraduate (UG) student research assistant/intern:

1. Julia Loeb, May – December, 2021. UG Research Assistant on plant-based protein product development and nondestructive testing projects.
2. Lauren Doyle, Feb – December, 2021. UG Research Assistant on barley malt and nondestructive testing projects.
3. Ivory Okube, Sept 2019 – May 2020. UG Research Assistant on protein quality and non-dairy milk projects.
4. Theshmey Coq, May – June 2018. Summer intern working on extruded products material characterization.
5. EPA P3 Student Competition Mentees: David Cline, John Mays and Chase Mahoney.
6. Megan Davisson, Jan – May 2018, Jan – Feb 2019. Understanding material properties of extruded and expanded products from millet and spent grains.
7. Team Wind: Senior Design group in BAE 402 and 403, Fall and Spring 2016/2017; 2018/2019. Eight (8) students.
8. Bradley Ballard, September 2016 – August 2017. Chia mucilage extraction and coating on seeds; Gluten free bread from millet. Product development and sensory evaluation.

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9. Shinta Marchelia Sugiharto, Indonesia International Institute of Life Sciences. June – August 2016. Hyperspectral imaging for predicting carrot qualities.
10. Winda Winda, Indonesia International Institute of Life Sciences. June – August 2016. Millet bread quality characterization.
11. Andrew Giarretta (Undergrad Intern), May - July 2015: Sweet potato frying process optimization.

High School Scholars

- Kristian Bolden and Jonathan Lott. Design, Fabrication and Testing of a Pulsed UV Light System for Treatment of Produce (Strawberry) to extend their shelf-life and Design and Testing of Ultraviolet Light System for Treatment of Fruits to extend their Shelf-life as Compared to Biomass Derived Antioxidant. NSF STEM scholarship for under-represented minority in High School in Kentucky. Jan – May 2018 and Spring 2019. Both came 2nd place at the Divisional and State level Science Fair in 2019.

PROFESSIONAL DEVELOPMENT ACTIVITIES ATTENDED 2014 - Present

Teaching Workshops and Seminars

1. Center for Enhancement of Education and Learning (CELT) Workshop on “Learning How to Learn: Powerful Mental Tools to Help You Master Tough Subjects”. Held on Friday, April 12, 2019 from 2:00 - 3:00 in Gatton College of B&E, Room 311.
2. Faculty Learning Community (FLC), facilitated by ASD for Instruction, CAFÉ, Dr. Grabau. We met once a week on Tuesdays from March 26 to May 7, 2019. We extensively discussed the book by Ken Bain, “What the best college teachers do”.
3. Wiley. Connecting and Engaging Students in Your Face-to-Face Course. By Roshelle Overton and Casey Colson. March 19, 2019.
4. Center for Enhancement of Education and Learning (CELT) Workshop on “The Right Tools – Selecting Technology Strategically and Effectively”. Held on Wednesday, March 9, 2019 from 3:30 - 4:30 p.m. in Niles Gallery, Lucille Little Fine Arts Library
5. What’s The Focus? (WTF?) CELT Workshop on Multimedia held on February 29, 2016 at 2 - 3:30 pm in Young Library B24A.
6. Center for Enhancement of Education and Learning (CELT) Workshop. “Who Are Our Students? A Student Panel Discussion”. Held on Wednesday, February 3, from 3:30 - 4:30 p.m. in Niles Gallery, Lucille Little Fine Arts Library.
7. Faculty Learning Community (FLC), College of Environment, Food and Agriculture, University of Kentucky. Met from February – March, 2016.
8. Faculty Learning Community (FLC), eLearning Blended and Online Group. Met from September 2015 - April 2016, once a month.
9. Center for Enhancement of Education and Learning (CELT) Workshop. “The Good, the Bad, and the Ugly: Teacher and Course Evaluations”. Wednesday, November 18th, 2015 from 3:30 - 4:30 p.m. Held in Niles Gallery, Lucille Little Fine Arts Building, UK, Lexington KY.
10. Center for Enhancement of Education and Learning (CELT) Workshop. “The Right Tools – Selecting Technology Strategically and Effectively”. Wednesday, October 21st, 2015 from 3:30 - 4:30 p.m. Held in Niles Gallery, Lucille Little Fine Arts Building, UK, Lexington KY.
11. eLII: Innovation + Design Lab 3-day workshop. Facilitated by CELT, UKAT and UK eLearning. Held from May 12 – 14, 2015 at Little Library and King Library on UK Campus.
12. STEM teaching enhancement workshop and forum. April 25th, 2015. Held at Hilary J. Boone Center, University of Kentucky.
13. eLII – Panel Discussion held at David Marksbury Building on April 9, 2015. 4 – 5 PM.

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14. The Nature of Undergraduate Education. The Office of Faculty Advancement & Institutional Effectiveness in collaboration with The Office of Undergraduate Education and UK Analytics and Technologies presents Dr. Jillian Kinzie. March 25, 2015 at Center Theatre, Student Center, UK.
15. Public Speaking Seminar Series – Power Hour, University of Kentucky Library, Fall Semester 2014. Topics include: Formal Speech Making, Speech Delivery, Presentation Aids, Intellectual Property, Avoiding Plagiarism and Listening & Responding: Empathy, Understanding, & Constructive Criticism.
16. Graduate Teaching Workshop – A teaching workshop organized by Tomlinson Project in University-Level Science Education (T-PULSE) for Teaching Assistants at McGill to introduce them to Learner’s Centered Approach. Jan 2007

Research & Development Workshops and Seminars

1. MSF Python Workshop 11:30-1 on Friday Dec 6, 2019 in Room 383 in Business Building (Gatton B&E).
2. LinkedIn Learning. Critical Thinking. Mike Figliuolo. May 3, 2019.
3. LinkedIn Learning. Strategic Thinking. Dorie Clark. February 19, 2019.
4. Department of Plant Science Seminar. Embracing Complexity in Biological Systems by Dr. Jacobson, Oakridge Lab. Held on March 28, 2019 (Thursday) 1:30 PM, Cameron Williams Lecture Hall, 101 Plant Science Building
5. Grant Writers Seminars and Workshop in Association with University of Tennessee Knoxville and University of Kentucky. 2017, 2018. By Dr. Broyles.
6. IBM Workshop Cognitive, HPC and Cloud Review - Deep Learning HPC State of Review. Held at 1 pm in Jacob's Science Building Rm 108.
7. NSF Career Workshop by Dr. Christina Payne, Associate Director NSF CBET Program. Held in 307 Gatton College of Business from 10 am - 12 pm.
8. University of Kentucky, Office of VP Research Workshop - Mentor Training Sessions. March 23, 30 & April 6, 2018. Held in Charles T. Wethington Building 312.
9. Promotion and Tenure Workshop on Feb. 19, 2018. Held in Gorham Hall, Good Barn, College of Agriculture, Food and Environment.
10. College of Engineering Faculty development Spring 2018 Workshop Series: Holding difficult conversation (Jan 24, 2018); Meet Productively (February 28); Time Management (March 28, 2018); Handling Disagreements in the Workplace (April 25, 2018).
11. CAFE Workshop: Integrity and Ethics in Instruction Workshop held on Jan 9, 2018, 3 - 5 pm in 221 Jacob Science Building
12. Unconscious Bias. University. 8:30 – 10 am on March 24, 2017.
13. Active Shooter Forum held in Seay Auditorium in Ag North at 1 pm on Wednesday, February 15, 2017.
14. Strengthening the Connection between Life-Science Research and K-12: An NSF Sponsored Workshop. Held on April 2nd, 2016 at UK-Lexmark Building, from 8:30 am – 5 pm.
15. Cayuse 424, a new proposal submission platform at UK. Held on May 22, 2017 in Cameron Williams hall from 10 – 11:30 am.
16. Microsoft AZURE. February 7, 2017. David Marksbury. 9 am – 4:30 pm.
17. Introduction to Zoom Web Conferencing. Online Webinar. February 6, 2017.
18. Introduction to ENVI. Held by Harris Corp Company in Bloomfield, Colorado. January 24 – 26, 2017.
19. College of Engineering (COE) Faculty Development Workshop Series: January 17 – Proposal Development and Management (Pre and Post-awards); February 21 - Patent Literature (as it

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- pertains to research) and Building a Brand; March 21 – Effective Teaching; May 16 – Research Commercialization Strategies, IP Policy, and Innovation Held in 112 Oliver H. Raymond building.
20. The College of Agriculture, Food and Environment (CAFE) Faculty Council Lunch & Learn session for November held on November 17, from 12:00-1:00 in the Weldon Suite of the E.S. Good Barn.
 21. First Modeling and Simulation of Food Systems (MSFS) workshop. Held in Capri Italy. June 6 – 9, 2016.
 22. Coursera online module on Data Science: Module 2, “R Programming Language” -. John Hopkins University. Feb – April, 2016. Grade Achieved – 96%.
 23. Office of VP Research, University of Kentucky Grant Writing Workshop Series. Developing a Research Proposal: NSF and DOD/DOE. Mining Building on March 8, 2016.
 24. Promotion and Tenure Workshop on Feb. 26, 2016. At Cameron Williams auditorium of the Plant Sciences building.
 25. Transformative Food Technologies to Enhance Sustainability at the Food, Energy, and Water Nexus. Held at the Innovation Center Conference Center, University of Nebraska, Lincoln Nebraska. February 22 – 24, 2016.
 26. Imaging Symposia. Biomedical Informatics. By Dr. Zhang, a Professor Internal Medicine at, Director for Medical Informatics and Director for Biomedical Informatics Core, at University of Kentucky. Pavilion H Rm HX303.
 27. "Working with Distressed and Distressing Students". A presentation made by Mary Chandler Bolin, PhD, Director-University of Kentucky Counseling Center and Therese Smith, Students of Concern Case Manager, both of University of Kentucky. November 17, 2015 at 2 – 3:30 pm in C.E. Barnhart Building Room 249.
 28. Center for Enhancement of Education and Learning (CELT) Workshop. “Why We Love the Classroom: A Conversation”. Monday, October 12th, 2015 from 3:30 - 4:30 p.m. Held in Niles Gallery, Lucille Little Fine Arts Building, UK, Lexington KY.
 29. Performance Reviews and Dossier Preparation Workshop by Black Faculty Group at UK. September 23, 2015, 11 am - 1:30 pm at Hilary Boone Faculty Club, UK.
 30. Workshop on “Data Analytics with MATLAB”. September 16, 2015. W.T. Young Library, Room B108C.
 31. Audited Calculus by MIT on Edx.org. July – August 2015.
 32. Online Module on “Introduction to Data Science” on Coursera. John Hopkins University. May 4 – 31, 2015. Grade Achieved – 100%.
 33. Online Webinar on “Simulating Food Industry Processes with COMSOL Multiphysics”. By COMSOL on May 28, 2015.
 34. Promotion and Tenure Beginnings Workshop. Held on May 12, 2015 at Lexmark Room 209, Main Building, UK. Facilitated by Associate Provost for Faculty Advancement and Institutional Effectiveness.
 35. NSF Career Proposal Writing Workshop. Held at Northeastern University, Boston MA from April 27 – 28, 2015.
 36. NSF Career Workshop Organized titled “NSF Career Workshop - Prospects & Recent NSF Reviewers”. Organized by UK College of Engineering on April 22, 2015 at Boone Center Hunt Room.
 37. Intellectual Property Workshop in Commercialization Workshop Series organized by UK Office for Commercialization and Economic Development, Gatton College of Business and Economics, UK office of the VP for Research and UK Office of the Provost. Held on March 4, 2015 in Wethington Health Sciences Building, room 127.
 38. Promotion and Tenure Workshop on Feb. 13, 2015. At Cameron Williams auditorium of the Plant Sciences building.

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39. 2015 NSF CAREER Proposal Writing Workshop. Held at Northeastern University, Boston, MA from April 27 – 28, 2015.
40. International Non-thermal Processing Short Course. Held at Ohio State University, Columbus. October 21, 2014.
41. Basic Grantsmanship ~ A Framework for Success Tomorrow. A presentation organized by office of Vice President for Research at University of Kentucky. Presenter: Kathy Doyle Grzech, M.A., Associate Director, UK Proposal Development Office. Held on October 7, 2014.
42. Grant writing workshop organized by University of Kentucky Center for Clinical and Translational Science. Titled: Grant Writing: *Progressing from an Idea to Funding*. Held on September 24, 2014.
43. COMSOL Multiphysics Workshop. Held at Four Point by Sheraton Lexington KY on November 13, 2014.

Professional Meetings Attended 2014 - date:

1. American Society of Agricultural and Biological Engineers (ASABE). Held in Boston, Massachusetts State from July 6 - 10, 2019.
2. 3rd International Symposium on Broomcorn Millet held in Fort Collins Colorado from August 8 – 12, 2018
3. American Society of Agricultural and Biological Engineers (ASABE) annual conference. Held in Detroit, Michigan from July 29 – August 1st. 2018
4. American Society of Agricultural and Biological Engineers (ASABE). Held in Spokane, Washington State from July 16 - 19, 2017.
5. Institute of Food Technology (IFT) Annual Meeting & Food Expo 2015. Held in Las Vegas, Nevada. June 25 - 28, 2017.
6. NC1023 USDA Multistate Annual Meeting held at 100 LaSells Stewart Center/OSU Conference Center, Corvallis OR. October 16 – 18, 2016.
7. American Society of Agricultural and Biological Engineers (ASABE). Held in Orlando, Florida from July 17 - 20, 2016.
8. NC1023 USDA Multistate Annual Meeting held at 525 West Johnson Street, Madison, WI 53703. October 25 – 27, 2015.
9. American Society of Agricultural and Biological Engineers (ASABE). Held in New Orleans, LU from July 26 - 29, 2015.
10. Institute of Food Technology (IFT) Annual Meeting & Food Expo 2015. Held in Chicago, IL. July 11 – 14, 2015.
11. American Society of Agricultural and Biological Engineers (ASABE). Held in Montreal Quebec Canada from July 13 – 17, 2014.
12. NC1023 USDA Multistate Annual Meeting held at Hilton Garden Inn near the Ohio State University, Columbus, OH from October 19 – 21, 2014.
13. Institute of Food Technology (IFT), Food Engineering Division Poster Session. Held at Chicago, IL USA. June 13 – 16, 2013.
14. American Association of Cereal Chemists International (AACCI). Held at Hollywood Florida USA September 30 - October 3.
15. 29th Sorghum Research and Utilization Conference - Great Plains Sorghum Conference held at Kansas State University International Grains Program Conference Center. August 28 – 30, 2012.
16. Northeast Agricultural and Biological Engineering Conference, NABEC. Held at Burlington Vermont, USA. July 24 – 27, 2011.
17. NABEC 2010. Held at Geneva, Pennsylvania, USA. July 18 – 21, 2010.
18. Annual international meeting of Institute of Food Technology (IFT) at Anaheim, California USA. June 6 – 10, 2009.

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19. Northeast Agricultural and Biological Engineering Conference (NABEC). Held at Aberdeen, Maryland, USA from 27th - 30th July, 2008.
20. American Society of Biological and Agricultural Engineering (ASABE) annual conference Held at Providence, Rhode Island, USA between June 29th – July 2nd, 2008.
21. 3rd CIGR conference held at Naples, Italy from September 24-26, 2007
22. NABEC conference held at Wooster, Ohio, USA July 29th - August 1st 2007.
23. Annual International meeting of American Society of Agricultural and Biological Engineers at Minneapolis, USA from 17-20 June, 2007
24. NABEC conference held in Montreal, QC, Canada. July 30th - August 2nd 2006.
25. Annual General Meeting of the Nigerian Institute of Food Science and Technology (NIFST), held at Conference Centre, University of Ibadan, Ibadan, Oyo State Nigeria, from 12th – 14th October, 2004.
26. First National Drying Symposium, held at Crab Park Hall, University of Port-Harcourt, Port-Harcourt, Rivers State, Nigeria. 21st- 23rd October 2003.

VOLUNTEER AND SERVICES

Graduate Student Committee

1. Student's Name: Chadwick Parrish. Degree: Master of Science. Thesis Title: Vibro-Acoustic Codling Moth Larvae Infestation Detection in Apples. Electrical and Computer Engineering Department at the University of Kentucky. April 28, 2021.

External Examiner Duty

University of Kwazulu-Natal, South Africa

1. Student's Name: Sandile Sifiso Dlalda. Degree: Master of Science. Thesis Title: Effects of different packaging materials and storage conditions on the quality attributes of tomato fruits across the South African supply chain. January 2022

University of Kentucky, KY USA

2. Student's Name: Siavash Mazdeyasna. Degree: Doctor of Philosophy. Dissertation Title: Noncontact Multiscale Diffuse Optical Imaging of Deep Tissue Hemodynamics in Animals and Humans. Biomedical Engineering Department at the University of Kentucky. September 2020.

McGill University, QC Canada

3. Student's Name: Sai Kranthi Kumar VANGA. Degree: Doctor of Philosophy. Dissertation Title: Effects of novel processing techniques on proteins in plant-based alternative milk. Bioresource Engineering Department at McGill University. July 2018.

Proposal Review and Jury Service

1. Proposal Reviewer, Carnegie African Diaspora Fellowship Program's applications for Spring 2020, 2019, 2018, Fall 2017.
2. Panelist, BAE Periodic Program Review panel. Jan. 23, 2018.
3. Reviewer, Ontario Ministry of Agric., Food & Rural Affairs (OMAFRA). Jan 2017
4. Reviewer, Virginia Tech. CALS Animal Nutrition Pratt's Grant Program. Jan 2017
2. Reviewer, USDA-AFRI/NIFA panel on "Improving Food Quality". October 10 – 13, 2016.
3. Reviewer, USDA-AFRI/NIFA panel on Agricultural Systems and Technology: Engineering. Products and Processes. June 15 – 18, 2015.
4. Judge on STEM Clean Tech Competition. 2016, 2019.

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Journal Review Service

Editorial Duties

1. Special Topic Editor, Foods Journal 2021 to 2023
 - a. Special Issue topic: Applications of Non-destructive Technologies for Agricultural and Food Products Quality Determination (2021).
2. Associate Editor, Frontiers in Nutrition
 - a. Nutrition and Food Science Technology (2021) (4 paper assigned; 1 papers completed)
3. Frontiers in Sustainable Food Systems - Guest Editor of a Research Advances in Millet Research
4. Associate Editor, ASABE (PRS & NRES) August 2015 to date (23 papers Assigned: 23 completed)

Journal Review Duties

1. Journal of Food Process Engineering 2009 to date (14 papers reviewed)
2. Transactions of ASABE & Applied Engineering 2014 to date (14 papers reviewed)
3. Journal of Food Processing and Preservation 2015 to date (12 papers reviewed)
4. Journal of Food Engineering 2017 to date (13 papers reviewed)
5. Food and Bioprocess Technology 2015 to date (9 papers reviewed)
6. Food Chemistry 2019 to date (2 paper reviewed)
7. LWT 2016 to date (17 papers reviewed)
8. Journal of Food Measurement and Characterization 2016 to date (5 paper reviewed)
9. Journal of Food Science 2015 to date (8 papers reviewed)
10. Meat Science 2017 to date (2 paper reviewed)
11. Journal of Science of Food and Agriculture 2012 to date (5 papers reviewed)
12. Critical Review in Food Science and Technology 2015 to date (2 papers reviewed)
13. Foods 2019 to date (3 paper reviewed)
14. Meat and Meat Biology 2019 to date (1 paper reviewed)
15. Food Analytical Methods 2020 to date (1 paper reviewed)
16. Int'l Journal of Biological Macromolecules 2020 to date (1 paper reviewed)
17. Scientific Reports 2020 to date (1 paper reviewed)
18. Cereal Chemistry 2020 to date (1 paper reviewed)
19. Microchemical Journal 2021 to date (2 paper reviewed)
20. Journal of Cereal Science 2021 to date (1 paper reviewed)

Service position within BAE Department

1. Chair, Research and Graduate Studies Committee (RGSC). August 2021 – present
2. Lab Safety Committee. August 2021 – present
3. Seminar committee. August 2021 – present
4. Member, Search Committee for Engineer Associate for Electrical Engineering, BAE Department, University of Kentucky. 2018-2019, 2019 - 2020.
5. Member, Search Committee for Assistant/Asso. Professor of Food Processing/Fermentation, BAE Department, University of Kentucky. 2020
6. Departmental delegate to the College of Agriculture, Food and Environment Faculty Council, 2019.
7. Member, Search Committee for Research Facilities Manager, BAE Department, University of Kentucky. 2016, 2019.
8. Member, Undergraduate curriculum committee. August 2017 to date.
9. Chair, Student Recruitment and Outreach committee. BAE Department. 2015 to 2020.
10. Secretary, BAE Faculty Meeting. 2015-2017.

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11. Member, University of Kentucky TSM program curriculum committee. 2015 to date.
12. Member, BAE student recruitment and outreach committee, 2014 – 2015.
13. Alumni and development committee member, 2014 – 2015.
14. Member, Search Committee for Assistant Professor of Bioprocessing, BAE Department, University of Kentucky. 2014 – 2015.

Service within University of Kentucky

1. Member, College of Agriculture, Food and Environment (CAFÉ) Barnhart Fund of Excellence Award Selection Committee 2019 – 2021.
2. High School Student Mentor, NSF Scholars Program, UK-Carter G. Woodson Academy - 2018
3. Advisor, EPA P3 Student Competition at US Engineering and Science Festival held in Walter E. Washington Convention Center in DC under National Sustainable Design Expo. April 7 – 8, 2018
4. Member, UK Food Connection Committee on Student Support Program 2014-2015
5. Mentor, UK Team from College of Engineering to the 1B FirstBuild competition on October 2, 2015 in Louisville, KY

Service within Professional Associations

1. ASABE
 - a. Vice President, African Network Group of American Society of Agricultural and Biological Engineers (ANGASABE). 2020 – 2022.
 - b. Chair and Ad-hoc committee member for awards – African Network Group of ASABE (ANGASABE), 2019 – 2020.
 - c. Chair, Vice Chair, Secretary, Process System Community (PRS), 2019 – 2022.
 - d. Judge for Superior Paper Award, ASABE-PRS Community - 2019
 - e. Past Chair (2020 – 2022), Chair (2018 – 2020), Vice Chair (2016 – 2018) and Secretary (2015 – 2016) – ASABE-PRS 701 Committee,
 - f. P-129 (Student Poster and Oral Competition) Rep for PRS, 2018 – 2021.
 - g. Vice Chair Publicity, ASABE Kentucky Section, 2017 - 2018
 - h. Conference Session Chair/Moderator, ASABE-PRS 701, 703: Spokane 2017(1); Detroit 2018(3); Boston 2019(1); Virtual 2020 (PRS Community Showcase Live Session Moderator); Virtual 2021 (PRS 01 Live Session and PRS 701)
 - i. Member, Ad-hoc committee on Revitalization Program for ASABE-PRS 701, 2015 - 2017
 - j. Member, Ad-hoc committee on development of collaboration between African Network & our Chinese colleagues, 2016 - 2017
 - k. Panel Member, ASABE AIM 2016 - Marketing Yourself in Academia CPD Panel. July 17, 12 – 2 pm, 2016.
 - l. ASABE Future City Regional Competitions - Special Award Judge, 2015
2. Institute of Food Technology (IFT)
 - a. IFT Bluegrass Branch, Scholarship Award Committee, member 2017 – to date
 - b. IFT Annual Meeting Scientific Program Track Team Reviewer (Food Engineering Division), 2013 -2016, 2018-2021
 - c. IFT Research and Development Awards Jury, 2015 - 2017
 - d. IFT Feeding Tomorrow Scholarship Jury, 2014, 2016, 2017
3. Member, NC 1023 multistate hatch committee, 2014 to date
4. Ad-hoc committee member (Resources for Mathematical Modeling; Teaching Food Engineering to Engineers and Non-thermal Processing) NC 1023 October 2014 to date.

Curriculum Vitae

Advisory Board Membership

Member, Advisory Board of Biosystems and Agricultural Engineering program at Florida A&M University.
2015 to date.

Other volunteer services

Community Organization volunteer: Gbongan Notables Worldwide (GNW), Chair Agricultural Committee). June – July 2021.

Board Member, Creekside Andover Neighbor Homeowners' Association Sept 2019 - date

Member of Choir, Immanuel Baptist Church, Lexington KY Aug 2018 - date

McGill University International Student Buddy Program Jan 2005 to Jan 2009

- Helped intending, new and international students with information related to travel visa, housing, cost of living etc.
- Met with new students after arrival to help them settle quickly and easily.

PROFESSIONAL ASSOCIATION MEMBERSHIP

Professional Member, Institute of Food Technology (IFT)	Dec 2008 to date
Pro. Member, American Society of Ag & Biological Engr. (ASABE)	Dec 2006 to date
Member, Canadian Society of Biological Engineers (CSBE)	Dec 2006 to date
Reg. member, Council for Regulation of Engr. in Nigeria (COREN)	July 2005 to date
Member, Nigerian Institute of Food Science and Tech. (NIFST)	Dec 1995 to date
Member, Society of Food Engineers (SoFE)	Sept 2016
Member, American Society for Quality (ASQ)	Dec 2012 – Dec 2015
Member, Canadian Inst. of Food Science and Technology (CIFST)	Sept 2009 to 2016
Professional member, Nigerian Society of Engineers (NSE)	Jan 2004 to date
Member, International Society of Food Engineering (ISFE)	Oct 2009 to date
Member, Project Management Institute (PMI)	March 2014 - 2015