JOHN D. FLOROS – CURRICULUM VITA

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GENERAL INFORMATION

Professional Experience

2012-	Dean of the College of Agriculture, Director of K-State Research & Extension, and Professor of Food Science & Engineering, Kansas State University
2000-12	Head of the Department of Food Science, and Professor of Food Science & Engineering, Pennsylvania State University
2007-08	President, Institute of Food Technologists, Chicago, IL
1999-2000	Elected Professor, Food Science and Engineering, Department of Food Science and Technology, Aristotelian University of Thessaloniki, Greece
1998-2000	Professor, Food Process Engineering and Packaging, Department of Food Science (Joint/Courtesy appointment with the Department of Agricultural and Biological Engineering), Purdue University
1993-98	Associate Professor, Food Process Engineering and Packaging, Department of Food Science (Joint/Courtesy appointment with the Department of Agricultural and Biological Engineering), Purdue University
1995-96	Senior Research Engineer, Nestle R&D Center Inc., New Milford, CT
1988-93	Assistant Professor, Food Process Engineering and Packaging, Department of Food Science (Joint/Courtesy appointment with the Department of Agricultural and Biological Engineering), Purdue University
1984-88	Research Assistant, Department of Food Science & Technology, University of Georgia
1983-84	Research Assistant, Laboratory of Microbiology, Agricultural University of Athens, Greece
1981-83	Plant Manager, Tomato Processing Plant, Central Union of Agricultural Cooperative, Ilia, Greece
1977-81	Production Supervisor, Fruit & Vegetable Processing Plant, Asteris, Inc., Greece (during the production seasons of June to October)

Education

1984-88	PhD, Food Science & Technology, University of Georgia, Athens, GA, USA
1976-83	BS/MS, Food Science & Technology, Agricultural University of Athens, Greece

Training in Academic Leadership

2017	Advancing to the Presidency, American Council on Education, April 24-25, Washington, DC
2013-17	University / Industry Consortium (UIC)
2012-17	Association of Public and Land-Grant Universities (APLU) Meetings
2005-07	Food Systems Leadership Institute (Cohort I)
2005	Future of the American Public Research University, Academic Symposium, Penn State University, Feb. 25

2005 Research and Professional Ethics Workshop, Office of Research Protection and the College of Ag. Sciences, Penn State University, Jan. 18

2001 Chairing the Academic Department, Workshop for Division / Department Chairs and Deans, American Council on Education, Feb. 14-17, San Diego, CA

2000-12 Academic Leadership Forum, Regular Programs for Academic Administrators, Office of the Provost, Penn State University

2000-11 The Penn State Leadership Academy, Development Program for Academic Administrators, Penn State University

2000 The Penn State Executive Leadership and Management Program for Academic Administrators, Smeal College of Business, Penn State University, Nov. 19-21

1994-95 ESCOP/ACOP Leadership Program (Class IV, Project: Teaching Academy)

Membership in Professional and Honor Societies (past and present)

- American Society of Agricultural and Biological Engineers (ASABE, formerly ASAE)
- American Society for Quality Control (ASQC)
- American Statistical Association (ASA)
- Institute of Food Technologists (IFT)
- Society of Plastics Engineers (SPE)
- Gamma Sigma Delta (ΓΣΔ)
- Phi Kappa Phi (ΦΚΦ)
- Phi Tau Sigma (ΦΤΣ)
- Sigma Xi (ΣΞ)

Major Awards & Honors

2017 The Wallace Kidd Diversity Award (MANRRS), Kansas State University

2014 Food and Drug Administration's Award in recognition of *"distinguished service to the people of USA*"

2009 Fellow, Institute of Food Technologists

2007 Fellow, Food Systems Leadership Institute

2001 J. G. Woodrooff Lecturer, University of Georgia

1997 Honorary Research Professor, Department of Biotechnology, Denmark's Technical University, Lyngby, Denmark

1989 Robert C. Anderson Award for Research Creativity, University of Georgia

1988 Paper Award for a *Publication with Exceptional Engineering Merit*, American Society of Agricultural Engineers (ASAE, now ASABE)

1988 Student Scientist Award, Southern Association of Agricultural Scientists

1987 E. Broadus Browne Award for Outstanding Ph.D. Research, University of Georgia

1987 Certificate of Merit for Outstanding Scholastic Ability, Institute of Food Technologists

1986 Student Scientist Award, Southern Association of Agricultural Scientists

Board Memberships and Selected Key Professional Activities

2017-18 Co-Chair, National Academies of Sciences, Engineering and Medicine, Executive Committee on Science Breakthroughs 2030: A Strategy for Food and Agricultural Research

2017 Testified in front of the Senate Committee on Agriculture, Nutrition, and Forestry on "Agricultural Research: Perspectives on Past and Future Successes for the 2018 Farm Bill"

2016-17 Chair, International Advisory Board, Food Safety & Technology Research Center, The Hong Kong Polytechnic University

2015-16 External Advisory Board, Agency for Science, Technology and Research (A*STAR), Singapore

2015-16 External Review Board, Aristotelian University, Thessaloniki, Greece

2014-18 Executive Committee, University and Industry Consortium

2014-15 Scientific Advisory Council, Wrigley's

2013-18 Kansas 4-H Foundation Board

2013-14 Global Health Subcommittee, US Food and Drug Administration (FDA)

2012-18 Kansas Water Authority Board

2011-18 External Advisory Board, Hellenic Quality Assurance Agency of Higher Education, Greece

2011-13 Research Advisory Board, Tate & Lyle

2010-13 Technical Advisory Board, MGP Ingredients, Inc.

2010-11 External Review Committee, Center for Food Safety and Applied Nutrition (CFSAN), FDA (Chair)

2010-11 Expert Review Panel, Advanced Foods and Materials Network, Canada

2009-13 Science Board, U.S. Food and Drug Administration (FDA)

2008-09 External Review Board, Food Science Department, Stellenbosch University, South Africa

2007-08 External Review Board, Food Science Department, University of Guelph, Canada

2006-09 Board of Directors, Institute of Food Technologists

2004-06 Executive Board, Food Update Foundation

2004-05 Council of Food Science Administrators (Chair)

2003-04 External Review Board, College of Food Systems, United Arab Emirates University

1998-01 Executive Board, Institute of Food Technologists

1998-99 External Review Board, Department of Applied Biology & Chemical Technology, Technical University of Hong Kong

LEADERSHIP AND ACADEMIC ADMINISTRATION

Kansas State University, Dean & Director (2012 – Present)

Size and Nature of the College of Agriculture (COA) & K-State Research & Extension (KSRE): Jointly, the COA and KSRE, make up the largest unit within the Kansas State University system. It comprises of nearly 1,600 faculty and staff, and about 3,400 students, of which 550- 600 are graduate students. The total annual expenditures in 2017 were about $198M, with more than $105M of that in research expenditures, by far the largest research unit in the university. Our funding sources are diverse and include: federal funds, state sources, local government contributions, student tuition and fees, competitive grants and contracts, industry grants and donations, foundation and other non-profit grants and donations, private fundraising, and other income from sales, contracts and fees.

Duties as Dean of the College Agriculture: As Dean of the College of Agriculture (COA) at Kansas State University, I lead a dynamic, student-centered, research-driven and service-oriented college with diverse offerings of outstanding undergraduate and highly ranked graduate academic programs. The College encompasses more than traditional production agriculture with programs ranging from food and biosciences to communication and education, from bioprocessing and engineering to natural resources and recreation, and from environmental management to economics and agri-business.

Duties as Director of K-State Research & Extension: As Director of K-State Research & Extension (KSRE), I oversee the Kansas Agricultural Experiment Station and the Cooperative Extension Service, a partnership between Kansas State University and federal, state, and county governments. KSRE has offices in every Kansas county, and investments in five KSU colleges: Agriculture, Arts & Sciences, Engineering, Human Ecology, and Veterinary Medicine. We conduct basic and applied research throughout Kansas that is shared by Extension faculty, educators, agents and others on our websites and through social media, numerous conferences, workshops, field days, publications, newsletters and more. In collaboration with several federal and state agencies, and other non-profit and private entities, we support Kansas' biggest industry – Agriculture and Food – by helping the state with innovation, talent development, workforce training, and economic development.

Accomplishments as Dean and Director:

- Provided vision, overall program leadership, and strategic direction to Associate and Assistant Deans, Department Heads, Center and Institute Directors, and Extension Program Leaders, which form our COA/KSRE Leadership Team (about 40 people)
- Involved 5000+ people (faculty, staff, students, community leaders and other external stakeholders) in developing the COA/KSRE 2025 strategic plan that set an overall goal of becoming a top 5 College of Agriculture by 2025 (https://www.k-state.edu/2025/documents/K-State-2025-Agriculture_and_KSRE-Strategic-Direction-Action-and-Alignment-Plan-Aug-2013.pdf)
- Managed the COA/KSRE budget (~$200M) responsibly through consecutive federal/state cuts, internal university reallocations, and other financial challenges
- Worked closely with faculty, staff and students in a shared governance model
- Promoted teaching, research, outreach & extension, public service, and international activities both internally and externally
- Collaborated closely with several university leaders and groups to create the Global Food Systems Initiative, the only university-wide initiative approved by the Board of Regents and supported by state funds in recent years

- Cooperated with the KSU Foundation, the KSU Research Foundation, the K-State Institute for Commercialization, and the Vice President for Research, to define a process of strategically aligning private sector companies to the university and create long-term partnerships
- Partnered with state agencies, non-profit groups, and private industry to help the state of Kansas with innovation, product marketing, talent development, workforce training, and economic development, particularly in areas important to the state's economy and wellbeing (food and agriculture, water and natural resources, health and wellbeing, community revitalization, youth education and leadership development)
- Guided the College of Agriculture to record enrollments during the last five years (2012-2017), with average student enrollment increases of 27% (undergraduate), 18% (graduate), and 64% (multicultural), as compared to the previous five years
- Created new undergraduate student programs, and improved student experience, learning and success, as evidenced by the highest ever reported retention rates (1st to 2nd, and 1st to 3rd year retention), by the 4-Year and 6-Year graduation rates, and by the nearly 100% job placement
- Led the COA/KSRE to record extramural research funding (from $24M in 2011 to $58M in 2016), an increase of ~150% in just four years, and a major factor leading to the university's designation as a Carnegie Tier-1 Research University
- Increased significantly the college's research expenditures (from $76M in 2011 to $105M in 2017), despite reduced state support
- Established K-State's first Industry/University Cooperative National Science Foundation Center on wheat genetics and genomics
- Advanced the college's international research and outreach agenda by successfully competing for four new Feed the Future Innovation Labs from the U.S. Agency for International Development, an investment of over $100M for five years, making K-Sate without peer in this area of agricultural research
- Improved the COA ranking to 4th in the nation among all Colleges of Agricultural Sciences (by Niche in 2017, see https://www.niche.com/colleges/search/best-colleges-for-agricultural-sciences/) and most of our graduate programs were now ranked in the top five nationally.
- Increased the COA student scholarship $$$ awarded by more than 50% in five years
- Intensified private fundraising efforts and raised $86M in less than six years, and a college record $20M last year (2017), more than triple (3X) the amount raised just a few years ago
- Completed an architectural and engineering study of the college's infrastructure needs, and initiated the design and planning for a new $550M campaign to renew and expand our academic and research facilities

Pennsylvania State University, Department Head (2000 – 2012)

Duties as a Department Head:

- Provided overall program leadership and strategic direction for faculty, staff and students
- Promoted research, teaching, extension, public service, and international activities
- Advanced the continuous acquisition of internal and external resources
- Managed, coordinated and administered the Department's resources
- Articulated a vision for the future of the Department both internally and externally
- Recognized individual excellence and facilitated teamwork

- Fostered interdisciplinary ties with appropriate departments and programs within the College, University and beyond
- Strengthened linkages with and represented the Department to state and federal agencies, private entities, partners and collaborators, industry groups, alumni, and the citizens of PA
- Maintained a positive, productive and nurturing environment for students, faculty and staff
- Advocated tolerance, honesty and integrity, and promoted diversity
- Served as liaison for the Department to the administration of the College and University

Accomplishments as Department Head:

- Led the development of several of the department's Strategic Plans, with full participation of faculty, staff, students and external stakeholders. Examples can still be found at http://foodscience.psu.edu/about/strategic-plan/StragticPlan05_08.pdf, or http://foodscience.psu.edu/about/strategic-plan/Strategic%20Plan%202008-2013.pdf
- Formed an external advisory board composed of high-level scientists and leaders from industry, government and academia
- Reversed a downward trend and increased undergraduate student numbers by ~300%, from 52 in 2002 to 222 in 2012
- Reorganized undergraduate and graduate programs, and received accreditation from the Institute of Food Technologists, the national scientific society
- Augmented the number of endowments and nearly doubled the available funds for student fellowships and scholarships in 10 years
- Increased graduate student numbers by 50%, by doubling the size of the PhD program
- Developed a focused research agenda
- Increased competitive grants/contracts from about $1M before 2000 to an average of $5M per year for the period of 2006-12, and increase of almost 400%
- Raised about ~$46M from state, private, industrial and other sources for a new building
- Completed the design and construction of the new building in 2006 as the largest Food Science Building in the country
- Increased the distance education offerings and outreach programs
- Developed global connections and increased the number of international student programs
- Made significant additions to an outstanding faculty, and increase the diversity of faculty and students

Institute of Food Technologists, President (2007 – 2008)

IFT is the scientific society for Food Science and Technology, and a global organization with more than 20,000 members worldwide. Its mission is to advance the science of food and its applications across the global food system. The IFT president, an elected position, works broadly with scientists, engineers, technologists and other professionals from academia, industry and government to:

Duties as President of IFT:

- Advance and promote careers in Food Science and Technology
- Promote science, engineering, technology and their application in food

- Establish productive and interactive global networks
- Advocate for evidence-based decision making on food issues
- Communicate science, address public issues and influence outcomes

Accomplishments as President of IFT:

- Led or co-led the scientific society of more than 20,000 members for three years
- Implemented a new, smaller, and more responsive governance structure
- Developed and put into action a comprehensive strategic plan
- Articulated and publically communicated a new vision and mission for the Institute
- Managed, coordinated and administered the Institute's resources
- Guided the Institute through an internationalization period that proactively contributed to the global advancement of Food Science
- Strengthened the Institute's student recruitment efforts, and as a result, most Food Science programs in the country experienced significant student growth
- Fostered stronger ties with other scientific societies and together advocated for increased public support for education and research in agricultural, food and nutrition sciences
- Promoted a program to increase student scholarships

TEACHING, ADVISING AND MENTORING

My expertise, passion and commitment to quality teaching have made me a popular teacher and a frequent guest lecturer. I have gained the respect, recognition and appreciation of students and faculty alike due to my keen interest in student learning, effective communication skills, and continuous commitment to improving teaching materials and methods.

Purdue University

At Purdue University, I designed, developed and regularly taught four new courses:

1. FS 444 – Statistical Process Control, senior level
2. FS 445 – Food Packaging, senior level
3. FS 591 – Fruit and Vegetable Processing, senior/graduate level, and
4. FS 690B – Process/System Optimization Methods, graduate level

In addition, together with other faculty of the Food Science Department, I developed and regularly taught three graduate level courses:

5. FS 640 – Aseptic Processing & Packaging, graduate level
6. FS 654 – Food Processing & Packaging, graduate level, and
7. FS 655 – Industrial Case Studies, graduate level

Pennsylvania State University

At Penn State University, I periodically taught one course:

1. FD SC 411 – Managing Food Quality, senior level

Also, I regularly taught portions of the following courses:

2. FD SC 105 – Food, Facts & Fads, freshman level, and
3. FD SC 200 – Introduction to Food Science, sophomore level

Occasionally, I also lectured in other undergraduate and graduate courses within the Department.

Finally, I was instrumental in developing and organizing two new international courses:

4. FD SC 497B – Food Systems in Central America (with a 10-day visit to Costa Rica)
5. FD SC 497F – Food Systems in Italy (with a 10-day visit to Italy)

Outreach Teaching Activities

Throughout my career, I have been heavily involved in teams of faculty that developed, organized and taught many short courses and workshops. A partial list follows:

1. Aseptic Processing & Packaging Workshop (Purdue University)
2. Better Process Control School (Purdue University and PSU)
3. Food Science Fundamentals (similar workshops at Purdue University and PSU)
4. The Penn State Ice Cream Short Course (PSU)
5. The Penn State Pasteurizer's workshop (PSU)

Graduate Student Mentoring, Advising and Training

Throughout my career, I have been very active in graduate student training. I have advised or co-advised 22 graduate students (10 M.S. and 12 Ph.D.). Five (5) of those students, having their own funding from fellowships, scholarships, and/or governmental support, chose me as their major professor because of my research expertise and excellent national and international reputation. In addition, two (2) Postdoctoral Fellows and two (2) Visiting Scholars have worked under my direction in my laboratory. Additionally, I have served as a member of the Advisory Committee for 42 other graduate students.

Completed Graduate Students (22 Total – 10 MS & 12 PhD)

1. Guillou, Anne A. Minimization of the amount of NaCl used during natural cucumber fermentation and storage through multiresponse optimization methods. (M.S. Thesis, Aug. 1991).
2. Vieira, Margarida M. Quality changes and germination of *Bacillus cereus T* spores during ultrapasteurization and sequential heating of liquid whole eggs. (M.S. Thesis, Aug. 1991).
3. Price, Jan L. Optimization of oxygen and carbon dioxide levels for controlled/modified atmosphere packaging of shredded lettuce. (M.S. Thesis, Dec. 1992).
4. Liang, Hanhua. The effect of acoustic radiation on diffusion through biomembranes (Ph.D. Thesis, Dec. 1993).
5. Vradis, Ioannis. Modeling of electrically assisted ultrafiltration of whey. (Ph.D. Thesis, May 1995).
6. Gnanasekharan, Vivek. Evaluation of gas flow models and simulation of food package integrity tests. (Ph.D. Thesis, Aug. 1995).
7. Han, Jung, H. Modeling inhibition kinetics and mass transfer of controlled release potassium sorbate to develop an antimicrobial polymer for food packaging. (Ph.D. Thesis, May 1996).
8. Lay Ma, Sandra. Maximizing the shelf life of minimally processed apple slices by modified atmospheres and ascorbic acid treatment. (M.S. Thesis, Aug. 1997).
9. Farkas, Jerry K. The development of iron-based oxygen absorbing systems used in food packaging and preservation. (Ph.D. Thesis, Aug. 1998).
10. Rattray, Jeff. The use of neural networks to improve the effectiveness of food processing operations. (Ph.D. Thesis, Dec. 1998).
11. Dock (Steenstrup), Lisa Lotte. Development of thermal and non-thermal preservation methods for production of microbiologically safe apple cider. (Ph.D. Thesis, Dec. 1999).
12. Ozdemir, Murat. Antimicrobial releasing edible whey films and coatings. (Ph.D. Thesis, Dec. 1999).
13. Ozen, Banu. Effect of Ozone and Chlorine Dioxide treatments used in perishable food applications on polymeric materials: Changes in mechanical, thermal and mass transfer properties. (Ph.D., Thesis, Dec. 2000).
14. Lay, Ursula Vanesa. Sucrose in spray dried whole milk powder and the refining and conching processes in chocolate manufacture: A glass transition approach. (M.S. Thesis, Dec. 2005).
15. Matsos Konstantinos. Addition of active compounds in a whey protein edible coating: Effects on quality and shelf life of coated apple slices. (M.S. Thesis, Aug. 2006).
16. Chacko, Jino. Controlled release of Nisin from a biopolymer based film for food packaging applications. (M.S. Thesis, May 2008).

17. Kokkinidou, Smaro. Destruction and deactivation of patulin by ascorbic acid. (M.S. Thesis, Aug. 2008).

18 Lay, Ursula Vanesa. Encapsulating fatty acid esters of bioactive compounds in starch. (Ph.D. Thesis, May 2010).

19 Julius Ahirifie-Gogofio. Kinetics and predictive modeling of patulin degradation by ozone in apple juice and apple cider. (M.S. Thesis, May 2010).

20 Anallese Liutman. Optimization of an alginate-based edible coating with beeswax, nisin and EDTA to maximize shelf life of fresh mushrooms. (M.S. Thesis, Dec. 2011).

21 Minal Lalpuria. The use of niacin in bioplastics for improved food packaging materials. (Ph.D. Thesis, Aug. 2012).

22. Min Liu. Synthesis of bio-based nanocomposites for controlled release of antimicrobial agents in food packaging. (Ph.D. Thesis, May. 2014).

Post-Doctoral Students (2)

1. Fonkwe, Linus. Small-scale processing techniques for safe food in space (1996 - 97)

2. Kouassi, Gilles, K. Mechanism of protein inactivation by High Pressure Processing; and Applications of nanoscience / nanotechnology in food packaging and safety (2005 - 07)

Visiting Scholars (2)

1. Valentina Trinetta. Development of pollulan films with Sacacin-A for antimicrobial active packaging (2008-09)

2. Masataka Uchino. Food packaging and food safety (2010-11)

Advisory Committee Member to 42 additional graduate students (Not Listed)

RESEARCH, SCHOLARSHIP AND CREATIVE ENDEAVOR

My major research contributions are in the application of chemical engineering science, applied mathematics and industrial statistics to the field of food process engineering and packaging. My work has been focusing in developing innovative, efficient and effective food processing and packaging systems, improving the value, quality, safety and shelf life of food products, and advancing optimization methodology. Together with my students and collaborators, we broadened the understanding and modeled the behavior of several complex physicochemical and biochemical phenomena that occur during food processing and packaging; and we developed and optimized many food manufacturing operations. Specifically, we successfully accomplished the following:

- Developed effective peeling processes for fruits and vegetables, optimized a calcification process for diced tomatoes, and established new, environment-friendly methods to commercially ferment vegetables using low-salt brines.
- Discovered that acoustic (ultrasonic) radiation accelerates mass transfer in food dehydration, hydration and rehydration
- Proved that application of electric fields increases permeate flow during ultrafiltration
- Found optimum gas permeability values for "breathable" plastic films that maximize the shelf life of minimally processed produce packaged under modified atmospheres
- Designed "active" packaging films that (a) have antimicrobial properties and improve the safety of some packaged foods, and (b) absorb oxygen and extend the shelf life of oxygen sensitive foods
- Modeled the migration of health-hazardous substances and the sorption of flavor components in packaged foods
- Improved methods and equipment that detect package integrity defects and assure food safety and quality
- Showed that genetic algorithms, neural networks and fuzzy logic can be used to optimize, monitor and optimally control some food manufacturing operations
- Applied thermal and non-thermal methods to reduce pathogenic microorganisms and mycotoxins in fresh and minimally processed fruits and vegetables
- Applied nanotechnology based approaches to build new bio-based polymers for improved controlled release of active compounds and better packaging applications
- Developed edible films and coatings with antimicrobial and other active properties to improve the safety and quality of food products

Alone or with my students and other colleagues, I have published more than **130** research articles, book chapters and other publications, more than **110** research abstracts, and have made numerous scientific and technical presentations, more than **300** of which have been invited.

Research Publications

Refereed Papers

1. Floros, J.D. and Chinnan, M.S. 1987. Optimization of pimiento pepper lye-peeling process using response surface methodology. *Trans. ASAE*. 30:560-565.

2. Floros, J.D., Wetzstein, H.Y. and Chinnan, M.S. 1987. Chemical (NaOH) peeling as viewed by scanning electron microscopy: Pimiento peppers as a case study. *J. Food Sci*. 52:1312-1316, 1320.

3. Floros, J.D. and Chinnan, M.S. 1988. Computer graphics-assisted optimization for product and process development. *Food Technol*. 42(2):72-78, 84.

4. Floros, J.D. and Chinnan, M.S. 1988. Seven factor response surface optimization of a double-stage lye (NaOH) peeling process for pimiento peppers. *J. Food Sci*. 53:631-638.

5. Floros, J.D. and Chinnan, M.S. 1988. Microstructural changes during steam peeling of fruits and vegetables. *J. Food Sci*. 53:849-853.

6. Cheng, T-S., Floros, J.D., Shewfelt, R.L. and Chang, C.J. 1988. The effect of high-temperature stress on ripening of tomatoes (*Lycopersicon esculentum*). *J. Plant Physiol*. 132:459-464.

7. Chinnan, M.S. and Floros, J.D. 1989. Texture optimization of chemically (NaOH) peeled pimiento peppers. *Int. Food Sci. Technol*. 7:75-80.

8. Mudahar, G.S., Toledo, R.T., Floros, J.D. and Jen, J.J. 1989. Optimization of carrot dehydration process using response surface methodology. *J. Food Sci*. 54:714-719.

9. Floros, J.D. and Chinnan, M.S. 1989. Determining the diffusivity of sodium hydroxide through tomato and capsicum skins. *J. Food Eng*. 9:129-141.

10. Floros, J.D. 1990. Controlled and modified atmospheres in food packaging and storage. *Chem. Eng. Progress*. 86(6):25-32.

11. Floros, J.D. and Chinnan, M.S. 1990. Diffusion phenomena during chemical (NaOH) peeling of tomatoes. *J. Food Sci*. 55:552-553.

12. Floros, J.D. and Chinnan, M.S. 1990. Effect of film perforation on the quality of individually seal packaged tomatoes. *J. Food Quality*. 13:317-329.

13. Guillou, A.A. and Floros, J.D. 1992. Problems associated with the processing of cucumber pickles: Softening, bloater formation and environmental pollution. *Develop. Food Sci*. 29:499-514.

14. Floros, J.D., Ekanayake, A., Abide, G.P. and Nelson, P.E. 1992. Optimization of a diced tomato calcification process. *J. Food Sci*. 57:1144-1148.

15. Guillou, A.A., Floros, J.D. and Cousin, M.A. 1992. Calcium chloride and potassium sorbate reduce sodium chloride used during natural cucumber fermentation and storage. *J. Food Sci*. 57:1364-1368.

16. Vradis, I. and Floros, J.D. 1993. Membrane separation processes for wine dealcoholization and quality improvement. *Develop. Food Sci*. 32:501-520.

17. Price, J.L. and Floros, J.D. 1993. Quality decline in minimally processed fruits and vegetables. *Develop. Food Sci*. 32:405-427.

18. Guillou, A.A. and Floros, J.D. 1993. Multiresponse optimization minimizes salt in natural cucumber fermentation and storage. *J. Food Sci*. 58:1381-1389.

19. Gnanasekharan, V. and Floros, J.D. 1994. Package integrity evaluation: Criteria for selecting a method - Part I. *Packag. Technol. Eng*. 3(6):44-48.

20. Gnanasekharan, V. and Floros, J.D. 1994. Package integrity evaluation: Criteria for selecting a method - Part II. *Packag. Technol. Eng.* 3(7):67-72.

21. Floros, J.D. and Liang, H. 1994. Acoustically assisted diffusion through membranes and biomaterials. *Food Technol*. 48(12):79-84.

22. Floros, J.D. and Liang, H. 1995. Multiresponse optimization by a normalized function approach. *Develop. Food Sci*. 37:2139-2150.

23. Gnanasekharan, V. and Floros, J.D. 1995. Back propagation neural networks: Theory and applications for food science and technology. *Develop. Food Sci*. 37:2151-2168.

24. Vradis, I.G. and Floros, J.D. 1995. Genetic algorithms and fuzzy theory for optimization and control of food processes. *Develop. Food Sci.* 37:2169-2182.

25. Floros, J.D., Dock L.L. and Han J.H. 1997. Active packaging technologies and applications. *Food Cosmet. & Drug Packag*. 20:10-17.

26. Farkas, J.K., Floros, J.D., Lineback, D.S. and Watkins, B.A. 1997. Oxidation kinetics of menhaden oil with TBHQ. *J. Food Sci*. 62:505-507, 547.

27. Gnanasekharan, V. and Floros, J.D. 1997. Migration and sorption phenomena in packaged foods. *CRC Crit. Rev. Food Sci. Nutrit*. 37:519-559.

28. Han, J.H. and Floros, J.D. 1997. Casting antimicrobial packaging films and measuring their physical properties and antimicrobial activity. *J. Plastic Film Sheet*. 13:287-298.

29. Han, J.H. and Floros, J.D. 1998. Modeling the growth inhibition kinetics of baker's yeast by potassium sorbate using statistical approaches. *J. Food Sci*. 63:12-14.

30. Han, J.H. and Floros, J.D. 1998. Potassium sorbate diffusivity in American processed and Mozzarella cheeses. *J. Food Sci*. 63:435-437.

31. Han, J.H. and Floros, J.D. 1998. Simulating diffusion model and determining diffusivity of potassium sorbate through plastics to develop antimicrobial packaging films. *J. Food Proc. Preserv*. 22:107-122.

32. Han, J.H. and Floros, J.D. 1998. Modelling the change in colour of potassium sorbate powder during heating. *Internat. J. Food Sci. Technol*. 33:199-203.

33. Dock, L.L., Nielsen, P.V. and Floros, J.D. 1998. Biological control of *Botrytis cinerea* growth on apples stored under modified atmospheres. *J. Food Protect.* 61:1661-1665.

34. Floros, J.D., Ozdemir, M and Nelson, P.E. 1998. Trends in aseptic packaging and bulk storage. *Food Cosmet. Drug Packag.* 21:236-239.

35. Han, J.H. and Floros, J.D. 1999. Modeling antimicrobial activity loss of potassium sorbate against baker's yeast after heat process to develop antimicrobial food packaging materials. *Food Sci. Biotechnol*. 8(1):11-14.

36. Rattray, J.H., Floros, J.D. and Linton, R.H. 1999. Computer-aided microbial identification using decision trees. *Food Control* 10:107-116.

37. Moruzzi, G., Garthright, W.E. and Floros, J.D. 2000. Aseptic packaging machine pre-sterilisation and package sterilisation: statistical aspects of microbiological validation. *Food Control* 11:57-66.

38. Dock, L.L., Floros, J.D. and Linton, R.H. 2000. Heat inactivation of *Escherichia coli* O157:H7 in apple cider containing malic acid, sodium benzoate and potassium sorbate. *J. Food Protect.* 63:1026-1031.

39. Han, J.H. and Floros, J.D. 2000. Simulating migration models and determining the releasing rate of potassium sorbate from antimicrobial plastic films. *Food Sci. Biotechnol.* 9(2):68-72.

40. Ozdemir, M. and Floros, J.D. 2001. Analysis and modeling of potassium sorbate diffusion through edible whey protein films. *J. Food Eng.* 47:149-155.

41. Han, Y., Floros, J.D., Linton, R.H., Nielsen, S.S. and Nelson, P.E. 2001. Response surface modeling for the inactivation of *Escherichia coli* O157:H7 on green peppers (*Capsicum annuum L.*) by chlorine dioxide gas treatments. *J. Food Protect.* 64:1128-1133.

42. Ozen, B.F. and Floros, J.D. 2001. Effects of emerging food processing techniques on the packaging materials. *Trends Food Sci. Technol.* 12:60-67.

43. Steenstrup, L.L. and Floros, J.D. 2002. Statistical Modeling of D- and z-value of *E. coli* O157:H7 and pH in Apple Cider Containing Preservatives. *J. Food Sci.* 67:793-796.

44. Han, Y., Floros, J.D., Linton, R.H., Nielsen, S.S. and Nelson, P.E. 2002. Response surface modeling for the inactivation of *Escherichia coli* O157:H7 on green peppers (*Capsicum annuum*) by ozone gas treatments. *J. Food Sci.* 67:1188-1193.

45. Ozen, B.F., Dock, L.L., Ozdemir, M. and Floros, J.D. 2002. Processing factors affecting the osmotic dehydration of diced peppers. *Int. J. Food Sci. & Technol.* 37(5):497-502.

46. Ozen, B.F., Mauer L.J. and Floros, J.D. 2002. Effects of ozone exposure on the structural, mechanical and barrier properties of select plastic packaging films. *Packag. Technol. & Sci.* 15:301-311.

47. Ozdemir, M. and Floros, J.D. 2003. Film composition effects on diffusion of potassium sorbate through whey protein films. *J. Food Sci.* 68:511-516.

48. Steenstrup, L.L. and Floros, J.D. 2004. Inactivation of *E. coli* O157:H7 in apple cider by Ozone at various temperatures and concentrations. *J. Food Proc. Preserv.* 28:103-116.

49. Ozdemir, M. and Floros, J.D. 2004. Active Food Packaging Technologies. *CRC Crit. Rev. Food Sci. Nutrit*. 44(3): 185-193.

50. Yao, N., Floros J.D., and Seetharaman, K. 2005. Identification of important production variables affecting hard pretzel quality. *J. Food Quality*. 28:222-244.

51. Yao, N., Floros J.D., and Seetharaman, K. 2007. Optimisation of hard pretzel production variables affecting quality. *Intern. J. Food Sci. & Technol*. 42(3):269-280.

52. Kouassi, G.K., Anantheswaran, R.C., Knabel, S.J., and Floros, J.D. 2007. Effect of high pressure processing on activity and structure of alkaline phosphatase and lactate dehydrogenase in buffer and milk. *J. Agric. & Food Chem.* 55:9520-9529.

53. Ozdemir, M. and Floros, J.D. 2008. Optimization of edible whey protein films containing preservatives for mechanical and optical properties. *J. Food Eng.* 84:116-123.

54. Ozdemir, M. and Floros, J.D. 2008. Optimization of edible whey protein films containing preservatives for water vapor permeability, water solubility and sensory characteristics. *J. Food Eng.* 86:215-224.

55. Ozdemir, M., Ozen, B.F., Dock, L.L. and Floros, J.D. 2008. Optimization of osmotic dehydration of diced green peppers by response surface methodology. *LTW – Food Sci. & Technol.* 41:2044-2050.

56. Hayman, M.M., Kouassi, G.K., Anantheswaran, R.C., Floros, J.D., and Knabel, S.J. 2008. Effect of water activity on inactivation of *Listeria monocytogenes* and lactate dehydrogenase during high pressure processing. *Internat. J. Food Microbiol.* 124(1):21-26.

57. Lay Ma, U.V., Ziegler, G.R. and Floros, J.D. 2008. Effect of Sucrose on Physical Properties of Spray-Dried Whole Milk Powder. *J. Food Sci.* 73:E431-E438.

58. Trinetta V., Floros J.D. and Cutter C.N. 2009. Sakacin A-containing pullulan film: an active packaging system to control epidemic clones of *Listeria monocytogenes* in ready-to-eat foods. *J. Food Safety.* 30(2):366-381.

59. John D. Floros, Rosetta Newsome, William Fisher, Gustavo V. Barbosa-Canovas, Hongda Chen, C. Patrick Dunne, J. Bruce German, Richard L. Hall, Dennis R. Heldman, Mukund V. Karwe, Stephen J. Knabel, Theodore P. Labuza, Daryl B. Lund, Martina Newell-McGloughlin, James L. Robinson, Joseph G. Sebranek, Robert L. Shewfelt, William F. Tracy, Connie M. Weaver, and Gregory R. Ziegler, 2010. Feeding the World Today and Tomorrow: The Importance of Food Science and Technology – An IFT Scientific Review. *Comprehensive Reviews in Food Science and Food Safety,* 9:572-599.

60. Lay Ma, U.V., Floros, J.D. and Ziegler, G.R. 2011. Effect of Starch Fractions on Spherulite Formation and Microstructure. *Carbohydrate Polymers.* 83(4):1757-1765.

61. Lay Ma, U.V., Floros, J.D. and Ziegler, G.R. 2011. Formation of Inclusion Complexes of Starch with Fatty Acid Esters of Bioactive Compounds. *Carbohydrate Polymers.* 83(4):1869-1878.

62. Trinetta, V., Cutter, C.N. and Floros, J.D. 2011. Effects of ingredient composition on optical and mechanical properties of pullulan film for food-packaging applications. *LTW – Food Sci. & Technol.* 44:2296-2301.

63. Chacko, J., Lalpuria, M., Floros, J.D. and Anantheswaran, R.C. 2011. Controlled Release of Nisin from Biopolymer Films. *Proc. Int. Conf. Eng. Food (ICEF'11).* 1:105-106.

64. Lalpuria, M., Karwa, V., Anantheswaran, R.C. and Floros, J.D. 2013. Modified agar diffusion bioassay for better quantification of Nisaplin®. *J. Applied Microbiol.* 114(3):663-671.

65. Kokkinidou S., Floros, J.D. and Laborde, L. 2014. Kinetics of the Thermal Degradation of Patulin in the Presence of Ascorbic Acid. *J. Food Sci.* 79(1):T108-T114.

66. Min Liu DeGruson, John D Floros and Gregory Ziegler. 2018. Modification and Characterization of Layered Double Hydroxide Nanoparticles with Different Antimicrobial Agents. *Applied Clay Science* (In Review).

67. Chacko, J., Anantheswaran, R.C. and Floros, J.D. 2018. Modeling of Nisin Release from a Biopolymer Based Film for Food Packaging Applications. *J. Food Sci.* (In Review).

68. Floros, J.D., Wessler S., et. al. 2018. Science Breakthroughs 2030: A Strategy for Food and Agricultural Research, *National Academies of Sciences, Engineering and Medicine* (In Prep).

Book Chapters

1. Floros, J.D. and Liang, H. 1992. Mass transfer and diffusion in foods. In *Encyclopedia of Food Science and Technology*. Hui, Y.H. (Ed). pp. 1657-1669. Wiley, NY.

2. Floros, J.D. 1992. Optimization methods in food processing and engineering In *Encyclopedia of Food Science and Technology*. Hui, Y.H. (Ed), pp. 1952-65, Wiley, NY.

3. Floros, J.D. and Gnanasekharan, V. 1992. Principles, technology and applications of destructive and nondestructive package integrity testing. In *Advances in Aseptic Processing Technologies*, Singh, R.K. and Nelson, P.E. (Eds), pp. 157-188, Elsevier Sci. Publ. Ltd., New York, NY.

4. Gnanasekharan, V. and Floros, J.D. 1992. Automated nondestructive package integrity testing. In *Food Processing Automation II,* pp. 361-374, ASAE, St. Joseph, MI.

5. Floros, J.D. 1993. Aseptic packaging technology. In *Principles of Aseptic Processing and Packaging*, Chambers, J.V. & Nelson, P.E. (Eds.), pp. 115-148, The Food Processors Institute, Washington, DC.

6. Floros, J.D. 1993. The shelf life of fruits and vegetables. In *The Shelf Life of Foods and Beverages*, Charalambous, G. (Ed.), pp. 195-216, Elsevier Sci. Publ. Ltd., New York, NY.

7. Gnanasekharan, V. and Floros, J.D. 1993. Shelf life prediction of packaged foods. In *The Shelf Life of Foods and Beverages*, Charalambous, G. (Ed.), pp. 1081-1118, Elsevier Sci. Publ. Ltd., New York, NY.

8. Gnanasekharan, V. and Floros, J.D. 1994. Comparison of Back Propagation Network (BPN) performance and Response Surface Methodology (RSM) for modeling food processes. In *Computer Integrated Manufacturing in the Process Industries*, Boucher, T.O., Jafari, M.A. & Elsayed, E.A. (Eds.), pp. 748-763, Rutgers Univ., Piscataway, NJ.

9. Vradis, I. and Floros, J.D. 1995. Electrically assisted membrane separation processes. In *Food Process Design and Evaluation*, Singh, R.K. (Ed.), pp. 1-26, Technomic Publ. Co., Lancaster, PA.

10. Gnanasekharan, V. and Floros, J.D. 1995. A theoretical perspective on the minimum leak size for package integrity evaluation. In *Plastic Package Integrity Testing - Assuring Seal Quality*, Blakistone, B.A. & Harper C.L. (Eds.) pp. 55-65, Institute of Packaging Professionals, Herndon, VA.

11. Floros, J.D. and Gnanasekharan, V. 1995. Determination of critical leak size by analysis of gas and aerosol flow. In *Advances in Aseptic Processing and Packaging Technologies*, Ohlsson, T. (Ed.), 10 pages, Kompendiet, Goteborg, Sweden.

12. Lay, S.V. and Floros, J.D. 1997. Extend product shelf life by combining MAP with other packaging and processing technologies. In *Fundamentals of Modified Atmosphere Packaging*, 11 pages, Society of Manufacturing Engineers, Dearborn, MI.

13. Farkas, J.K. and Floros, J.D. 1997. Active packaging: Applications and effects on food quality and safety. In *MAPack '97*, 10 pages, Institute of Packaging Professionals, Herndon, VA.

14. Dock L.L. and Floros, J.D. 1997. Processing techniques to improve the quality and shelf-life of tomato products. In *Solutions '97*, 11 pages, Packaging Machinery Manufacturers Institute, Arlington, VA.

15. Liang, H. and Floros, J.D. 1998. Osmotically induced mass transfer in apple slices. In *Drying '98*. Proceedings of the 11th International Drying Symposium (IDS 98), Halkidiki, Greece, Aug. 19-22, 1998, vol. A, pp. 938-945.

16. Ozaslan, B.F., Ozdemir, M., Dock, L.L. and Floros, J.D. 1998. Optimizing the osmotic dehydration process of green peppers. In *Drying '98*. Proceedings of the 11th International Drying Symposium (IDS 98), Halkidiki, Greece, Aug. 19-22, 1998, vol. A, pp. 946-953.

17. Floros, J.D., Rattray, J. and Liang, H. 1999. Mass transfer and diffusion in foods. In *Wiley Encyclopedia of Food Science and Technology*. Francis, F.J. (Ed), Wiley, NY.

18. Floros, J.D. and Rattray, J. 1999. Optimization methods in food processing and engineering. In *Wiley Encyclopedia of Food Science and Technology*. Francis, F.J. (Ed), Wiley, NY.

19. Dock, L.L. and Floros, J.D. 1999. Thermal and Non-Thermal Processing Techniques. In *Science and Technology of Functional Foods,* Schmidl M. and Labuza T. (Eds.), Aspen Publishers.

20. Floros, J.D., Nielsen, P.V. and Farkas, J.K. 2000. Advances in modified atmosphere and active packaging with applications in the dairy industries. *Bull. Int. Dairy Fed.* 346:22-28.

21. Liang, H. and Floros, J.D. 2003. Modeling mass transfer in apple tissue during osmotic dehydration under ultrasound field. In *Advances in Drying Technology*, Saravacos, G. et. al. (Eds.), Proceedings of the *EUDrying '03 Symposium*, Heraklion, Greece, Sep. 4-5, 2003, pp. 171-180.

22. Floros, J.D. and Matsos, K.I. 2003. Packaging and Canning, Modern. In *Encyclopedia of Food and Culture*. Katz, S.H. (Editor in Chief), Vol. 3, pp. 31-35, Scribner's Sons, Gale Group, Thomson Learning, Inc., New York, NY.

23. Ghosh, V., Anantheswaran, R.C. and Floros, J.D. 2003. Refrigerants. In *Encyclopedia of Agricultural, Food and Biological Engineering*, Heldman, D.R. (Ed.), pp. 827-830, Marcel Dekker Inc., New York, NY.

24. Floros, J.D. and Matsos, K.I. 2005. Introduction to Modified Atmosphere Packaging. In *Innovations in Food Packaging*. Han, J.H. (Ed.), Chapter 9, pp. 159-172, Elsevier Ltd., London, UK.

25. Han, J.H. and Floros, J.D. 2007. Active Packaging: A Non-Thermal Process. In *Advances in Thermal and Non-Thermal Food Preservation*. Tewari, G. and Juneja, V.K. (Eds.), pp. 167-183, Blackwell Publishing, Ames, Iowa.

26. B.A. Magnuson, C.M. Bryant, B.A. Bugusu, J.D. Floros, J. Weiss and R.Y. Yada. 2007. Benefits and Challenges of the Application of Nanotechnology to Food. In *Technical Proceedings of the 2007 Nano Science and Technology Institute (NSTI) Nanotechnology Conference and Trade Show,* Volume 2. pp. 594 - 597.

27. Floros, J.D., Weiss, I. and Mauer. L. J. 2010. Aseptic packaging technology. In *Principles of Aseptic Processing and Packaging*, 3rd Edition, Nelson, P.E. (Ed.), pp. 101-134, Purdue University Press, West Lafayette, IN.

28. Ghosh, V., Anantheswaran, R.C. and Floros, J.D. 2011. Refrigerants. In *Encyclopedia of Agricultural, Food and Biological Engineering*, 2nd Edition, Heldman, D.R. (Ed.), pp. 1417-1421, Taylor & Francis, New York, NY.

29. Elias, R.J. and Floros, J.D. 2011. Manufacturing functional foods: Effects on quality and bioavailability. In *Nutritional Genomics: The Impact of Dietary Regulation of Gene Function on Human Disease*, Wayne R. Bidlack and Ray Rodriguez (Eds.), Chapter 20, pp. 365-383, Taylor and Francis, New York, NY.

30. Bugusu, B.A. Lay Ma, U.V. and Floros, J.D. 2011. Products and Their Commercialization. In *"Nanotechnology in the agri-food sector – Implications for the future"* Lynn Frewer, Willem Norde, Arnout Fischer and Frans Kampers (Eds.), Chapter 9, pp. 149-170. Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim, Germany.

31. Ashirifie-Gogofio, J. and Floros, J.D. 2012. Aseptic Processing and Packaging. In *Handbook of Food Safety Engineering*, Da-Wen Sun (Ed.), Chapter 21, pp. 524-542, Wiley Blackwell, Oxford, England.

32. Liu M. and Floros, J.D. 2012. Aseptic Processing and Packaging. In *Thermal Food Processing: New Technologies and Quality Issues*, Da-Wen Sun (Ed.), 2nd Edition, Chapter 17, pp. 441–458, CRC Press, Taylor and Francis Group.

33. Lalpuria, M., Anantheswaran, R.C. and Floros, J.D. 2012. Packaging technologies and their role in food safety. In *Microbial decontamination in the food industry: Novel methods and applications*, Ali Demirci and Michael O. Ngadi (Eds.), pp. 701-745, Woodhead Publishing Ltd., Cambridge, UK.

34. Floros, J.D. 2015. Academic Leadership through Strategic Planning – A Dean's Perspective. In *Academic Leadership in Higher Education – From the Top Down and the Bottom Up,* Robert Sternberg et al. (Eds.), pp. 161-168, Rowman & Littlefield, Lanham Maryland, USA.

35. Liu-DeGruson M. and Floros, J.D. 2018. The Influence of Processing on the Stability of Nanostructures in Food. In *Nanomaterials in Food*, Gulden Goksen (Ed.), Pan Stanford Publishing (In Press).

Other Publications

1. Floros, J.D. 1983. Technical and economic problems of the tomato processing industry. M.S. Thesis, Agricultural University of Athens, Greece (In Greek).

2. Balis, C., Flouri, F. and Floros, J.D. 1984. Effect of air-pollution on the soil microbial flora in the region of Attica - Greece. In "*The ecological impact of the air-pollution in the Attica region*." Part C. Project 1.7 of the European Community.

3. Floros, J.D., Chinnan, M.S. and Wetzstein, H.Y. 1986. Comparison of steam and lye-peeling mechanism by scanning electron microscopy. ASAE Paper No. 86-6549, St. Joseph, MI.

4. Floros, J.D., Chinnan, M.S. and Wetzstein, H.Y. 1987. Extending the shelf-life of tomatoes by individual seal packaging. ASAE Paper No. 87-6525, St. Joseph, MI.

5. Floros, J.D. 1988. Chemical (NaOH) peeling of fruits and vegetables: Physico-chemical mechanisms and process optimization. Ph.D. Dissertation, University of Georgia, Athens, GA.

6. Floros, J.D. and Nelson, P.E. 1988. Controlled atmosphere packaging and storage of foods: Developments and challenges. AIChE Paper No. 44a, New York, NY.

7. Liang, H. and Floros, J.D. 1991. Multiresponse system optimization by a normalized function approach. IUFoST Paper No. 272, Toronto, Canada.

8. Gnanasekharan, V. and Floros, J.D. 1991. Modeling food package requirements and performance. IUFoST Paper No. 399, Toronto, Canada.

9. Floros, J.D. 1994. Critical leak size and package integrity. In *Packaging Technologies and Inspection News*, Vol. IV, pp. 3, PTI, Tukahoe, NY.

10. Floros, J.D. 1996. Review of the book: Food Packaging & Preservation (Mathlouthi, M., (Ed.), 1994). *Trends Food Sci. Techno*l. 7(2):69.

11. Floros, J.D. 1996. Annual meeting update: Call for 1997 annual meeting symposia. *Food Technol.* 50(8):14.

12. Floros, J.D. 1996. Annual meeting update: Abstracts for 1997 volunteered papers. *Food Technol*. 50(9):14.

13. Floros, J.D. 2004. Food and Diet in Greece from Ancient to Present Times. In the "*2004 Indigenous Knowledge Conference Proceedings*", pp. 5, Pennsylvania State University.

14. Floros, J.D. 2006. Foreword. In *Trends in Food Science – History at Penn State*. Kroger, M., pp. V-VI, DEStech Publications, Lancaster, PA.

15. Chikthimmah, N. and Floros, J.D. 2007. Challenges to Food Science in the U.S. *Food Technol.* 61(3):38-44.

16. A. Vestal, B. Magnuson, J. Weiss, J. Floros, R. Yada, C. Bryant and B. Bugusu,. 2007. Comments of the Institute of Food Technologists on the Nanoscale Science, Engineering and Technology (NSET) Subcommittee of the National Science and Technology Council's Committee on Technology – Research Priority Document and Public Meeting, Jan 4, 2007.

17. Floros, J.D. 2007. IFT – A Roadmap to the Future. *Food Technol.* 61(9):11.

18. Floros, J.D. 2007. IFT: A Global Citizen and Partner, *Food Technol.* 61(10):9.

19. Floros, J.D. 2007. Championing Research, Innovation, and Funding. *Food Technol.* 61(11):9.

20. Floros, J.D. 2007. IFT: Influential Advocate & Trusted Spokesorganization. *Food Technol.* 61(12):9.

21. Smith K., Beyrouty C., Boggess B., Bryan M., Ernst S., Floros J., Martin L., Miller R., Sumner S. 2008. Land Grant Colleges' Response to a Changing Food System. A report written based on the Cohort-1 Fellows of the Food Systems Leadership Institute (FSLI), and published electronically.

22. Floros, J.D. 2008. Steward for the Profession and its Community. *Food Technol.* 62(1):9.

23. Floros, J.D. 2008. Selecting Our Leaders: IFT Election Begins March 10. *Food Technol.* 62(2):11.

24. Floros, J.D. 2008. We're Kicking It up a Notch in New Orleans. *Food Technol.* 62(3):11.

25. Floros, J.D. 2008. Getting the Most out of Your IFT Membership. *Food Technol.* 62(4):11.

26. Floros, J.D. 2008. Food Science — Feeding the World. *Food Technol.* 62(5):11.

27. Floros, J.D. 2008. Supporting Our Foundation—Supporting Our Future. *Food Technol.* 62(6):13.

28. Floros, J.D. 2008. Educating the Next Generation. *Food Technol.* 62(7):11.

29. Floros, J.D. 2008. A Year of Accomplishments. *Food Technol.* 62(8):11.

30. Floros, J.D. 2009. Getting Real About Our Modern Food System. *Posted on September 1, 2009 by ePerspective (IFT-Food Technology),* at: http://foodtecheperspective.wordpress.com/2009/09/01/getting-real-about-our-modern-food-system/.

31. Lay Ma, U.V. and Floros, J.D. 2009. Promising nanoscale technology making better foods. *PA Business Central.* 18(22):7 (Nov. 6, 2009).

32. Floros, J.D. 2011. Feeding the world today and tomorrow – A look into our Future Food System. pp. 1-6. *Based on a presentation given at the 64th AMSA Reciprocal Meat Conference (RMC), Manhattan, Kansas, June 19–22, 2011. Posted on 6/28/2011 by AMSA*

Published Abstracts (Not Listed)

Together with my students and collaborators, we have published more than **110** abstracts in Proceedings of local, national or international scientific conferences and meetings.

Selected Invited Presentations and Recent Keynote Addresses

2015 *Sustainability of the Global Food Supply*, Keynote Speaker, Annual Symposium of the Dairy Farmers of Canada, Edmonton, Toronto, Montreal and Moncton, Canada

2015 *Food Science & Engineering for a More Sustainable Food Supply,* Keynote Address, 29th European Federation of Food Science and Technology International Conference, Athens, Greece

2015 *Sustainability of the Global Food System*, Invited Presentation at the Agency for Science, Technology and Research (A*STAR), Singapore

2013 *Feeding the World through Science and Technology,* Keynote Address, National Meeting of the American Chemical Society (ACS), New Orleans, LA

2013 *Feeding the World Today and Tomorrow,* Keynote Speaker, National Conference of the Dietitians Association of Canada, Victoria, Canada

2013 *Feeding 10 Billion People: The Food System of the Future*, Keynote Address, National Food Technology Summit & Expo, Mexico City, Mexico

2012 *The Evolving Food System: Benefits, Trends, & Risks,* Keynote Address, Global Food Safety Initiative (GFSI) Conference, Orlando, FL

2011 *Feeding the World through Food Science and Technology,* Keynote Address, Argentine Food Science and Technology Congress, Buenos Aires, Argentina

2011 *The Role of Food Science and Technology in Feeding the World,* Invited Presentation at the Department of Food Science, Rutgers University, New Brunswick, NJ

2011 *The Role of Processed Foods in our Food System – Past, Present & Future,* Keynote Address, American Meat Institute (AMI) Meeting, Chicago, IL

2011 *A Look into our Future Food System,* Keynote Address, 64th American Meat Science Association's Reciprocal Meat Conference (RMC), Manhattan, KS

2011 *Summary and Closing Remarks,* Invited Presentation, 11th International Congress on Engineering and Food, Athens, Greece

2010 *Perspectives on Creating & Sustaining a Positive Climate in the Academic Department,* Invited Presentation at the Penn State Leadership Academy, The Pennsylvania State University, State College, PA

2010 *New and Emerging Applications of Nanotechnology in our Food Supply,* Invited Presentation at the National Institutes of Health (NIH) Step-Forum, Washington DC

2009 *Manufacturing Functional Foods: Effects on Quality and Bioavailability,* Invited Presentation at the Nutritional Genomics Conference, California State University, Pomona, CA

2009 *Food Packaging Technologies for a Global Food System,* Invited Presentation at the Tokyo Agricultural University, Tokyo, Japan

2008 *Nanotechnology for Food Processing and Packaging,* Invited Presentation at the Nanotech Northern Europe Working Group, Danish Nano-Conference, Copenhagen, Denmark

2008 *The Green Consumer: Opportunities and Challenges for Food Science,* Keynote Address, Annual Meeting of the Canadian Institute of Food Science and Technology (CIFST), Prince Edward Island, Canada

2007 *Global Trends & the Food System,* Invited Presentation at the University of Guanajuato, Mexico

2007 *Advances in Food Packaging Technologies,* Keynote Address, Annual Conference of the South African Association of Food Science and Technology (SAAFoST), Durban, South Africa

Research Grants and Awards Received

At Purdue and Penn State Universities, I received more than $2.6M in grants and contracts. I was the PI or Co-PI in all of these grants. As a faculty at Purdue University, I received $775,000 in grants ($700,000 from external sources, and $75,000 from within Purdue).

Date	Project Title	Granting Agency/Company	Amount	Investigator(s)
Extramural Funding at Purdue University				
1988-1989	Lye-Peeling and Calcification of Tomatoes	Brooks Foods and Akerlund and Rausing North America, Inc.	$18,000	Floros (90%) Nelson (10%)
1988-1989	Aseptic Processing and Packaging of Egg Products	Value Added Center, Indiana Dept. of Commerce	$15,000	Floros (60%) Cousin (30%) Nelson (10%)
1988-1990	Alternative Methods for Low-Salt Pickle Processing	Value Added Center, Indiana Dept. of Commerce	$40,671	Floros (75%) Cousin (20%) Liska (5%)
1989-1991	Low-Salt Fermentation of Pickles: Process scale-up for Commercial Applications	Pilgrim Farms	$30,000	Floros
1989-1992	Tomato Processing Improvement Research	Indiana and Mid-America Food Processors Associations	$8,500	Floros
1989-1992	Modified Atmosphere Packaging for Fresh Produce	Value Added Center, Indiana Dept. of Commerce	$50,000	Floros (70%) Handa (25%) Nelson (5%)
1991-1992	Oxygen Absorbers in Food Preservation	Mitsubishi	$42,651	Floros (90%) Pratt (10%)
1992-1993	Food Packaging Equipment	Modern Controls and Cryovac	$13,710	Floros
1992-1994	Migration of Plastics Components into Foods	Value Added Center, Indiana Institute of Agriculture, Food and Nutrition, Inc.	$34,730	Floros (90%) Nelson (10%)
1994	Package Integrity Research	Graphics Packaging Corporation	$6,500	Floros
1994-1995	Migration / Sorption of D-Limonene in an Epoxy Resin	Tropicana and Enerfab	$20,000	Floros (90%) Nelson (10%)
1996-1997	Food Processing and Preservation in CELLS	NASA (part of a multimillion $ project)	$125,504	Floros
1997	Integrity of Pharmaceutical Packages	SmithKline Beecham	$6,600	Floros

1997-1999	Alternative methods to pasteurize apple cider	Indiana Value Added Center	$38,000	Floros (65%) Linton (30%) Hirst (5%)
1998-2000	The use of O_3 and ClO_2 to reduce the microbial load of fresh & minimally processed Fruit & Vegtbl.	USDA	$250,000	Nelson (35%) Floros (35%) Linton (30%)
Extramural Funding at Purdue University Subtotal			**$699,866**	
Intramural Funding at Purdue University				
1989-1990	Food Packaging Lab. Equipment	Agricultural Expt. Station, Purdue Univ.	$14,500	Floros
1989-1991	The Effect of Acoustic Radiation on Diffusion Through Biomembranes	Agricultural Expt. Station, Purdue Univ.	$17,000	Floros
1992-1994	The Effect of Electric, Acoustic and Electro-acoustic Fields on Membrane Separation	Purdue Research Foundation	$19,800	Floros
1993-1995	Quantifying Gas Leaks & Microbial Penetration in Food Packages	Agricultural Expt. Station, Purdue Univ.	$24,000	Floros
Intramural Funding at Purdue University Subtotal			**$75,300**	
Purdue University Total			**$775,166**	

At Penn State University, I led teams of faculty that received nearly $2M in grants.

Date	Project Title	Granting Agency/Company	Amount	Investigator(s)
2002-2004	Regulation, Risk and Return: A Food Systems Approach to Dairy Product Safety	USDA	$561,217	Floros (15%) et al.
2003-2005	Detecting, Tracking and Control Hazards in Milk and Dairy Products	USDA	$696,539	Floros (15%) et al.
2004-2006	Developing New Technologies & Programs to Enhance the Safety and Security of Dairy Products	USDA	$623,112	Knabel (10%) Floros (9%) et al.
Pennsylvania State University Total			**$1,880,868**	
Total Funding (Penn State & Purdue Universities)			**$2,656,034**	

Evidence of National and International Recognition

Selected Major Professional Activities

2012 External Reviewer, Dept. of Food Science and Human Nutrition, University of Main
2011 Expert Panel Chair, Hellenic Quality Assurance Agency of Higher Education, Greece
2010 Expert Panel Member to review the Advanced Foods and Materials Network, Canada
2009 External Reviewer, Dept. of Food Science and Human Nutrition, University of Florida
1996 Chair, Annual Meeting Technical Program Committee, Institute of Food Technologists
1996 Chair, Food Packaging Division, Institute of Food Technologists
1996 Counselor, Institute of Food Technologists
1993 Executive Committee, Food Packaging Division, Institute of Food Technologists
1993 Executive Committee, Food Engineering Division, Institute of Food Technologists
1992 Chair, Indiana Section, Institute of Food Technologists

Editorial Board
Journal of Food Quality (1997-2000)
Food, Cosmetics & Drug Packaging (1997-2005)

Reviewed Scientific Papers for:
Transactions of the American Society of Agricultural and Biological Engineers
Journal of Applied Engineering
Food Technology
International Journal of Refrigeration
Journal of Food Engineering
Journal of Food Process Engineering
Journal of Food Processing and Preservation
Journal of Food Quality
Journal of Food Science
Transactions of ASAE
Trends in Food Science and Technology

Reviewed Research Proposals for
Binational Agricultural Research and Development (BARD) Fund program
Indiana Corporation for Science and Technology
NSF
NASA
USDA

Elected to the following

Heat and Mass Transfer Committee, American Society of Agricultural Engineers (1989-1991)

Food Processing Committee, American Society of Agricultural Engineers (1988-1991)

Food Packaging Committee, American Society of Agricultural Engineers (1991-1993)

Indiana Section, Institute of Food Technologists, Chair (1992-1993)

Food Packaging Division, Executive Committee, Institute of Food Technologists (1993-1996)

Food Engineering Division, Executive Committee, Institute of Food Technologists (1993-1996)

Food Packaging Division, Institute of Food Technologists, Chair (1996-1997)

Counselor, Institute of Food Technologists (1996-1999)

Executive Committee, Institute of Food Technologists (1998-2001)

Council of Food Science Administrators, Chair (2004-2005)

Executive Board, Food Update, (2004-2007)

Institute of Food Technologists, President (2007-2008)

Nominations and Elections Committee, Institute of Food Technologists (2010-2013)

Appointed to

Treasurer, Indiana Section, Institute of Food Technologists (1989-1991)

Food Engineering Scholarship Awards Committee of IFT (1989-1994)

Judge, IFT Graduate Student Paper Competition (1990)

Annual Meeting Program Committee of IFT (1990-1996; Chair in 1996-97)

Chair, Research Paper Awards Nominations Committee of the American Society of Agricultural Engineers (Journals of Applied Engineering and Transactions) (1991)

Chair, Food Engineering Scholarship Awards Committee of IFT (1991-1993)

Food Packaging Scholarship Awards Committee of IFT (1991-1995)

Judge, IFT National College Bowl Competition (1993)

Annual Meeting Committee of IFT (1996-1997)

Diversity Committee of IFT (1998-2001, Ex. Com. Liaison)

Frontiers in Food Science Task Force (Summit Conferences), IFT (2000-2004, Chair in 2001-02)

Strategic Planning Committee, IFT (2002)

National Awards Jury, IFT, (2002-2005)

General Communications Committee, IFT (2003-2005, Chair in 2003-04)

Communications Management Committee, IFT (2003-2007, Chair in 2005-06)

Strategic Planning Task Force, IFT (2005-07)

Task Force on Nominations & Elections, IFT (2005)

Nanoscience and Nanotechnology Working Group, IFT (2005-10)

Science Board, U.S. Food and Drug Administration (2009-13)

Nanoscience Advisory Panel, Chair, IFT (2011-12)

Organized and Chaired the Following Technical Sessions / Symposia

Two technical sessions on Food Packaging, and Processing of Fruits and Vegetables during the 1991 IFT National Meeting

Three technical sessions on Food Engineering, Rheology, and Food Packaging during the 1992 IFT National Meeting

Two technical sessions on Food Packaging, and Food Engineering during the 1993 IFT National Meeting

One technical session on Food Packaging during the 1993 AIChE (CoFE) Meeting

Two technical sessions on Food Engineering, and Food Packaging during the 1994 IFT National Meeting

One technical session on Food Packaging during the 1995 IFT National Meeting

One technical session on Food Packaging during the 1996 IFT National Meeting

National Program Chair

In 1996, I became the chair of IFT's Technical Program Committee. This is one of the most significant positions within our scientific organization. It involved the leadership and coordination of approximately 40 scientists from universities and industry in order to review, approve or reject about 1,500 submitted abstracts from all over the world, and then organize the institute's annual meeting, where 1,350 scientific presentations were made, and about 20,000 individuals attended.

EXTENSION, OUTREACH & SERVICE

Extension and Outreach

Since the early days of my faculty career, and then throughout my administrative appointments, I served as an Extension Educator and helped the local, national and international food and agricultural industry by transferring knowledge. I was always readily available to teach, answer questions on the phone, consult, and participate in numerous schools, workshops and short-courses, where basic and applied research was translated into useful and relevant information. Over the years, I have developed and taught many customized training courses for the Food and Pharmaceutical Industries.

Consulting and Technology Transfer

During the last 35 years, I have consulted extensively on technical issues pertaining to: Food Science, Food Processing, Food Packaging, Food Safety, Quality Control, Effective Research Methods, Experimental Design, Statistical & Mathematical Modeling, Process/Product/System Optimization, Risk Analysis, Statistical Process Control, and Problem Solving. Over the years, I also developed expertise and consulted on Research Effectiveness and Strategic Planning.

Service at Purdue University

Department Committees

Examination and Progress Committee, IGPFS, 1988-90
Newsletter Committee, 1988-90
Newsletter Editor, 1989-90
Junior Advisor, Food Science Student Club, 1988-89
Senior Advisor, Food Science Club, 1989-90
Social Committee, 1988-90
Undergraduate Teaching Committee, 1989
Undergraduate Student Counselor, 1989-95
Graduate Admissions and Recruitment Committee, 1990-95 (Chair 1992-95)
Graduate Committee, 1992-99
Computer Integrated Manufacturing Committee, 1992-99

College Committees

Curriculum and Student Relations Committee, 1990-93
Andrew's Fellowship Committee Chair, 1994-95
Leadership Fellows Group, 1995-99
Grievance Committee, 1997-98

University Committees

Faculty Representative to Graduation Commencement, 1988-97

Service at Pennsylvania State University

Department Committees

Involved in all Departmental Committees

College Committees

PA Change Agents States for Diversity (CASD) Catalyst Team, 2000-06
College Leadership Retreat Committee Co-organizer, 2002
Search Committee for Associate Dean of Undergraduate Education, Chair, 2004

Strategic Planning Committee, Co-Chair, 2004-05
Strategic Planning Committee, 2009-10
Communications and Marketing Advisory Committee, 2010-11
Ag Futures Committee, 2010
College Re-Structuring Committee, 2011

University Committees

Academic Leadership Forum Planning Committee, 2005-11
Inter-College Masters of Professional Studies in Homeland Security (iMPS-HLS) Administrative Committee, 2009-11

Service at Kansas State University

College Committees

Involved in all College Committees

University Committees

Deans' Council, 2012-18
Masters of Public Health Program Executive Board, 2012-18
Search Committee for the Vice President of Research, 2013
Budget Advisory Committee, 2013-16
North Campus Corridor Task Force, 2014-15
Research Support Task Force, 2015-16
Budget Modernization Executive Committee, 2017-18
Budget Modernization Steering Committee, Co-Chair, 2017-18
Confucius Institute Board of Directors, 2018