### **CURRICULUM VITAE**

# Paul Ki-Souk Nam

Associate Professor, Department of Chemistry Missouri University of Science & Technology 229 Schrenk Hall, 400 W. 11<sup>th</sup> St., Rolla, MO 65409 Phone: (573) 341-4441 e-mail: nam@mst.edu

### **EDUCATION:**

- **Ph.D. Chemistry-Analytical** (1991) University of Missouri-Columbia, MO

  PhD Dissertation: "A Tandem Supercritical Fluid Extraction and On-Line Chromatographic System for Multiresidue Analysis"
- M.S. Chemistry-Analytical (1988) University of Missouri-Columbia, MO

  MS Thesis: "Chemical Characterization of Dairy Biomass and Supercritical Fluid Extraction of Hazardous Chemicals"
- **B.S.** Chemistry (1985) University of Hawaii, Manoa, HI

## PROFESSIONAL WORK EXPERIENCE:

2011-Pres	Associate Professor, Department of Chemistry, Missouri University of Science &
	Technology (Formerly University of Missouri-Rolla), MO
2004-2011	Assistant Professor, Department of Chemistry, Missouri University of Science &
	Technology (Formerly University of Missouri-Rolla), MO
1999-2004	Research Assistant Professor, Dept. of Chemistry and Center for Environmental
	Science & Technology, University of Missouri-Rolla, MO
1997-1998	Research Associate, Dept. of Chemistry and Center for Environmental Science &
	Technology, University of Missouri-Rolla, MO
1992-1995	Postdoctoral Fellow, National Center for Agricultural Utilization Research
	Food Quality & Safety Research Unit, U.S. Department of Agriculture - ARS, Peoria, IL
1985-1991	Graduate Research Assistant, Environmental Trace Substances Research Center and
	Dept. of Chemistry, University of Missouri-Columbia, MO

### PROFESSIONAL AFFILIATION:

American Chemical Society (ACS); Korean Scientist and Engineer Association (KSEA); Society for the Advancement of Material and Process Engineering (SAMPE); American Oil Chemists' Society (AOCS); Algae Biomass Organization (ABO)

## **COURSES TAUGHT:**

(Undergraduate and graduate level) Analytical Chemistry; Instrumental Analysis; Separations; Environmental Monitoring; Mass Spectrometry

### **RESEARCH AREA:**

Biosensors; Biomarkers; Biofuel & bioproduct; Environmental monitoring & remediation; Supercritical fluid reaction, extraction & chromatography; Analytical method & instrument development; Biopolymer synthesis & characterization; Waste treatment & recycling technology.

# PATENT:

- 1. Patent US 6,939,693 (2005) and Patent Application US 2007/0196448, "Enantioselective oligomerization of α-hydroxy carboxylic acids and α-amino acids", S. Lorbert, <u>P. Nam</u>, D. Forciniti, M. Rajesh, S. Kapila, C. Schasteen
- 2. Patent Application US 2005009158 (2005), "Process for Enzymatically Resolving an Enantiomeric Mixture of Alpha-hydroxy Acids", R. Arindam, S. Kapila, <u>P. Nam</u>, V. Flanigan, S. Lorbert, C. Schasteen
- 3. Patents US 6,800,318 (2004), US 6,793,951 (2004), US 6,547,987 (2003), "Solvent and Method for Extraction of Triglyceride Rich Oil", S. Kapila, <u>P. Nam</u>, V. Flanigan

- Patent US 6,605,590 (2003), "Oligomers and Oligomeric Segments of α-hydroxy Carboxylic Acids and α-amino Acids and Uses in Improving Bioavailability of Nutrition Supplement for Ruminants", S. Lorbert, C. Schasteen, <u>P. Nam</u>, D. Forciniti, M. Rajesh, S. Kapila
- 5. Patent US 6,342,651 (2002), "Reductive Combustion of Ammonium Salts of Sulfuric Acid", S. Lorbert, J. Willock, L. Irvine, S. Kapila, V. Flanigan, P. Nam, Y. Liske

#### **AWARD:**

- 1. Best Paper Award, American Foundry Society Special Merit Award, Molding Methods & Materials Division, 2013, "Foam Pattern Aging and Its Effect on Crack Formation in Investment Casting Ceramic Shells"
- 2. Excellence in Teaching Award, Department of Chemistry, Missouri University of Science & Technology, 2012
- 3. US Department of Agriculture Award, Bio-Energy Awareness Days "Grand Challenge" winner, 2008
- 4. Best Paper Award, 91<sup>st</sup> Annual Conference of American Oil Chemists' Society (AOCS), April 28, 2000, "Application of Hydrofluorocarbon in Selective Extraction of Triglycerides from Oilseeds"

### **RESEARCH GRANT & CONTRACT:**

- 1. "HBCU-HSI-RIU Consortium: A Synergistic Paradigm for Training the Next Generation Agriculture Workforce for a Sustainable Future", \$1,250,000 (Co-PI, 20% Share), USDA through Lincoln University, (6/2023–5/2028)
- 2. "Bioaugmented Phytoremediation to Treat 1,4-Dioxane Contaminated Groundwater", \$108,764 (Co-PI, 35% Share), DoD through University of Iowa, (12/2021 12/2025)
- 3. "Improving Drinking Water Safety for Small Rural Community through Toxic Disinfection Byproduct Control by Advanced Oxidation", \$72,543 (PI, 100% Share), USDA CBG through Lincoln University, (5/2021 3/2025)
- 4. "Analysis of chemical signals in short- and long-lived C. elegans populations", \$10,000 (Co-PI, 40%), Missouri S&T Center for Biomedical Research Seed Grant program, (7/2023 6/2024)
- 5. "Phytoforensic Site Assessment Analysis for Chlorinated Solvents Kisco Street", \$6,630 (Co-PI, 40%), Ramboll Americas Engr Solutions, (10/2021 10/2023)
- 6. "Side-Effects of Ozone Treatment and Irritant Detection in Modern Aquariums", \$20,150 (Co-PI, 30% Share), Bass Pro, (12/2020 12/2022)
- 7. "Evaluation of Antioxidant Therapy and Oxidative Stress Biomarkers after Blast-Induced Traumatic Brain Injury in Rat Models", \$412,261 (PI, 28% Share), US Army/ARL through Leonard Wood Institute, (4/2019 9/2022)
- 8. "Assessing Traumatic Brain Injury Noninvasively with Urinary Metabolites", \$1,367,141 (Co-PI, 20% Share), US Army/ARL through Leonard Wood Institute, (1/2019-6/2022)
- 9. "Corn Seed Quality Chemical Marker Discovery", \$152,050 (Co-PI, 35% Share), Bayer CropScience, (4/2019 3/2023)
- 10. "Method Development/Optimization to Enhance the Portable GC", \$33,761 (Co-PI, 50% Share), Nanova Environmental Inc., (9/2018 12/2021)
- 11. "Soy-Based Structural Insulated Panels for Energy Efficient Housing", \$25,000 (Co-PI, 33% Share), USDA-SBIR through Thermocore, (8/2019-4/2020)
- 12. "Smart Sensor Bandage for Ulcer Monitoring", \$120,950 (Co-PI, 49% Share), NIH-STTR, (8/2018 4/2020)
- 13. "Beta Testing of a Newly Developed NovaTest P100 Portable GC", \$30,991 (Co-PI, 30% Share), Nanova Environmental Inc., (2017–2018)
- 14. "Energy Efficient Building Panels with Insulation Core of Soy-Based Polyurethane Foams", \$30,000 (PI, 60% Share), Missouri Soybean Merchandizing Council, (2015–2017)
- 15. "Microalgae-Based Biofuels and Bioproducts", \$199,586 (PI, 100% Share); USDA-NIFA through Lincoln University; (Sept. 2010 Aug. 2015)
- 16. "On-Field Demonstration of Microalgae Cultivation for CO<sub>2</sub> Bioremediation and Biofuel Production", \$20,000 (PI, 100% Share); USDA-CSREES Evans-Allen through Lincoln University; (Feb. 2014 Sept. 2014)

- 17. "High Performance Alloy Materials & Advanced Manufacturing of Steel Castings for Improved Weapon System Reliability", Additional \$1,800,000 (Co-PI, 5% Share); US Army through Benet Laboratories; (Aug. 2010 July 2012)
- 18. "Integrated Program for the Development of Microalgae as Sustainable Resources for Biofuels and Biomaterials", \$526,906 (PI, 80% Share); Missouri Life Sciences Research Board; (Jan. 2008 June. 2012)
- 19. "Research and Development Program for Micro-algae Cultivation, Oil Extraction and Conversion to Biodiesel", \$70,000 (PI, 100% Share); USDA-CSREES Evans-Allen through Lincoln University; (Jan. 2011 Dec. 2012)
- 20. "High Performance Alloy Materials & Advanced Manufacturing of Steel Castings for Improved Weapon System Reliability", \$2,998,033 (Co-PI, 5% Share); US Army through Benet Laboratories; (Aug. 2007 Mar. 2011)
- 21. "Research and Development Program for Micro-algae Cultivation, Oil Extraction and Conversion to Biodiesel", \$140,000 (PI, 100% Share); USDA-CSREES Evans-Allen through Lincoln University; (Jan. 2008 Dec. 2010)
- 22. "The use of power plant flue gas to grow algae as an attempt to reduce carbon-dioxide gas emissions", \$50,000 in-kind (PI, 50% Share); Associated Electric Cooperative Inc. & Central Electric Power Cooperative, Missouri; (Sept. 2008 Aug. 2010)
- 23. "Development and Evaluation of a Highly Effective Vapor Disinfectant for Dynamic Decontamination of Vehicles, Buildings and Other Structures" \$603,099 (Co-PI, 15% Share); Naval Surface Warfare Center through Mid America Research & Development Foundation; (Aug. 2007 Jul. 2009)
- 24. "Center for Agricultural / Environmental Experiential Learning" \$31,082 (PI, 100% Share); USDA-CSREES through Lincoln University; (Sep. 2006 Aug. 2009)
- 25. "Endocrine Modulators and Excess Nutrients in Little Medicine Creek and West Locust Creek", \$293,266 (Co-PI, 30% Share); US EPA Region 7 through Missouri Dept. of Conservation; (2003–2007)
- 26. "Development of Healthy Food and Drink Products from Germinated and Fermented Soybean" \$66,000 (PI, 40% Share); Missouri Soybean Merchandising Council, Jeff. City, MO; (2004–2007)
- 27. "Characterization and Biological Effect Study of Endocrine Disruptors in Indian Creek, Newton County, Missouri", \$70,709 (Co-PI, 50% Share); US Geological Survey through Missouri Water Resources Research Center; (2005-2006)
- 28. "Fuel Preporator Evaluation" \$1,332,950 (Co-PI, 10% Share); US Army, TACOM; (2004–2006)
- 29. "A Program for the Development and Evaluation of Multispectral Obscurant Materials, Improved Engine Exhaust Smoke Systems, Computer Modeling and Simulation Tools for Analyzing Obscurant Cloud Transport and Diffusion and Robotic Obscurant" \$1,341,000 (Co-PI, 15% Share); US Army, SBCCOM; (2003-2005)
- 30. "Development of Advanced Sensors, Obscurants and Robotic Obscurant Platform", \$2,215,000 (Co-PI, 5% Share); US Army, SBCCOM; (2002-2005)
- 31. "Physicochemical Characterization and Biological Evaluation of Mineral and Biogenic Oil Based Obscurant Smoke", \$402,000 (Co-PI, 20% Share); US EPA; (2001–2005)
- 32. "Technique Development for Characterization of Heterogeneous Glycoproteins", \$225,000 (Co-PI, 40% Share); Monsanto Protein Technologies, St. Louis, MO; (2002–2004)
- 33. "Assessment of Endocrine Disruption in Hellbenders (*Crytobranchus alleganiensis*) in Missouri Rivers", \$73,422 (Co-PI, 30% Share); Fish and Wildlife Service of the US Dept of the Interior; (2002–2004)
- 34. "Research Grade Mass Spectrometers", \$226,383 (PI, 50% Share); DOE-Los Alamos National Laboratory; (2004)
- 35. "Development of Soy Hull Glycerol Derived Urethane Foams and Evaluation of their Mechanical Properties", \$28,750 (Co-PI, 25% Share); Missouri Soybean Merchandising Council, Jefferson City, MO; (2002–2004)

- 36. "Determination of Antioxidant Activity and Antioxidant Constituents from Natural and Synthetic Sample Sources", \$74,500 (Co-PI, 25% Share); Novus International, St. Louis, MO; (2001–2003)
- 37. "Enzymatic Synthesis and Characterization of MHBA and Amino Acid Co-Oligomers", \$130,500 (Co-PI, 25% Share); Novus International, St. Louis, MO; (1998–2003)
- 38. "Development of High Quality, Healthy and Economic Soy Foods for Human Consumption", \$27,500 (Co-PI, 40% Share); Missouri Soybean Merchandising Council, Jefferson City, MO; (2002–2003)
- 39. "An Assessment of High Oleic Soy Oil Esters as Technical Fluids: Insulating and Lubricating Oils", \$32,000 (Co-PI, 10% Share); Missouri Soybean Merchandising Council, Jefferson City, MO; (2000–2002)
- 40. "A Process for Selective Extraction of Tocopherols, Isoflavons, and Sterols from Soy Flakes", \$38,000 (Co-PI, 20% Share); Missouri Soybean Merchandising Council, Jefferson City, MO; (2000–2002)
- 41. "Development of On-Line, Real Time Particulate Matter Characterization and Monitoring System", \$1,200,000 (PI, 20% Share); US AirForce and NASA SBIR through Deposition Research Lab Inc., St. Louis, MO; (1998-2001)
- 42. "Characterization and Biological Effect Study of Endocrine Disruptors in Effluents from Missouri Sewage Treatment Plants", \$66,700 (Co-PI, 50% Share); US Geological Survey and Missouri Water Resources Research Center, Columbia, MO; (2001-2002)
- 43. "Development of a Combustion Process for the Production of Feedstock Chemicals from Ammonium Sulfate and Ammonium Bisulfate", \$77,727 (Co-PI, 30% Share); Novus International, St. Louis, MO; (1998-2000)
- 44. "Design, Fabrication, and Evaluation of a Pilot-Scale Continuous-Feed Soybean Processing System and Use of Novel Solvent for Tailored Soybean Oil Extraction", \$90,000 (Co-PI, 30% Share); United Soybean Board, St. Louis, MO; (1998-2000)
- 45. "Selective Extraction of Soybean Oil Constituents with Novel Solvent Systems", \$45,000 (Co-PI, 30% Share); Missouri Soybean Merchandising Council, Jeff. City, MO; (1998-2000)

### **PUBLICATION:**

### (JOURNAL)

- 1. A. Olajide, S. Kaur, N. Wheeler, V. Nam, H. Shi, P. Nam. "Monitoring residual solvents in pharmaceutical products using a portable pre-concentration GC-PID", *J. Pharmaceutical and Biomedical Analysis*, 249, 15 (2024)
- 2. A. Sigler, J. Wu, A. Pfaff, O. Adetunji, P. Nam, D. James, C. Burton, H. Shi. "Repeated Low-Level Blast Exposure Alters Urinary and Serum Metabolites", *Metabolites*, 13, 638 (2023)
- 3. M. Bose, J. Hagerty, J. Boes, C. Kim, W. Stoecker, P. Nam. "Optical Oxygen Sensor Patch Printed with Polystyrene Microparticles-Based Ink on Flexible Substrate", *IEEE Sensors*, (2021), doi: 10.1109/JSEN.2021.3105655
- 4. M. Bose, G. Dhaliwal, K. Chandrashekhara, P. Nam. "Role of Additives in Fabrication of Soy-based Rigid Polyurethane Foam for Structural and Thermal Insulation Applications", *Journal of Applied Polymer Science*, (2021), doi:10.1002/app.51325
- 5. A. Sigler, X. He, M. Bose, A. Cristea, W. Liu, P. Nam, D. James, C. Burton, H. Shi. "Simultaneous Determination of Eight Urinary Metabolites by HPLCMS/MS for Noninvasive Assessment of Traumatic Brain Injury", *Journal of the American Society for Mass Spectrometry*, (2020), doi: 10.1021/jasms.0c00181
- 6. G. Dhaliwal, S. Anandan, M. Bose, K. Chandrashekhara, P. Nam. "Effects of Surfactants on Mechanical and Thermal Properties of Soy-Based Polyurethane Foams", *Journal of Cellular Plastics*, (2020), doi: 10.1177/0021955X20912200
- 7. G. Dhaliwal, S. Anandan, K. Chandrashekhara, N. Dudenhoeffer, P. Nam, Fabrication and Testing of Soy-based Polyurethane Foam for Insulation and Structural Applications. *Journal of Polymers and the Environment*, 27, 1897-1907 (2019)

- 8. G. Dhaliwal, S. Anandan, K. Chandrashekhara, J. Lees, P. Nam. "Development and Characterization of Polyurethane Foams with Substitution of Polyether Polyol with Soy-Based Polyol". European Polymer Journal (2018) 107: 105. doi: 10.1016/j.eurpolymj.2018.08.001
- 9. H. Zhao, P. Nam, V. Richards, S. Lekakh. "Thermal Decomposition Studies of EPS Foam, Polyurethane Foam, and Epoxy Resin (SLA) as Patterns for Investment Casting; Analysis of Hydrogen Cyanide (HCN) from Thermal Degradation of Polyurethane Foam". Inter Metalcast (2018) 1-8. doi: 10.1007/s40962-018-0240-5
- S. Srinivasan, S. Kapila, D. Forciniti, P. Nam. Efficacy of L-Cysteine as an Antioxidant in Papain Catalyzed Synthesis of Oligopeptides in Organic Solvent System. *Biochemistry and Analytical Biochemistry* (2017) 6: 335
- 11. K. Amunugama, L. Jiao, K. Koerperich, Y-W. Huang, P. Nam, C. Hou. Cellular Oxidative Damage Is More Sensitive to Biosynthetic Rate than to Metabolic Rate: A Test of the Theoretical Model on Hornworms (Manduca sexta larvae). *Experimental Gerontology* (2016) 82:73-80
- 12. H. Zhao, P. Nam, V. Richards, S. Lekakh. Thermal Degradation Kinetics of Epoxy Stereolithography Pattern for Investment Casting Process. *Transactions of the American Foundry Society* (2015) 15-084
- 13. S. Palanisami, K. Lee, B. Balakrishnan, F. Rindi, <u>P. Nam</u>. Flue-gas influenced heavy metal bioaccumulation by the indigenous microalgae *Desmodesmus communis* LUCC 002. *Environmental Technology* (2014) 36, 4: 463-469
- 14. K. Lee, M. Eisterhold, F. Rindi, S. Palanisami, <u>P. Nam</u>. Isolation and Screening of Microalgae from Natural Habitats in the Midwestern United States of America for Biomass and Biodiesel Sources. *Journal of Natural Science, Biology and Medicine* (2014) 5: 333-339
- 15. S. Palanisami, T. Viswanathan, N. Dudenhoeffer, K. Lee, <u>P. Nam</u>, "Utilization of Flue Gas as a Carbon Dioxide Source from a Coal-Burning Power Plant for the Cultivation of Microalgae in Outdoor Circular Ponds", *Int. Journal of Pharma and Bio Sciences*, 4, 4 (B), 749-762 (2013)
- 16. S. Palanisami, K. Lee, <u>P. Nam</u>, "Nutrient Feeding Strategy Determines The Fate of Microalgal Growth and Carbon Metabolizing Enzyme System A Study with *Desmodesmus commuis* LUCC 002", *Int. Journal of Current Microbiology and Applied Sciences*, 2, 7, 233-239 (2013)
- 17. V. Robinson, C. Reeves, K. Lee, S. Palanisami, B. Balakrishnan, <u>P. Nam</u>. Investigating the use of *Enaphalodes rufulus* (red oak borer) as an antimicrobial agent. Int. J. Curr. Microbiol. App. Sci (2013) 2(9): 310-315
- 18. S. Palanisami, K. Lee, <u>P. Nam.</u> Activity of microalgal lipid accumulating key enzyme isocitrate dehydrogenase on nutrient feeding modulation Int. J. Curr. Microbiol. App. Sci (2013) 2(8): 389-393
- 19. W.A. Everhart, S.N. Lekakh, V.L. Richards, J.D. Smith, H. Li, K. Chandrashekhara, H. Zhao and <u>P. Nam</u>, "Foam Pattern Aging and its Effect on Crack Formation in Investment Casting Ceramic Shells", *Transactions of the American Foundry Society*, 120: 237-244 (2012)
- 20. H. Shi, <u>P. Nam</u>, Y. Ma, "Comprehensive Profiling of Isoflavones, Phytosterols, Tocopherols, Minerals, Crude Protein, Lipid, and Sugar during Soybean (*Glycine max*) Germination", *Journal of Agricutural and Food Chemistry*, 58, 4970-4976 (2010)
- 21. C-C. Huang, Y. Xu, <u>P. Nam</u>, J. Briggler, M. McKee, Y. Huang. "Heavy Metals, Hematology, and Serum Chemistry in Adult Hellbenders (*Cryptobranchus alleganiensis*)", *Environmental Toxicology and Chemistry*, 29, 5, 1132-1137 (2010)
- 22. M. Solis, C-C. Liu, <u>P. Nam</u>, D. Niyogi, J. Bandeff, Y-W. Huang, "Occurrence of Organic Chemicals in Two Rivers Inhabited by Ozark Hellbenders (Cryptobranchus alleganiensis bishopi)", *Archives of Environmental Contamination and Toxicology*, 53, 426-434 (2007)
- 23. T. Wang, <u>P. Nam</u>, H. Shi and Y. Ma, "Compositional Monosaccharide Analysis of Transgenic Corn Glycoproteins by HPLC with Fluorescence Detection and LC/MS with Sonic Spray Ionization, *Journal of Chromatographic Science*, 45, 4, 200-206 (2007)
- 24. M. Rajesh, S. Kapila, <u>P. Nam</u>, S. Lorbert, and C. Schasteen, "Enzymatic Synthesis and Characterization of L-Methionine and 2-Hydroxy-4-(methylthio) butanoic acid (HMB) Cooligomers", *J. Agricultural and Food Chemistry*, 51, 2461-2467 (2003)
- 25. Y. Liske, S. Kapila, V. Flanigan, P. Nam, and S. Lorbert, "Evaluation of Combustion Processes for

- Production of Feedstock Chemicals from Ammonium Sulfate and Ammonium Bisulfate", *J. Hazardous Substances Research*, 2, 8-11 (2001)
- 26. M. Gehrke, S. Kapila, <u>P. Nam</u> and V. Flanigan "A High Efficiency All Glass Sampling and Concentration Device for Adsorptive Semivolatile Organics" *Chemosphere*, 43, 479-483 (2001)
- 27. <u>P. Nam</u>, S. Kapila, Q. Liu, W. Tumiatti, A. Porciani, and V. Flanigan, "Solvent Extraction and Tandem Dechlorination for Decontamination of Soil" *Chemosphere*, 43, 485-491 (2001)
- 28. M. Gehrke, S. Kapila, <u>P. Nam</u> and V. Flanigan " A High Efficiency All Glass Sampling and Concentration Device for Adsorptive Semi Volatile Organics" *Organohalogen Compounds*, Vol. 40, 145-148, (1999)
- 29. <u>P. Nam</u>, Q. Liu, S. Kapila, W. Tumiatti and A. Porciani, "Assessment of Radiolysis and Chemical Dehalogenation for Decontamination of PCBs and PCDDs in Soil." *Organohalogen Compounds*, Vol. 40, 507-511, (1999)
- 30. W. Tumiatti, A. Porciani, R. Actis, S. Kapila and <u>P. Nam</u>, "A Continuous technology for decontamination of PCBs/PCTs/PCDFs/PCDDs in insulating oil CPD process applications" *Organohalogen Compounds*, Vol. 40, 571-575, (1999)
- 31. X. Zhang, S. Kapila, <u>P. Nam</u>, P. Whitefield and V. Flanigan "A Study on the Photochemical Transformation of Particle-Borne Tetrachloro Dibenzo-p-Dioxins, *Organohalogen Compounds*, Vol 40, 421-424, (1999)
- 32. Snyder, J.W. King, and <u>K.S. Nam</u>, "Determination of Volatile and Semivolatile Contaminants in Meat by Supercritical Fluid Extraction / Gas Chromatography / Mass Spectrometry", *J. Sci. Food Agric.*, 72 (1), 25-30 (1996)
- 33. <u>K.S. Nam</u> and J.W. King, "Supercritical Fluid Extraction and Enzyme Immunoassay for Pesticide Detection in Meat Products", *J. Agric. Food Chem*, Vol. 42 (7), pp. 1469-1474 (1994)
- 34. <u>K.S. Nam</u> and J.W. King, "Coupled SFE/SFC/GC for the Trace Analysis of Pesticide Residues in Fatty Food Samples", *J. High Resolution Chromatography*, Vol. 17 (8), pp. 577-582 (1994)
- 35. R. Tilio, S. Kapila, <u>K.S. Nam</u>, R. Bossi, S. Faccetti, "Reduction/Elimination of Sulfur Interference in Organochlorine Residue Determination by SFE", *J. Chromatography*, Vol. 662, pp. 191-197 (1994)
- 36. R. Tilio, K. Krishnan, S. Kapila, <u>K.S. Nam</u> and S. Faccetti, "A Simple Analytical Methodology for Multiresidue Pollutant Determinations", *Chemosphere*, Vol. 29, Nos. 9-11, pp. 1849-1858 (1994)
- 37. M.H. Liu, S. Kapila, <u>K.S. Nam</u> and A.A. Elseewi, "Tandem Supercritical Fluid Extraction and Liquid Chromatography System for Determination of Chlorinated Phenols in Solid Matrices", *J. Chromatography*, Vol. 639 (2), pp. 151-157 (1993)
- 38. S. Kapila, <u>K.S. Nam</u>, M.H. Liu, R.K. Puri, A.F. Yanders, "Promises and Pitfalls of SFE in Polychlorinated Compound Analyses", *Chemosphere*, Vol. 25, Nos. 1-2, pp. 11-16 (1992)
- 39. <u>K.S. Nam</u>, S. Kapila, A.F. Yanders and R.K. Puri, "A Multiple Sample Extraction and On-line System for the Analysis of Chlorinated Compounds", *Chemosphere*, Vol. 23, Nos. 8-10, pp.1109-1116 (1991)
- 40. <u>K.S. Nam</u>, S. Kapila, A.F. Yanders, and R.K. Puri, "Supercritical Fluid Extraction and Cleanup Procedures for Determination of Xenobiotics in Biological Samples", *Chemosphere*, Vol. 20 (7-9), pp.873-880 (1990)
- 41. M.H. Liu, S. Kapila, <u>K.S. Nam</u>, T.E. Clevenger, and A.F. Yanders, "Role of Entrainers in Supercritical Fluid Extraction of Chlorinated Aromatics from Soils and Biological Matrixes", *Organohalogen Compd.*, 2, pp.183-185 (1990)
- 42. <u>K.S. Nam</u>, S. Kapila, A.F. Yanders and R.K. Puri, "Supercritical Fluid Extraction and Cleanup Procedures for Determination of Xenobiotics in Biological Samples", *Chemosphere*, Vol. 20, Nos. 7-9, pp.873-880 (1990)
- 43. <u>K.S. Nam</u>, S. Kapila, A.F. Yanders and R.K. Puri, "A Multiple Sample Extraction and On-line System for the Analysis of Chlorinated Compounds", *Organohalogen Compd.*, Vol. 2, pp.195-198 (1990)
- 44. <u>K.S. Nam</u>, S. Kapila, D.S. Viswanath, T.E. Clevenger, J. Johansson and A.F. Yanders, "Application of Supercritical Fluid Extraction of Biological Tissue Samples for the Determination of

Polychlorinated Organic", *Chemosphere*, Vol.19, Nos. 1-6, pp.33-38 (1989)

### (CONFERENCE PROCEEDING)

- 1. G. S. Dhaliwal, S. Anandan, S. Ganguly, K. Chandrashekhara\*, M. Bose, P. Nam. "Investigation of the Role of Surfactants on the Properties of Soy-Based Polyurethane Foam," *Proceedings of the 5th Annual Composites and Advanced Materials Expo (2018, Dallas, TX)*, The Composites and Advanced Materials Expo (CAMX), Oct 2018
- 2. G. S. Dhaliwal, S. Anandan, K. Chandrashekhara, and P. Nam, "Development and Characterization of Polyurethane Foams with Polyether Polyol and Soy-Based Polyol," Proceedings of the CAMX Conference, Orlando, FL, Dec. 11-14, 2017.
- 3. G. S. Dhaliwal, S. Anandan, K. Chandrashekhara, N. Dudenhoeffer, and P. Nam, "Fabrication and Testing of Soy-based Polyurethane Foam," Proceedings of CAMX Conference, Sept. 26-29, Anaheim, CA, 2016.
- 4. <u>P. Nam</u>, Y. Huang, D. K. Niyogi, "Environmental Monitoring and Assessment of Endocrine Disrupting Chemicals in Missouri Streams", *Proceedings of UKC2008*, San Diego, CA, (2008)
- 5. K. Lee, <u>P. Nam</u>, V. Flanigan, F. Rindi, "Evaluation of Microalgae for Possible Use as the Biofuel Feedstock", *Proceedings of UKC2008*, San Diego, CA (2008)
- 6. V. Flanigan, A. Shah, R. Seemamahannop, <u>P. Nam</u>, S. Kapila, "Preparation of Soy Hull Augmented Polyurethanes and Assessment of Their Thermal Conductivity and Gas Permeability", *Proceedings of the SAMPE-Society for the Advancement of Materials and Process Engineering*, Baltimore, MD (2007)
- 7. R. Seemamahannop, M. Kafeel, V. Flanigan, <u>P. Nam</u>, S. Kapila, "Development and Characterization of Allyl Soyate and Defatted Soy Meal Based Plastics", *Proceedings of the SAMPE-Society for the Advancement of Materials and Process Engineering*, Baltimore, MD (2007)
- 8. K. Anderson, R. Seemamahannop, <u>P. Nam</u>, S. Kapila, V. Tumiatti, C. Roggero, S. Maina, M. Tumiatti, "Fingerprinting of Mineral Insulating Oils", *Proceedings of the MyTransfo Meeting*, Torino, Italy (2006)
- 9. V. Flanigan, H. Shi, N. Nateri, <u>P. Nam</u>, K. Lee, S. Kapila, "A fluidized bed combustor for treatment of high moisture content waste", *Proceedings of the IV International Conference on Value Added Resource Recovery*, L'Aquila, Italy (2003)
- 10. V. Flanigan, H. Shi, N. Nateri, <u>P. Nam</u>, K. Kittiratanapiboon, K. Lee, and S. Kapila, "A Fluidized-Bed Combustor for Treatment of Waste from Livestock Operations", *Proceedings of Waste Research Technology* (2003)
- 9. K. Hambacker, S. Kapila, <u>P. Nam</u>, M. Gehrke, V. Flanigan, "Rapid Vapor Concentrator and Detection System for Nitroaromatics", *Proceedings of SPIE-The International Society for Optical Engineering*, Vol. 4394 (Pt. 2, Detection and Remediation Technologies for Mines and Minelike Targets VI), 899-911 (2001)
- M. Gehrke, S. Kapila, <u>P. Nam</u> and V. Flanigan "Design of an Automated Rapid Vapor Concentrator and its Application in Nitroaromatic Vapor Sampling", *Proceedings of SPIE-The International Society for Optical Engineering*, Vol. 4038 (Detection and Remediation Technologies for Mines and Minelike Targets), 1352-1363 (2000)
- 11. V. Flanigan, S. Kapila, M. Maples, <u>P. Nam</u> and W. Tumiatti, "A Process for Recovery of Carbon, Steel and Organics from Scrape Tires" *Proceedings of the 1<sup>st</sup> International Conference on Solid Waste Technology, Safety and Environment*, Rome, Italy. 148-158 (1999)
- 12. S. Kapila, <u>P. Nam</u>, Q. Liu, V. Flanigan, A. Porchiani and W. Tumiatti, "Solvent Extraction and Tandem Dechlorination for Decontamination of Soil" *Proceedings of the 1<sup>st</sup> International Conference on Solid Waste Technology, Safety and Environment*, Rome, Italy. 463 -472 (1999)
- 13. M. Gehrke, S. Kapila, <u>P. Nam</u> and V. Flanigan, "Mass Spectrometric Characterization of Electron Attachment Reaction Products", *Proceeding of the Society of Photo-Optical Instrument Engineers*, Vol. 3710, 299-306 (1999)
- 14. M. Gehrke, S. Kapila, <u>P. Nam</u>, and V. Flanigan, "Enhnaced Detection of Nitroaromatic Vapors with a Cryotrap and Solute Modulation through Electron Attachment Reactions" *Proceeding of the Society*

- of Photo-Optical Instrumentation Engineers, Vol. 3392, 401-408 (1998)
- 15. S. Kapila, <u>K.S. Nam</u>, M.H. Liu, R.K. Puri and A.F. Yanders, "Promises and Pitfalls of Supercritical Fluid Extraction in Polychlorinated Compound Analysis", *Proceedings of the 11th International Symposium on Chlorinated Dioxins and Related Compounds*, Research Triangle Park, NC, Sept. (1991)
- L. Isbell, S. Kapila, <u>K.S. Nam</u>, A.F. Yanders, R.K. Puri and D.S. Viswanath, "Application of Support Bonded Siloxanes and Supercritical Carbon Dioxide for Trace Analysis of Organochlorine Compounds", *Proceedings of the Conference on Hazardous Waste Research*, Manhattan, KS, May (1990)
- 17. <u>K.S. Nam</u>, S. Kapila, A.F. Yanders, R.K. Puri and D.S. Viswanath, "Supercritical Fluid Extraction and cleanup Procedures for Determination of Xenobiotics in Biological Samples", *Proceedings of the Conference on Hazardous Waste Research*, Manhattan, KS, May (1990)
- 18. <u>K.S. Nam</u>, S. Kapila, D.S. Viswanath, G. Pieczonka and B.V. Mallu, "Application of Supercritical Fluid Extraction of Hazardous Chemicals from Fish Tissue", *Proceedings of the International Symposium on Supercritical Fluids*, French Chemical Society: Paris Cedex, pp.743-751 (1988)

## (BOOK CHAPTER)

- 1. Y. Huang, D. K. Niyogi, <u>P. Nam</u>, J. M. Bandeff, "Livestock hormones in aquatic ecosystems", In Veterinary Pharmaceuticals in the Environment, Coats, J., Henderson, K. (Eds.), Oxford University Press, New York, pp. 135-152 (2009)
- J.W. King and <u>K.S. Nam</u>, "Coupling Enzyme Immunoassay with Supercritical Fluid Extraction", In *Immunoassays for Residue Analysis: Food Safety*, Ross C. Beier and Larry H. Stanker, Eds., American Chemical Society, Washington, DC, ACS Symposium Series No. 621, pp. 422-438 (1996) (TECHNICAL REPORT)
- 1. P. Nam, Y. Ma, H. Shi, K. Lee, S. Kapila, V. Flanigan, "Development of Healthy Food and Drink Products from Germinated and Fermented Soybean", Final Report #256 to Missouri Soybean Merchandizing Council (February 2007)
- 2. Y. Huang, <u>P. Nam</u>, "Characterization and Biological Effect Study of Endocrine Disruptors in Indian Creek, Newton County, Missouri", Report #2005MO51B to Missouri Department of Conservation, (May 2005)
- 3. Q. Chen, S. Kapila, V. Flanigan, <u>P. Nam</u>, W. Rouse, "Effect of Ambient Temperature on Oil Smoke Simulation in COMBIC", Report #ECBC-CR-060 to Chemical Biological Center US Army Soldier and Biological Chemical Command (May 2003)
- 4. P. Nam, H. Shen, S. Kapila, P. Whitefield, and D. Hagen, S. Chelli, "Development of a Particulate Matter On-Line Real Time Physical and Chemical Characterization and Monitoring System", Phase I Final Report (October 1998) and Phase II Final Report (April, 2001) to US DoD Air Force, T.P.O.C. SBIR Contract No. F3615-98-C-5143
- 5. S. Kapila, <u>P. Nam</u>, Y. Liske, B. Richer, and V. Flanigan, "Combustion Products of Ammonium Bisulfate by Oxygen Deficient Flame", Phase I Final Report (February 1998) and Phase II Final Report (April, 1999) to Novus International, Inc.
- 6. S. Kapila, <u>P. Nam</u>, and D. Forciniti, "The Enzymatic Synthesis and Characterization of MHBA Amino Acid Oligomers", Phase I Final Report (September 1997), Phase II Final Report (September, 1999), and Phase III Final Report (September, 2001) to Novus International, Inc.

#### **PRESENTATION:**

- T. Zhou, S. Kaur, P. Nam, H. Shi, J. Yang, B. Hua. "Controlling disinfectant byproducts from drinking water using Fe3O4-coated granular activated carbon", Pittsburgh Conference and Exposition, San Diego, CA, Feb. 24-28, 2024
- 2. S. Kaur, P. Nam, H. Shi, O. Patty. "Headspace Solid Phase Microextraction-GC/MS Method for Analysis of Volatile Organic Compounds in Corn Seed", Mid-American Environmental Engineering Conference, Columbia, MO, Nov. 4, 2023

- 3. O. Adetunji, M. Bose, X. He, N. Wheeler, V. Nam, H. Shi, P. Nam. "Analysis of Volatile Organic Contaminants with Portable Gas Chromatograph", Mid-American Environmental Engineering Conference, Columbia, MO, Nov. 4, 2023
- 4. S. Kaur, T. Zhou, P. Nam, H. Shi, J. Yang. "Control drinking water disinfection byproducts using Fe3O4-coated granular activated carbon catalyst", Mid-American Environmental Engineering Conference, Columbia, MO, Nov. 4, 2023
- 5. C. Kim, P. Nam, W. Stoecker. "Smart Bandage for Tissue Oxygen Monitoring: Optical Sensor Ink Development and Printing on Flexible Substrate", Missouri S&T, NextGen, OBI Symposium, Rolla, MO, April 28, 2023
- 6. S. Kaur, P. Nam, H. Shi, J. Yang, B. Hua. "Fe3O4-coated activated carbon catalysts for drinking water disinfection and toxic disinfection byproduct control", Missouri S&T Graduate Research Showcase, April 12, 2023
- 7. O. Adetunji, J. Wu, A. Pfaff, A. Sigler, C. Johnson, N. Ercal, H. Shi, P. Nam. "LC-MS/MS quantification of oxidative stress biomarkers in blast-induced neurotrauma", Pittsburgh Conference and Exposition, Philadelphia, PA, March 18-22, 2023
- 8. S. Kaur, P. Nam, H. Shi, J. Yang, B. Hua. "Fe3O4-coated activated carbon catalysts for drinking water disinfection and toxic disinfection byproduct control", Pittsburgh Conference and Exposition, Philadelphia, PA, March 18-22, 2023
- 9. P. Nam. "Biomarker assessment for diagnosis and treatment of explosive blast-induced traumatic brain injury", SLU Collaborative Research Symposium, St. Louis, MO, Jan. 13, 2023
- 10. O. Adetunji, P. Nam. "Therapeutic Assessment of N-Acetylcysteine Amide in TBI", 2022 Center for Biomedical Research Symposium, Rolla, MO; March 4, 2022
- 11. C. Kim, P. Nam. "Sensing Bandage for Transcutaneous Oxygen Monitoring", 2022 Center for Biomedical Research Symposium, Rolla, MO; March 4, 2022
- 12. S. Kaur, P. Nam. "Simultaneous Analysis of Phytohormones and Lipid Peroxidation Products in Corn Seeds by HPLC-Tandem Mass Spectrometry", 2022 Center for Biomedical Research Symposium, Rolla, MO; March 4, 2022
- 13. O. Adetunji, J. Wu, A. Sigler, M. Bose, A. Pfaff, C. Johnson, N. Ercal, H. Shi, P. Nam. "Therapeutic Assessment of N-Acetylcysteine Amide in Traumatic Brain Injury Using LC-MS/MS", Pittsburg Conference and Exposition, Atlanta, GA, March 5-9, 2022
- 14. S. Kaur, P. Nam, W. Liu, H. Shi, O. Patty. "Development of a Rapid and Sensitive Headspace Solid Phase Microextraction-GC/MS Method for Volatile Compounds in Corn Seeds", Pittsburg Conference and Exposition, Atlanta, GA, March 5-9, 2022
- 15. O. Adetunji, J. Wu, M. Bose, A. Pfaff, C. Johnson, N. Ercal, H. Shi, P. Nam. "Evaluation of N-Acetylcysteine Amide as a Therapeutic for Traumatic Brain Injury in Animal Models", Best Symposium (Dow Chemical), Virtual; May, 2022
- O. Adetunji, J. Wu, M. Bose, A. Pfaff, A. Sigler, M. Bose, C. Johnson, N. Ercal, H. Shi, P. Nam. "Assessment of Potential Traumatic Brain Injury Biomarkers in Blast-Induced rats Using LC-MS/MS", ACS Midwest Regional Meeting, Iowa City, IA, Oct. 19, 2022
- 17. O. Adetunji, J. Wu, M. Bose, A. Pfaff, C. Johnson, N. Ercal, H. Shi, P. Nam. "Evaluation of N-Acetylcysteine Amide as a Therapeutic for Traumatic Brain Injury Using LC-MS/MS", ACS Conference and Exposition, Virtual, April 5-16, 2021
- 18. P. Nam, H. Shi, N. Ercal, C. Johnson. "Antioxidant Therapy and Oxidative Stress Biomarkers for Explosive Blast-Induced Traumatic Brain Injury in Rat Models", AENC Conclave, Rolla, MO, Sept. 14, 2021
- 19. S. Kaur, P. Nam, W. Liu, H. Shi, O. Patty. "Simultaneous Analysis of Phytohormones and Lipid peroxidation products in Corn Seeds by HPLC-Tandem Mass Spectrometry", American Society of Mass Spectrometry conference, Philadelphia, PA, Oct. 30 Nov. 4, 2021
- 20. O. Adetunji, J. Wu, A. Sigler, M. Bose, A. Pfaff, C. Johnson, N. Ercal, H. Shi, P. Nam. "LC-MS/MS Evaluation of Antioxidant Therapy Efficacy in Traumatic Brain Injury", Pfizer Chemistry Connect virtual symposium, Virtual, Nov. 9, 2021

- M. Bose, J. Boes, S. Welter, J. Hagerty, C.-S. Kim, W. Stoecker, P. Nam. "Synthesis of Polystyrene Micro-particle Ink for Printed Optical Oxygen Sensor", Pittsburgh Conference and Exposition, Chicago, IL, March 1, 2020
- 22. M. Bose, A. Sigler, A. Pfaff, B. Rutter, W. Liu, H. Shi, N. Ercal, C. Johnson, P. Nam. "UFLC-MS/MS Analysis of Oxidative Stress Biomarkers from Explosive Blast-Induced Traumatic Brain Injury", Pittsburgh Conference and Exposition, Chicago, IL, March 1, 2020
- 23. A. Sigler, X. He, M. Bose, A. Cristea, W. Liu, P. Nam, H. Shi, C. Burton, D. James. "Determination of Urinary Metabolites by Liquid Chromatography Mass Spectrometry for the Assessment of Traumatic Brain Injury", Pittsburgh Conference and Exposition, Chicago, IL, March 1, 2020
- 24. N. Wheeler, M. Bose, X. He, V. Nam, P. Nam, H. Shi. "Analysis of Water Contaminants with a Portable Gas Chromatograph for In-field Detection of Volatile Organic Compounds", Pittsburgh Conference and Exposition, Chicago, IL, March 1, 2020
- 25. P. Nam. "Antioxidant Therapy and Oxidative Stress Biomarkers for Explosive Blast-Induced Traumatic Brain Injury in Rat Models", AENC Conclave, Rolla, MO, Sept. 30, 2020
- 26. S. Dasari, M. Rangapuram, M. Bose, K. Chandrashekhara, P. Nam, T. Schuman. "Glass Microspheres Reinforced Soy-Based Polyurethane Foams for Insulation Application", CAMX Conference, Orlando, FL, Sept. 21, 2020
- 27. P. Nam, "Biomass Conversion Technologies for Sustainable Bioenergy and Bioproducts", UM System Research Summit, St. Louis, MO, Nov. 2019
- M. Bose, J. Boes, S. Welter, J. Hagerty, C. Kim, W. Stoecker, P. Nam, "Development of Optical Oxygen Sensor Patch Printed with Polystyrene Micro-Particle Based Ink", Ozark Biomedical Initiative Conference, Rolla, MO, Sept. 2019
- 29. M. Bose, A. Sigler, A. Pfaff, B. Rutter, W. Liu, C. H. Shi, N. Ercal, C. Johnson, P. Nam, "Development of UFLC-MS/MS Method for Oxidative Stress Biomarkers from Explosive Blast-Induced Traumatic Brain Injury", Ozark Biomedical Initiative Conference, Rolla, MO, Sept. 2019
- 30. Sigler, M. Bose, X. He, A. Cristea, W. Liu, C. Burton, H. Shi, D. James, P. Nam, "Development of a UFLC-MS/MS Based Method for Non-Invasive Assessment of Traumatic Brain Injury Using Urinary Biomarkers", 9<sup>th</sup> Traumatic Brain Injury Conference, Washington DC, June 2019
- 31. P. Nam, M. Bose, X. He, H. Shi. "Performance Evaluation of a New Portable GC with Photoionization Detector for On-Site Real-Time Monitoring of Environmental VOC", 256th ACS National Meeting, Boston, MA, August 2018
- 32. G. S. Dhaliwal, S. Anandan, S. Ganguly, K. Chandrashekhara, M. Bose, P. Nam. "Investigation of the Role of Surfactants on the Properties of Soy-Based Polyurethane Foam," The 5th Annual Composites and Advanced Materials Expo (CAMX), Dallas, TX, October 2018
- 33. P. Nam. "Microalgal Biotechnology for Carbon Capture and Utilization", UM-UWC Carbon Capture and Utilization Workshop, Cape Town, South Africa, June 5-9, 2017
- 34. G. S. Dhaliwal, S. Anandan, K. Chandrashekhara, and P. Nam, "Development and Characterization of Polyurethane Foams with Polyether Polyol and Soy-Based Polyol," Proceedings of the CAMX Conference, Orlando, FL, Dec. 11-14, 2017.
- 35. G. S. Dhaliwal, S. Anandan, K. Chandrashekhara, N. Dudenhoeffer, and P. Nam, "Fabrication and Testing of Soy-based Polyurethane Foam," Proceedings of CAMX Conference, Sept. 26-29, Anaheim, CA, 2016.
- 36. K. Lee, S. Palanisami, B. Balakrishnan, P. Nam, N. Dudenhoeffer, K. Chandrashekhara, F. Rindi. Investigation of Indigenous Microalgal Bioresources for Sustainable Bioenergy and High-Value Bioproducts (2015) Bioenergy Conference, Washington, DC, June 23-24, 2015
- 37. S. Palanisami, K. Lee, P. Nam. Microalgal Bioenergy and Bioproduct Technology-Opportunities through Indigenous Species. Annual Meeting of Missouri Academy of Sciences, St. Joseph, MO, April 17-18, 2015
- 38. N. Dudenhoeffer, J. Armstrong, P. Nam, K. Lee. Continuous Flow Reactor for Carbonic Acid Hydrolysis of Biomass (2015) PittCon Conference, New Orleans, LA, March 8-12, 2015
- 39. S. Palanisami, K. Lee, P. Nam. (2014) Search for Potent Weather, Parasite and Invasion Resistant

- Indigenous Microalgae for Biodiesel and High Value Products. Missouri Academy of Science 50th Annual Meeting, University of central Missouri, MO. April 25 26, 2014.
- 40. J. Hill, S. Palanisami, K. Lee, P. Nam. (2014) Optimization of Outdoor Media for Indigenous Microalga in Perspective of Biodiesel Feedstock. Missouri Academy of Science 50th Annual Meeting, University of central Missouri, MO. April 25 26, 2014.
- 41. J. Haslag, S. Palanisami, K. Lee, P. Nam. (2014) Flue Gas Resisting Strategy of Missouri Native Microalgae Desmodesmus Communis Lucc 002: A Biodiesel Feedstock. Missouri Academy of Science 50th Annual Meeting, University of central Missouri, MO. April 25 26, 2014.
- 42. B. Balakrishnan, S. Palanisami, K. Lee, P. Nam. (2013) Isolation and characterization of novel Haematococcus sp. For the production high value red pigment astaxanthin. Missouri Academy of Science 50th Annual Meeting, University of central Missouri, MO. April 25 26, 2014.
- 43. S. Palanisami, K. Lee, P. Nam. (2014). Indigenous microalgae for efficient weather, parasite and invasion resistant bioenergy feedstock and high value products. LU Research Symposium, Lincoln University, Jefferson City, MO. April 16, 2014.
- 44. J. Hill, S. Palanisami, K. Lee, P. Nam. (2014). Nutrient optimization for the cost effective production of biodiesel feedstock from indigenous microalgae. LU Research Symposium, Lincoln University, Jefferson City, MO. April 16, 2014.
- 45. J. Haslag, S. Palanisami, K. Lee, P. Nam. (2014). Adaptive responses of Missouri native microalgae Desmodesmus communis LUCC 002 against coal fired flue gas. LU Research Symposium, Lincoln University, Jefferson City, MO. April 16, 2014.
- 46. B. Balakrishnan, S. Palanisami, K. Lee, P. Nam. (2014). Isolation, identification and growth characterization of a novel Haematococcus sp. LU Research Symposium, Lincoln University, Jefferson City, MO. April 16, 2014.
- 47. P. Nam, N. Dudenhoeffer, K. Lee. (2014) Continuous hydrolysis of microalgae biomass with carbonic acid for ethanol production. 247th American Chemical Society National Meeting, Dallas, TX, March 16, 2014.P. Nam, H. Shariff, N. Dudenhoeffer, K. Lee. (2013) Polymer-Coated Magnetic Particles for Microalgae Flocculation and Separation. 7<sup>th</sup> Annual Algae Biomass Summit. Orlando, FL. Sept. 30 Oct. 3, 2013.
- 48. K. Lee, S. Palanisami, B. Balakrishnan, P. Nam, F. Rindi. (2013) Characterization of Green Microalgal Isolates from Missouri Waters for Prospective Biodiesel Production. 7<sup>th</sup> Annual Algae Biomass Summit. Orlando, FL. Sept. 30 Oct. 3, 2013.
- 49. P. Nam, N. Dudenhoeffer, K. Lee. (2013) Hydrothermal Treatment of Starch with Carbonic Acid in Continuous Flow Reactor. UKC 2013, New York/New Jersey, Aug. 7-11, 2013.
- 50. K. Lee, S. Palanisami, B. Balakrishnan, P. Nam, F. Rindi. (2013) Green Microalgae Isolated from Missouri Waters for Prospective Biodiesel Production. UKC 2013, New York/New Jersey, Aug. 7-11, 2013.
- 51. S. Palanisami, K. Lee, P. Nam. (2013) Exploration of effluence and inexpensive means for microalgal biomass production. 49th Annual Meeting of the Missouri Academy of Science, College of the Ozarks, Point Lookout, MO. April 19 20, 2013.
- **52.** J. Haslag, S. Palanisami, K. Lee, P. Nam. (2013) Nutrient modulation and feeding strategy influenced biomass and lipid yield in *Scenedesmus* sp. 49th Annual Meeting of the Missouri Academy of Science, College of the Ozarks, Point Lookout, MO. April 19 20, 2013.
- 53. B. Balakrishnan, S. Palanisami, K. Lee, P. Nam. (2013) Molecular characterization of green microalgal isolates from Missouri in prospective of biodiesel production and culture collection. 49th Annual Meeting of the Missouri Academy of Science, College of the Ozarks, Point Lookout, MO. April 19 20, 2013.
- 54. B. Balakrishnan, S. Palanisami, K. Lee, P. Nam. (2013) Molecular characterization of green microalgal isolates from Missouri in prospective of biodiesel production and culture collection. LU Research Symposium, Lincoln University, Jefferson City, MO. April 16, 2013.
- 55. J. Haslag, S. Palanisami, K. Lee, P. Nam. (2013) Nutrient modulation and feeding strategy influenced biomass and lipid yield in *Scenedesmus* sp.LU Research Symposium, Lincoln University, Jefferson City, MO. April 16, 2013.
- 56. S. Palanisami, K. Lee, P. Nam. (2013) Exploration of effluence and inexpensive means for microalgal biomass production. LU Research Symposium, Lincoln University, Jefferson City, MO. April 16,

- 2013.
- 57. S. Palanisami, K. Lee, P. Nam. (2013) Exploration of effluence and inexpensive means for microalgal biomass production. 2013 Association of Research Directors, Inc. 17<sup>th</sup> Biennial Research Symposium, Jacksonville, FL. April 6 10, 2013.
- 58. J. Haslag, S. Palanisami, K. Lee, P. Nam. (2013) Nutrient modulation and feeding strategy influenced biomass and lipid yield in *Scenedesmus* sp. 2013 Association of Research Directors, Inc. 17<sup>th</sup> Biennial Research Symposium, Jacksonville, FL. April 6 10, 2013.
- 59. B. Balakrishnan, S. Palanisami, K. Lee, P. Nam. (2013) Molecular characterization of green microalgal isolates from Missouri in prospective of biodiesel production and culture collection. 2013 Association of Research Directors, Inc. 17<sup>th</sup> Biennial Research Symposium, Jacksonville, FL. April 6 10, 2013.
- 60. P. Nam, Lee, K., Rindi, F. "Investigation of Native Microalgae as Sustainable Source of Fuel, Feed and Food", American Chemical Society WT Schrenk Society Meeting, Rolla, MO, October 29, 2012
- 61. Chandrappa, D., Nam, P., Lee, K., Rindi, F. (2012) Evaluation of Lipid production by Midwest Native Microalgae for Biofuel Applications. Algae Biomass Summit, Denver Colorado September 24-27, 2012
- 62. Lee, K., Nam, P., Rindi, F. (2012) Microalgae from Midwestern United States for Biomass and Biodiesel. UKC 2012 (US-Korea Conference), Los Angeles, CA, August 8-11, 2012
- 63. Zhao, H., Lee, K., Nam, P. (2012) Rapid Determination of Neutral Lipid Content in Microalgae Using Nile Red Fluorescence. Abstracts of Papers, 103<sup>rd</sup> AOCS Annual Meeting, Long Beach, CA. April 29-May 2, 2012
- 64. Schulze-Miranda, R., Guruvaiah-Sundharam, M. Nam, P., Lee. K. (2012) Cultivation of microalgae *Scenedesmus* sp. in different phototropic media for the production of biofuels. 2012 Abstracts of Papers, 48<sup>th</sup> Annual Meeting of Missouri Academy of Science, Columbia, MO, April 13-14, 2012
- 65. Schulze-Miranda, R., Guruvaiah-Sundharam, M. Nam, P., Lee. K. (2012) Cultivation of microalgae *Scenedesmus* sp. in different phototropic media for the production of biofuels. Annual Research Symposium. Lincoln University, April 2012
- 66. Dudenhoeffer, N., Nam, P., and Lee, K. (2012) Evaluation of Carbonic Acid Hydrolysis for Algal Biomass Fermentation and the Production of Ethanol. Abstracts of Papers, 2012 Pittsburgh Conference of Analytical Chemistry and Spectroscopy, Orlando, FL, March 11-15, 2012
- 67. Zhao, Hongfang; Nam, K. Paul; Lekakh, Simon; Richards, Von, Characterization and Thermal Decomposition Kinetic Study of Polymer Patterns Used in Investment Casting, PITTCON Conference & Expo, Orlando, FL, March 11-15, 2012
- 68. Zhao, Hongfang; Xu, Mingzhi; Li, Haifeng, S. Lehakh, V. Richards, P. Nam Characterization of Low Density Polymer Patterns for Large Steel Investment Casting, 58th Annual Technical Conference and Equipment Expo, Investment Casting Institute, Covington, KY, October 9-12, 2011
- 69. Nam, P. (2011) Mass Cultivation of Microalgae for Sustainable Energy and Environment. Abstracts of Papers, American Chemical Society Workshop, Rolla, MO, November 14, 2011
- 70. Nam, P., Dudenhoeffer, N., Lee, K., and Rindi, F. (2011) Native Microalgae Cultivation with Flue Gas Carbon Dioxide from a Coal-Fired Power Plant. Abstracts of Papers, 2011 Algae Biomass Summit, Minneapolis, MN, October 24-27, 2011
- 71. Lee, K., Dumbach, D., Kandasamy, G., and Nam, P. (2011) Effect of Microalgal Biofertilizer on Growth Parameters of Corn Plant. Abstracts of Papers, 2011 Algae Biomass Summit, Minneapolis, MN, October 24-27, 2011
- 72. Lee, K. and Nam, P. (2011) Microalgal Biotechnology for Sustainable Energy and Environment. Invited Seminar, Chungju National University, Chungju, S. Korea, June 15, 2011
- 73. Dudenhoeffer, N., Nam, P., Kandasamy, G., and Lee, K. (2011) Microalgal Biomass Production Coupled with Bio-Fixation of Flue Gas Carbon Dioxide. Abstracts of Papers, 47<sup>th</sup> Annual Meeting of Missouri Academy of Science, Jefferson City, MO, April 15-16, 2011
- 74. Kandasamy, G., Dumbach, D., Nam, P., and Lee, K. (2011) Microalgae Based Bio-Fertilizers

- Evaluated for Corn Plant. Abstracts of Papers, 47th Annual Meeting of Missouri Academy of Science, Jefferson City, MO, April 15-16, 2011
- 75. Dudenhoeffer, N., Viswanathan, T., Lee, K., and Nam, P. (2011) Algae for bio-fixation of flue gas carbon dioxide and sustainable biomass production. Abstracts of Papers, 16<sup>th</sup> Biennial Research Symposium, Association of Research Directors, Atlanta, GA. April 9-13, 2011
- 76. Kandasamy, G., Nam, P., and Lee, K. (2011) Microalgae as Bio-Fertilizer. Abstracts of Papers, 16<sup>th</sup> Biennial Research Symposium, Association of Research Directors, Atlanta, GA. April 9-13, 2011
- 77. Modi, D., Nam, P., and Lee, K. (2010) Transesterification of Bio-Renewable Oils with Supercritical Alcohols. Abstracts of Papers, 2010 AIChE Annual Meeting, Salt Lake City, UT, Nov. 7, 2010
- 78. <u>P. Nam</u>, K. Lee, "Algae as a Potential Solution to Growing Energy Demand", Joint Annual Meeting of the Missouri Branch, American Society of Microbiology and Missouri Academy of Sciences, Springfield, MO, April 16, 2010
- 79. Nam, P., Lee, K., Flanigan, V., and Rindi, F. (2010) Pilot-Scale Cultivation of Locally-Isolated Microalgae Using Power-Plant Flue Gas. Abstracts of Papers, 4<sup>th</sup> Annual Algae Biomass Summit, Phoenix, AZ. Sept. 28, 2010
- 80. Lee, K. and Nam, P. (2010) Algae as a Potential Solution to Growing Energy Demand. Abstracts of Papers, Joint Annual Meeting of the Missouri Branch, American Society of Microbiology and Missouri Academy of Sciences, Springfield, MO. April 16, 2010
- 81. Dudenhoeffer, N., Lee, K., and Nam, P. (2010) Development of Techniques and Conditions for Large-Scale Production of Microalgal Biomass. Abstracts of Papers #99, 15<sup>th</sup> Biennial Research Symposium, Association of Research Directors, Atlanta, GA. March 28, 2010
- 82. Bamber, A., Eisterhold, M., Rindi, F., Lee, K., Nam, P., and Dien, B. (2010) Cultivation of Selected Microalgae Species for the Purpose of Producing Bioenergy and Biomaterials. Abstracts of Papers #100, 15<sup>th</sup> Biennial Research Symposium, Association of Research Directors, Atlanta, GA. March 28, 2010
- 83. Modi, D., Nam, P., and Lee, K. (2010) Transesterification in Supercritical Methanol for Biodiesel Production and Analysis. Abstracts of Papers, PittCon 2010, Orlando, FL. Feb. 28, 2010
- 84. K. Lee, <u>P. Nam</u>, V. Flanigan and F. Rindi, "Microalgal Biomass for Biofuels and Bioproducts," UKC2010, Seattle, WA, Aug. 11, 2010.
- 85. <u>P. Nam</u>, D. Modi, K. Lee, "Supercritical Transesterification for Biodiesel Production," UKC2010, Seattle, WA, Aug. 11, 2010.
- 86. N. Dudenhoeffer, D. Tran, T. Thorn, <u>P. Nam</u>, K. Lee, "Bio-sequestration of CO<sub>2</sub> by Growing Algae using Flue Gas from the Coal Power Plant at Chamois, Missouri", 46<sup>th</sup> Annual Meeting of Missouri Academy of Science, Springfield, MO, April 16, 2010
- 87. D. Dumbach, P. Markway, R. Jones, <u>P. Nam</u>, K. Lee, "Microalgal Biomass As A Slow-Release Biofertilizer", 46<sup>th</sup> Annual Meeting of Missouri Academy of Science, Springfield, MO, April 16, 2010
- 88. D. Modi, <u>P. Nam</u>, "Transesterification in Supercritical Methanol for Biodiesel Production and Analysis", PittCon 2010, Orlando, FL, Feb. 28, 2010
- 89. H. Zhao, N. Quadeer, <u>P. Nam</u>, V. Richards, "Solid Phase Microextraction GC/MS and Thermogravimetric Analysis to Investigate the Thermal Degradation of Foamed-Polymer Patters Used in the Lost Foam Casting Process", PittCon 2010, Orlando, FL, Feb. 28, 2010
- 90. <u>P. Nam</u>, "Microalgae for Sustainable Energy and Environment", BioEnergy Conference, Kirksville, MO, Dec. 4, 2009
- 91. <u>P. Nam,</u> "Algae-Based Bioremediation and Biofuels", MST Biological Sciences Dept Seminar, Nov. 2, 2009
- 92. <u>P. Nam,</u> T. Smiley, D. Modi, "Supercritical Fluid Transesterification for the Catalyst-Free Production of Biodiesel" 238th National Meeting of American Chemical Society, Washington, DC, Aug.16, 2009.

- 93. N. Dudenhoeffer, M. Eisterhold, K. Lee, <u>P. Nam</u>, "Development of Techniques and Conditions for Large-Scale Production of Microalgal Biomass" 238th National Meeting of American Chemical Society, Washington, DC, Aug.16, 2009.
- 94. A. Bamber, M. Eisterhold, N. Dudenhoeffer, K. Lee, <u>P. Nam</u>, F. Rindi, "Cultivation and Lipid Analysis of Isolated Microalgae Strains for Biodiesel Production", 45<sup>th</sup> Annual Meeting of Missouri Academy of Science, Maryville, MO, April 24-25, 2009
- 95. N. Dudenhoeffer, K. Lee, <u>P. Nam</u>, "Optimal Cultivation and Harvesting Conditions for Large-Scale Micro-Algae Cultures", 45<sup>th</sup> Annual Meeting of Missouri Academy of Science, Maryville, MO, April 24-25, 2009
- 96. <u>P. Nam</u>, K. Lee, V. Flanigan, "Microalgae-Derived Biofuels and Bioproducts: Integration of Algal Feedstock Production and Biorefinery Processes", Missouri Energy Summit, Columbia, MO, April 22-23, 2009
- 97. K. Lee, <u>P. Nam</u>, "Bioenergy from Algae: Cultivation and Harvest of Locally-Isolated Microalgae Strains for Biomass Production", Missouri Energy Summit, Columbia, MO, April 22-23, 2009
- 98. P. Nam, T. Smiley, D. Modi, "Supercritical Fluid Transesterification for the Catalyst-Free Production of Biodiesel", Missouri Energy Summit, Columbia, MO, April 22-23, 2009
- 99. R. Schaub, R. Carlile, <u>P. Nam</u>, V. Flanigan, S. Kapila, E. Black, "Characterization of Aerosol and Vapors from a High Throughput Obscurant Smoke Generator", PittCon 2009, Chicago, IL, March 8-13, 2009
- 100. K. R. Anderson, R. Seemamahannop, <u>P. Nam</u>, V. Flanigan, S. Kapila, "GC-FTMS Characterization of Volatile and Semi-Volatile Antimicrobial Compounds Obtained Under Controlled Oxidation of Oils", PittCon 2009, Chicago, IL, March Aug.13, 2009
- 101. T. Smiley, <u>P. Nam</u>, M. Eisterhold, K. Lee, "Supercritical Fluid Treatment for the Production of Biofuels from Microalgae," 236th National Meeting of American Chemical Society, Philadelphia, PA, Aug.17, 2008.
- 102. <u>P. Nam</u>, C. Liu, M. E. Solis, Y. Huang and D. K. Niyogi, "Systematic monitoring of potential endocrine disrupting organic contaminants in northern and southern Missouri streams," 236th National Meeting of American Chemical Society, Philadelphia, PA, 08-17-2008.
- 103. <u>P. Nam</u>, Y. Huang and D. K. Niyogi, "Environmental Monitoring and Assessment of Endocrine Disrupting Chemicals in Missouri Streams," UKC2008, San Diego, CA, 08-14-2008.
- 104. K. Lee, <u>P. Nam</u>, "Evaluation of Microalgae for Possible Use as the Biofuel Feedstock," UKC2008, San Diego, CA, 08-14-2008.
- 105. K. Lee, <u>P. Nam</u>, "Integrated Program for the Development of Microalgae as Sustainable Resources for Biofuels and Biomaterials," Second Annual USDA Bio Energy Awareness Day (BEAD II), Washington, DC, 06-19-2008.
- 106. B. Adams, M. Eisterhold, X. Angel, K. Lee, C. Campbell, <u>P. Nam</u>, "Cultivating and Harvesting Microalgal Species Selected for the Purpose of Producing Biofuels," Annual Meeting of the Missouri Academy of Science, Joplin, MO, 04-18-2008.
- 107. P. Stovall, T. Williams, K. Lee, <u>P. Nam</u>, "Factors Affecting the Rate of Chitosan-Aided Flocculation of Microalgae," Annual Meeting of the Missouri Academy of Science, Joplin, MO, 04-18-2008.
- 108. K. Anderson, B. Viswanathan, <u>P. Nam</u>, V. Flanigan, S. Kapila, C. Roggero, M. Tumiatti, V. Tumiatti, "Quantitative Determination of Corrosive Sulfur in Mineral Insulating Oils with IC, HPLC, and CZE," PittCon 2008, Chicago, IL, 03-02-2008.
- 109. B. Viswanathan, R. Seemamahannop, R. Schwiderski, <u>P. Nam</u>, S. Kapila, "Identification and Quantification of Ethoxyquin Degradation Product," PittCon 2008, Chicago, IL, 03-02-2008.
- 110. R. Schwiderski, B. Viswanathan, R. Seemamahannop, <u>P. Nam</u>, S. Kapila, "A Rapid Method for Determination of Alpha Hydroxy Acids in Seawater and Biological Fluids," PittCon 2008, Chicago, IL, 03-02-2008.
- 111. R. Seemamahannop, S. Garg, B. Viswanathan, <u>P. Nam</u>, S. Lorbert, S. Kapila, "Synthesis, Characterization and Quantification of 2-Hydroxy-4-Methylseleno-Butanoic Acid with HPLC-ESI MS and HPLC ICP MS," PittCon 2008, Chicago, IL, 03-02-2008.

- 112. R. Schaub, <u>P. Nam</u>, R. Carlile, S. Kapila, V. Flanigan, E. Black, "Development of a Versatile Man-Portable Obscurant Aerosol Generator: Characterization of Aerosols in Laboratory and Field Environments," PittCon 2008, Chicago, IL, 03-02-2008.
- 113. D. Bahaghighat, R. Schaub, R. Carlile, <u>P. Nam</u>, V. Flanigan, S. Kapila, E. Black, "Chemical Characterization of Obscurant Aerosols Obtained from Mini-Jet Based Aerosol Generator," PittCon 2008, Chicago, IL, 03-02-2008.
- 114. Y. Gao, P. Nam, V. Flanigan, S. Kapila, "Synthesis and HPLC–MS Characterization of Alpha-Hydroxy Acid Capped Lys–Met and Arg-Met Oligopeptides," PittCon 2008, Chicago, IL, 03-02-2008.
- 115. <u>P. Nam</u>, "Microalgae Processing for Biodiesel", Microalgae Workshop sponsored by MU Center for Sustainable Energy, Columbia, MO, Sept. 12, 2008
- 116. <u>P. Nam</u>, K. Lee, V. Flanigan, F. Rindi, "Bio-Sequestration of CO<sub>2</sub> by Growing Algae" 2009 Missouri Natural Resources Conference, Lake of the Ozarks, MO, Feb. 4-6, 2009
- 117. P. Nam, K. Lee, "The Promise of Algae", Ozark New Energy Conference, Springfield, MO, Feb. 22, 2008
- 118. P. Nam, "Collaborative Research and Education Prospects in Renewable, Economical, and Environmentally-Friendly Biofuels and Biomaterials", Lincoln University Seminar, Jefferson City, MO, May 15, 2007
- 119. P. Nam, R. Konduru, V. Flanigan, S. Kapila, "Effect of Temperature and Moisture on Detection of TNT and Related Compound Vapors in Terrestrial Environment", Organized session on Problems and Solutions of Landmine and Improvised Explosive Devices, 58th Pittsburgh Conference, Chicago, IL, Feb. 25, 2007
- 120. V. Flanigan, A. Shah, R. Seemamahannop, <u>P. Nam</u>, S. Kapila, "Preparation of Soy Hull Augmented Polyurethanes and Assessment of Their Thermal Conductivity and Gas Permeability", Abstracts of Papers, 52<sup>nd</sup> International SAMPE Symposium, Baltimore, MD, June 3-7, 2007
- 121. R. Seemamahannop, M. Kafeel, V. Flanigan, <u>P. Nam</u>, S. Kapila, "Development and Characterization of Allyl Soyate and Defatted Soy Meal Based Plastics", Abstracts of Papers, 52<sup>nd</sup> International SAMPE Symposium, Baltimore, MD, June 3-7, 2007
- 122. R. Schaub, <u>P. Nam</u>, S. Kapila, V. Flanigan, E. Black, "Development of Biogenic Oil-Based Multi-spectral Smoke/Obscurants: Evaluation in Laboratory and Open-Field Environments", Abstracts of Papers, 58<sup>th</sup> Pittsburgh Conference, Chicago, IL, Feb. 25 March 2, 2007
- 123. V. Pandit, R. Seemamahannop, S. Kapila, <u>P. Nam</u>, "Enantiomeric Separation of Amino Acids through Oligomerization with Immobilized Proteolytic Enzymes", Abstracts of Papers, 58<sup>th</sup> Pittsburgh Conference, Chicago, IL, Feb. 25 March 2, 2007
- 124. S. Srinivasan, S. Gorla, S. Garg, S. Kapila, <u>P. Nam</u>, "Enantio Separation of Alpha Hydroxy Acids through Chymotrypsin Catalyzed Peptide Synthesis and Chiral LC-MS Assessment", Abstracts of Papers, 58<sup>th</sup> Pittsburgh Conference, Chicago, IL, Feb. 25 March 2, 2007
- 125. S. Srinivasan, H. Wang, S. Gorla, S. Kapila, <u>P. Nam</u>, "Liquid Chromatography and Mass Spectrometry Characterization of Hydroxy-Acid Capped Polypeptides Synthesized through Protease Catalysis", Abstracts of Papers, 58<sup>th</sup> Pittsburgh Conference, Chicago, IL, Feb. 25 March 2, 2007
- 126. S. Srinivasan, Y. Gao, <u>P. Nam</u>, S. Kapila, M. Kerley, "Enzymatic Synthesis and Characterization of Tailored N and C End Protected Amino Acid Oligopeptides", Abstracts of Papers, 58<sup>th</sup> Pittsburgh Conference, Chicago, IL, Feb. 25 March 2, 2007
- 127. R. Seemamahannop, Y. Gao, <u>P. Nam</u>, V. Flanigan, S. Kapila, "Bisphenol-A and Organic Acid Anhydrides Leaching from Epoxy Coatings", Abstracts of Papers, 58<sup>th</sup> Pittsburgh Conference, Chicago, IL, Feb. 25 March 2, 2007
- 128. K. Anderson, R. Seemamahannop, C. Roggero, M. Tumiatti, R. Maina, S. Maina, V. Tumiatti, <u>P. Nam</u>, S. Kapila, "Quantitative Determination of Organo–Elemental Sulfur Species in Mineral Insulating Oils and Assessment of Their Copper Corrosivity", Abstracts of Papers, 58<sup>th</sup> Pittsburgh Conference, Chicago, IL, Feb. 25 March 2, 2007
- 129. S. Kapila, S. Srinivasan, S. Gorla, Y. Gao, P. Nam, M. Kerley, "Liquid Chromatography and Tandem

- Mass Spectrometry Characterization of Tailored Peptides Synthesized through Protease Catalysis", Abstracts of Papers, 58<sup>th</sup> Pittsburgh Conference, Chicago, IL, Feb. 25 March 2, 2007
- 130. R. Seemamahannop, R. Kolli, <u>P. Nam</u>, V. Flanigan, S. Kapila, "Decay of Antioxidants and Their Activity in Different Matrices", Abstracts of Papers, 58th Pittsburgh Conference, Chicago, IL, Feb. 25 March 2, 2007
- 131. W. Lin, Y-W. Huang, Y. Ma, <u>P. Nam</u>, X. Zhou, "The Cytotoxicity and Cytotoxic Mechanisms of Cerium Oxide Nanoparticles Against Lung Cancer Cells", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 132. T. Wang, Y. Ma, <u>P. Nam</u>, H. Shi, "Analysis of N-Acetylchitooligosaccharides by High Performance Liquid Chromatography-Tandem Mass Spectrometry", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 133. X. Liu, Y-W. Huang, W. Lin, Y. Ma, <u>P. Nam</u>, P. Whitefield, X. Zhou, "Determination of 8-Iso Prostaglandin F2alpha in Human Lung Cancer Cell after Exposure to Ceo2 Nanoparticles", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 134. R. Seemamahanoop, V. Flanigan, S. Kapila, R. Kolli, <u>P. Nam</u>, "Determination of Physicochemical Properties of Biogenic Oil Esters", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 135. K. Kittiratanapiboon, S. Agarwal, W. Cao, V. Flanigan, S. Kapila, R. Konduru, <u>P. Nam</u>, "Leaching and Migration of Nitroaromatic Explosives in Soil from Buried Land Mines over Long Time Periods", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 136. Y. Jiang, N. Basil, Y. Ma, <u>P. Nam</u>, I. Stayton, "Separation and Quantification of Short-Chain Coenzymes A's in Plant Tissues by Capillary Electrophoresis with Laser-Induced Fluorescence Detection", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 137. S. Garg, S. Kapila, S. Kapoor, <u>P. Nam</u>, "Separation of Alpha-Hydroxy Acid Enantiomers through Lipase Catalyzed Esterification and Hydrolysis", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 138. S. Gorla, S. Kapila, <u>P. Nam</u>, H. Palli, "Separation of Methionine Enatiomers through a Papain Catalyzed Synthesis of Methionine Oligomers", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 139. Y. Gao, V. Flanigan, S. Kapila, <u>P. Nam</u>, "An Evaluation of Bisphenol-A Leaching in Food and Beverages from Bisphenol-A Epoxy Coated Containers", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 140. R. Chand, E. Black, Q. Chen, V. Flanigan, S. Kapila, <u>P. Nam</u>, R. Schaub, "Characterization of Mineral and Biogenic Oil Obscurant Aerosols in Laboratory and Field Environments", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 141. P. Wadhwa, V. Flanigan, S. Kapila, K. Kittiratanapiboon, <u>P. Nam</u>, "Gas Chromatography-Mass Spectrometric Characterization of Thermo-Oxidation Products of Mineral Oil and Biogenic Oil Esters", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 142. S. Srinivasan, S. Gorla, S. Kapila, <u>P. Nam</u>, H. Palli, "Liquid Chromatographic-Tandem Mass Spectrometric Characterization of Oligopeptides and Tailored Co-Oligopeptides Synthesized through Protease Catalyzed Oligomerization at Elevated Temperatures", Abstracts of Papers, 57<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 12 17, 2006
- 143. W. Lin, Y. Huang, X. Zhou, <u>P. Nam</u>, Y. Ma, "The cytotoxicity and cytotoxic mechanisms of cerium oxide nanoparticles against lung cancer cells", 45<sup>th</sup> Annual Meeting of the Society of Toxicology, San Diego, CA, March 5–9, 2006
- 144. Y. Huang, W. Lin, I. Stayton, X. Zhou, <u>P. Nam</u>, Y. Ma, "Cytotoxicity of selected metal oxide and SiO<sub>2</sub> nanoparticles against lung cancer cells", International Congress of Nanotechnology, San Francisco, CA, Oct 31 Nov 4, 2005
- 145. Y. Huang, W. Lin, I. Stayton, X. Zhou, <u>P. Nam</u>, Y. Ma, "Cytotoxicity and single cell imaging of selected metal oxide and SiO<sub>2</sub> nanoparticles against lung cancer cells, Mechanisms of Action of

- Inhaled Fiber, Particles, and Nanoparticles in Lung and Cardiovascular Disease, Research Triangle Park, NC, Oct 25–28, 2005
- 146. Y. Huang, M. Solis, C. Liu, D. Niyogi, <u>P. Nam</u>, "Hematology, hormone profiling, and water quality assessment of Ozark hellbenders in the Eleven Point River and the North Fork of White River, Missouri", 2<sup>nd</sup> International Hellbender Symposium, Lakeview, AR, June 19-22, 2005
- 147. T. Wang, <u>P. Nam</u>, Y. Ma, "Identification and quantification of carbohydrates in glycoproteins of transgenic corn by high performance liquid chromatography-fluorescence detection and liquid chromatography-sonic spray ionization mass spectrometry", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 148. R. Chand, <u>P. Nam</u>, S. Kapila, Q. Chen, V. Flanigan, E. Black, W. Rouse, "Assessment of transmittance characteristics of oil aerosols in the visible and NIR regions under laboratory and field conditions", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 149. A. Roy, S. Garg, S. Kapila, <u>P. Nam</u>, H. Palli, V. Flanigan, "Enzymatic synthesis and LC-MS and MS-MS characterization of tailored oligopeptides", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 150. K. Kittiratanapiboon, P. Wadhwa, S. Kapila, K. Lee, <u>P. Nam</u>, V. Flanigan, "Gas chromatographymass spectrometric characterization of an oil aerosol-vapor microbial disinfectant", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 151. M. Kerley, S. Gorla, S. Kapila, W. Kolath, K. Lee, <u>P. Nam</u>, H. Palli, "Assessment of relative susceptibility of oligopeptides and alphahydroxy acid capped oligopeptides to enzymatic hydrolysis", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 152. C. Li, S. Kapila, K. Lee, <u>P. Nam</u>, H. Wang, "LC-MS characterization of synthetic cysteine oligopeptides and assessment of their antioxidant activity", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 153. N. Surapaneni, S. Kapila, <u>P. Nam</u>, H. Shi, V. Flanigan, "Simultaneous determination of tocopherols and phytosterols with gas chromatography-mass spectrometry", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 154. S. Kapoor, V. Flanigan, S. Kapila, <u>P. Nam</u>, A. Roy, "A chiral LC-MS assessment of enantio-enriched alpha-hydroxy acids obtained through lipase catalyzed hydrolysis of hydroxy acid esters", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 155. H. Shi, S. Kapila, K. Lee, F. Liu, Y. Ma, <u>P. Nam</u>, N. Surapaneni, V. Flanigan, "Determination of nutrients in germinating and fermented soybeans with mass spectrometry techniques", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 156. S. Garg, S. Kapila, <u>P. Nam</u>, H. Palli, V. Flanigan, "Separation of alpha-hydroxy acid enantiomers through lipase catalyzed esterification", Abstracts of Papers, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27 March 4, 2005
- 157. M. Solís, C. Liu, D. Niyogi, <u>P. Nam</u>, Y. Huang, "Water Quality Assessment, Endocrine Disruption, and Hematology of Ozark Hellbenders (*Cryptobranchus alleganiensis bishopi*) in Eleven Point and White River in Missouri", The Graduate Research Showcase, University of Missouri-Rolla, Rolla, MO, Feb. 22, 2005
- 158. <u>P. Nam</u>, S. Srinivasan, S. Kapila, "Synthesis and Characterization of Hydroxy Acid Capped Oligopeptides in Monophasic Aqueous Organic Media", Organized session on LCMS Analysis of Glycoproteins and Modified Peptides, 56<sup>th</sup> Pittsburgh Conference, Orlando, FL, Feb. 27, 2005
- 159. P. Nam, "Roller-Coaster Ride in Supercritical Fluids More Excitement Ahead?", UMR Chemistry Dept Homecoming Seminar, Oct. 15, 2004
- 160. Y. Huang, M. Solís, C. Liu, D. Niyogi, <u>P. Nam</u>, "Endocrine Endocrine modulators and excess nutrients in West Locust Creek and Little Medicine Creek in Northern Missouri", The 25th Annual Meeting of the Society of Environmental Toxicology and Chemistry, Oregon, Nov. 14-18, 2004
- 161. <u>P. Nam</u>, R. Chand, R. Schaub, S. Kapila, V. Flanigan, W. Rouse, "Particle Size Distribution and Extinction Coefficient of Oil Aerosols Produced via the Vaporization and Condensation", Annual AAAR conference, Atlanta, GA, Oct. 4-8, 2004

- 162. Q. Chen, S. Kapila, V. Flanigan, <u>P. Nam</u>, K. Kittiratanapiboon, W. Rouse, "An Experimental Study and Numerical Simulation of Oil Generated Aerosols in Battlefield", Annual AAAR conference, Atlanta, GA, Oct. 4-8, 2004
- 163. M. Solis, <u>P. Nam</u>, D. Niyogi, Y. Huang, "Water Quality Assessment, Endocrine Disruption, and Hematology of Ozark Hellbenders (*Cryptobranchus alleganiensis bishopi*) in Eleven Point and White River in Missouri", Joint Meetings of Ichthyologists and Herpetologists, Norman, OK, May 26-31, 2004.
- 164. M. Solís, C. Liu, D. Niyogi, <u>P. Nam</u>, Y. Huang, "Searching for Possible Causes of the Population Decline in Ozark Hellbenders (*Cryptobranchus alleganiensis bishopi*), Missouri Life Science Week, University of Missouri-Columbia, Columbia, Missouri, April 5-9, 2004
- 165. C. Liu, M. Solís, D. Niyogi, <u>P. Nam</u>, Y. Huang, "Identify Endocrine Modulators and Assess Excess Nutrients in Little Medicine Creek and West Locust Creek in Missouri", Missouri Life Science Week, University of Missouri-Columbia, Columbia, Missouri, April 5-9, 2004
- 166. Y. Huang, C. Liu, M. Solis, <u>P. Nam</u>, D. Niyogi, "Identify Endocrine Modulators and Assess Excess Nutrients in Little Medicine Creek and West Locust Creek in Missouri", Annual SETAC Ozark-Prairie Chapter meeting, La Crosse, WI, March 3-5, 2004
- 167. Y. Huang, M. Solis, <u>P. Nam</u>, D. Niyogi, "Searching for Possible Causes of the Population Decline in Ozark Hellbenders", Annual SETAC Ozark-Prairie Chapter meeting, La Crosse, WI, March 3-5, 2004
- 168. <u>P. Nam</u>, R. Chand, S. Kapila, V. Flanigan, W. Rouse, "Development and Evaluation of an Aerosol Characterization System", Abstracts of Papers, 55<sup>th</sup> Pittsburgh Conference, Chicago, IL, March 7-12, 2004
- 169. L. Fan, S. Kapila, <u>P. Nam</u>, V. Flanigan, "Application of Soybean Oil Methyl Ester for Decontamination of PCB Contaminated Soil", Abstracts of Papers, 55<sup>th</sup> Pittsburgh Conference, Chicago, IL, March 7-12, 2004
- 170. A. Roy, S. Kapior, S. Kapila, <u>P. Nam</u>, "Liquid Chromatography-Mass Spectrometry Characterization of Tailored Oligopeptides Sythesized through Protease Catalyzed Sequential Addition", Abstracts of Papers, 55<sup>th</sup> Pittsburgh Conference, Chicago, IL, March 7-12, 2004
- 171. S. Gorla, S. Kapila, <u>P. Nam</u>, V. Flanigan, "Determination of the Enzymatic Hydrolysis Susceptibility of a-hydroxy Acid Capped Oligopeptides", Abstracts of Papers, 55<sup>th</sup> Pittsburgh Conference, Chicago, IL, March 7-12, 2004
- 172. N. Surepaneni, H. Shi, S. Kapila, <u>P. Nam</u>, V. Flanigan, "A Rapid Gas Chromatography-Mass Spectrometry Based Method for Determination of Phytosterols", Abstracts of Papers, 55<sup>th</sup> Pittsburgh Conference, Chicago, IL, March 7-12, 2004
- 173. H. Shi, <u>P. Nam</u>, S. Kapila, K. Lee, V. Flanigan, Y. Ma, "Determination of Change in the Isoflanvone Composition of Soybean Products under Different Processing Conditions", Abstracts of Papers, 55<sup>th</sup> Pittsburgh Conference, Chicago, IL, March 7-12, 2004
- 174. C. Li, S. Kapila, K. Lee, <u>P. Nam</u>, V. Flanigan, "Characterization of Synthetic Hydrophobic Analogs of Glutathione (GSH) and an Assessment of Their Antioxidant Activity", Abstracts of Papers, 55<sup>th</sup> Pittsburgh Conference, Chicago, IL, March 7-12, 2004
- 175. M. Du, J. Chen, <u>P. Nam</u>, H. Shi, S. Kapila, V. Flanigan, Y. Ma, "LC-Fluorescence and LC-MS Determination of Glycoprotein Associated Glycans in Transgenic Corn", Abstracts of Papers, 55<sup>th</sup> Pittsburgh Conference, Chicago, IL, March 7-12, 2004
- 176. R. Seemamahannop, H. Shi, S. Kapila, <u>P. Nam</u>, V. Flanigan, "Assessment of Relative Oxidative Stability and Physical Properties of Biogenic Oil Esters", Abstracts of Papers, 55<sup>th</sup> Pittsburgh Conference, Chicago, IL, March 7-12, 2004
- 177. Y. Huang, M. Solis, J. Phillips, <u>P. Nam</u>, D. Niyogi, C. Liu, "Endocrine modulators and excess nutrients in Little Medicine Creek and West Locust Creek in Missouri", 24th Annual Meeting of the Society of Environmental Toxicology and Chemistry, Austin, Texas, Nov. 9-13, 2003
- 178. K. Lee, V. Flanigan, S. Kapila, <u>P. Nam</u>, "Development and evaluation of a broad spectrum disinfectant to counter agroterrorism", The Agroterrorism Conference, Columbia, MO, December 2003

- 179. V. Flanigan, H. Shi, N. Nateri, <u>P. Nam</u>, K. Kittiratanapiboon, K. Lee, S. Kapila, "A fluidized bed combustor for treatment of farm waste.", IV Congress and International Conference on Added Value and Recycling of industrial Waste, L"Aquila, Italy, June 23–26, 2003
- 180. A. Roy, S. Kapila, <u>P. Nam</u>, M. Rajesh, V. Flanigan, "Preparatory scale enantioenrichment of α-hydroxy acids enantiomers through lipase catalyzed hydrolysis of α-hydroxy acids esters", Abstracts of Papers, 27<sup>th</sup> International Symposium on High Performance Liquid Phase Separation and Related Techniques, Nice, France, June 15-19, 2003
- 181. J. Elrod, Y. Huang, <u>P. Nam</u>, and D. Twidwell, "Endocrine disruption study of Ozark hellbenders (*Cryptobranchus alleganiensis bishopi*) in Eleven Point and White Rivers", The Missouri Life Sciences Week, Columbia, MO, March 2003
- 182. P. Nam, H. Shen, K. Hambacker, S. Kapila, V. Flanigan, K. Mitchell, D. Sivils, "Remote/Network Controlled Rapid Sampling and Detection of Explosives and Chemical Warfare Agents in The Field", Abstracts of Papers, 54<sup>nd</sup> Pittsburgh Conference, Orlando, FL, March 9-14, 2003
- 183. C. Li, S. H. Shen, Kapila, <u>P. Nam</u>, V. Flanigan, "Determination of Volatile Oxidation Products of Triglycerides To Assess Antioxidant Activities of Synthetic and Natural Antioxidants", Abstracts of Papers, 54<sup>nd</sup> Pittsburgh Conference, Orlando, FL, March 9-14, 2003
- 184. M. Rajesh, S. Gorla, Shubhen Kapila, <u>P. Nam</u>, V. Flanigan, "HPLC/MS Characterization of Hydroxy Acid and Alpha-Amino Acid Hetero-Oligomers", Abstracts of Papers, 54<sup>nd</sup> Pittsburgh Conference, Orlando, FL, March 9-14, 2003
- 185. M. Rajesh, V. Flanigan, S. Kapila, <u>P. Nam</u>, D. Sivils, "Ion Formation and Transmission Mechanisms in Condensed Phase Mass Spectrometry", Abstracts of Papers, 54<sup>nd</sup> Pittsburgh Conference, Orlando, FL, March 9-14, 2003
- 186. A. Roy, L. Fan, S. Kapila, <u>P. Nam</u>, V. Flanigan, "Determination of Enantioselectivity of Lipase Catalyzed Hydrolysis of Hydroxyacid Acid Esters", Abstracts of Papers, 54<sup>nd</sup> Pittsburgh Conference, Orlando, FL, March 9-14, 2003
- 187. H. Shi, <u>P. Nam</u>, S. Kapila, V. Flanigan, Y. Ma, K. Lee, "Effect of Processing Techniques on Macro, Micro Nutrients and Off Flavors in Soy Food Preparations", Abstracts of Papers, 54<sup>nd</sup> Pittsburgh Conference, Orlando, FL, March 9-14, 2003
- 188. R. Seemamahannop, S. Kapila, <u>P. Nam</u>, H. Shen, V. Flanigan, W. Tumiatti, "LC-ICP-MS/LC-Ms Speciation of Organo Copper Compounds Formed Durign Copper Catalyzed Oxidation of Biogenic and Petroleum Dielectric Fluid", Abstracts of Papers, 54<sup>nd</sup> Pittsburgh Conference, Orlando, FL, March 9-14, 2003
- **189.** Y-W Huang and <u>P. Nam</u>, "Identification and Biological Screening of Endocrine Disruptors in Effluents from Missouri Sewage Treatment Plants", Abstracts of Papers, 23<sup>rd</sup> Conference of the Society of Environmental Toxicology and Chemistry, Salt Lake, UT, Nov. 16-20, 2002
- 190. R. Seemamahannop, S. Kapila, H. Shen, <u>P. Nam</u>, V. Flanigan, "Assessment of relative thermal and oxidative stability of biogenic oil esters", Abstracts of Papers, 224th ACS National Meeting, Boston, MA, August 18-22, 2002
- 191. M. Rajesh, S. Kapila, <u>P. Nam</u>, V. Flanigan, C. Schasteen, S. Lorbert, "Variabilities in molar response of homologs obtained with LC-ESI and LC-SSI mass spectrometry", Abstracts of Papers, 224th ACS National Meeting, Boston, MA, August 18-22, 2002
- 192. H. Shen, <u>P. Nam</u>, S. Kapila, V. Flanigan, P. Whitefield, D. Hagen, "Integrated system for real-time particle sizing and chemical speciation of emission sources", Abstracts of Papers, 224th ACS National Meeting, Boston, MA, August 18-22, 2002
- 193. R. Reich, H. Mayfield, P. Dawson, <u>P. Nam</u>, and H. Shen, "Real-time Physical and Chemical Characterization of Particulate Matter from Combustion Source", Abstracts of Papers, 50<sup>th</sup> ASMS Meeting, Orlando, FL, May 2002
- 194. <u>P. Nam</u>, H. Shen, S. Kapila, P. Whitefield, D. Hagen, and P. Claywell, "Particulate Matter Characterization and Monitoring System for the Real-Time Evaluation of Emission Particles", Abstracts of Papers, 53<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 17-22, 2002
- 195. S. Forni, P. Nam, S. Kapila and V. Flanigan, "Determination of Isoflavones in Biological Matrices

- with Mass Spectrometry: Effect of Operational Parameters on Detectability", Abstracts of Papers, 53<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 17-22, 2002
- 196. C. Li, S. Kapila, <u>P. Nam</u>, V. Flanigan, J. Andrews, S. Lorbert and C. Schasteen, "Relative Anti-Oxidant Efficiency of Synthetic and Natural Compounds", Abstracts of Papers, 53<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 17-22, 2002
- 197. K. Kittiratanapiboon, S. Rajesh, Shilpa Mathkar, V. Flanigan, S. Kapila and <u>P. Nam</u>, "An Assessment Of Chemical Transformation And Relative Mutagenicity Of Mineral And Biogenic Oils During Obscurant Smoke Generation", Abstracts of Papers, 53<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 17-22, 2002
- 198. R. Seemamahannop, S. Kapila, <u>P. Nam</u>, H. Shen, V. Flanigan and W. Tumiatti, "Evaluation of Biogenic Oil Based Technical Fluids", Abstracts of Papers, 53<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 17-22, 2002
- 199. M.P. Rajesh, S. Kapila, <u>P. Nam</u>, V. Flanigan, C. Schasteen and S. Lorbert, "Anomalies in the Liquid Chromatography Mass Spectrometric Response of α-Hydroxy Acid Oligomers", Abstracts of Papers, 53<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 17-22, 2002
- 200. A. Roy, S. Kapila, <u>P. Nam</u>, M.P. Rajesh and V. Flanigan, "Enatioselective Incorporation of α-Hydroxy Acids in Oligopeptide Chains", Abstracts of Papers, 53<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 17-22, 2002
- 201. P. Nam, A. Roy, M.P. Rajesh, S. Kapila, "Papain Catalyzed Enantioselective Incorporation of HMB in Polymethionine Chains", Abstracts of Papers, 13<sup>th</sup> International Symposium, Exhibit & Seminars on Chirality, Orlando, FL, July 15-18, 2001
- 202. P. Nam, H. Shen, S. Kapila, P. Whitefield, D. Hagen, S. Chelli, "Field Application of the Particulate Matter Characterization and Monitoring System for the Real-Time Evaluation of Emission Particles from Combustion Sources", Abstracts of Papers, 52<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 4-9, 2001
- 203. H. Shen, <u>P. Nam</u>, S. Kapila, P. Whitefield, D. Hagen, "On-Line Characterization of Aerosols Generated from Electrically Heated Metal Wires", Abstracts of Papers, 52<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 4-9, 2001
- 204. S. Kapila, K. Hambacker, P. Nam, V. Flanigan, M. Gehrke, "Selective Determination of Nitroaromatic Explosive Vapors", Abstracts of Papers, 52<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 4-9, 2001
- 205. M.P. Rajesh, S. Kapila, <u>P. Nam</u>, V. Flanigan, C. Schasteen, S. Lorbert, "Synthesis and Characterization of  $\alpha$ -Acid and  $\alpha$ -Amino Acid Hetero-Oligomers", Abstracts of Papers,  $52^{nd}$  Pittsburgh Conference, New Orleans, LA, March 4-9, 2001
- **206.** Shuping Ai, S. Kapila, <u>P. Nam</u>, K. Kittiratanapiboon, V. Flanigan, W. Tumiatti, "Characterization of Printed Circuit Board Pyrolysis Oil and Tars", Abstracts of Papers, 52<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 4-9, 2001
- 207. S.Forni, P. Nam, M.P. Rajesh, S. Kapila, V. Flanigan, "Comparison Of ESI, APCI, and SSI for Mass Spectrometric Determination of Plant Sterols and Isoflavones in Biological Matrices", Abstracts of Papers, 52<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 4-9, 2001
- 208. Y. Liske, S. Kapila, <u>P. Nam</u>, V. Flanigan, S. Lorbert, "Catalytic Conversion of Ammonium Sulfate / Ammonium Bisulfate to Hydrogen Sulfide", Abstracts of Papers, 52<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 4-9, 2001
- 209. R. Seemamahannop, S. Kapila, <u>P. Nam</u>, V. Flannigan, "Determination of Oxidative Degradation of Vegetable Oil Esters during Dielectric Application", Abstracts of Papers, 52<sup>nd</sup> Pittsburgh Conference, New Orleans, LA, March 4-9, 2001
- 210. P. Whitefield, D. Hagen, <u>P. Nam</u>, S. Kapila, H. Shen, P. Dawson, S. Chelli, "Real-Time, On-Line Characterization of Sub-Micron Particulate Matter from Combustion Emission Sources", Abstracts of Papers, 19<sup>th</sup> Annual American Association for Aerosol Research, St. Louis, MO, November 6-10, 2000
- 211. P. Nam, S. Forni, S. Kapila, V. Flanigan, "Application of Hydrofluorocarbon for Selective Extraction

- of Triglycerides from Oilseeds", Abstracts of Papers, 91st Annual Meeting of American Oil Chemists' Society, San Diego, CA, April 25-28, 2000
- 212. P. Nam, H. Shen, S. Kapila, P. Whitefield, D. Hagen, and S. Chelli, "Real-Time, On-Line Characterization of Particulate Matter from Combustion Emission Sources", Abstracts of Papers, 51<sup>st</sup> Pittsburgh Conference, New Orleans, LA, March 12-17, 2000
- 213. Y. Liske, S. Kapila, <u>P. Nam</u>, V. Flanigan, and S. Lorbert, "Conversion of Ammonium Sulfate into Hydrogen Sulfide and Sulfur Dioxide through Combustion in Sub-Stoichiometric Flames", Abstracts of Papers, 51<sup>st</sup> Pittsburgh Conference, New Orleans, LA, March 12-17, 2000
- 214. P. Nam, S. Forni, S. Kapila, and V. Flanigan, "Determination of Sterols and Isoflavones in Biogenic Oils with SFC-MS", Abstracts of Papers, 51st Pittsburgh Conference, New Orleans, LA, March 12-17, 2000
- 215. M.P. Rajesh, S. Kapila, <u>P. Nam</u>, D. Forciniti, C. Schasteen and S. Lorbert, "Synthesis and Characterization of MHBA Methionine and MHBA Lysine Co-Oligomers", Abstracts of Papers, 51<sup>st</sup> Pittsburgh Conference, New Orleans, LA, March 12-17, 2000
- 216. S.P. Ai, S. Kapila, <u>P. Nam</u>, M. Maples, and V. Flanigan, "Characterization of Low Temperature Scrap Tire Pyrolysis Products with GC/MS and GC/FTIR", Abstracts of Papers, 51<sup>st</sup> Pittsburgh Conference, New Orleans, LA, March 12-17, 2000
- 217. P. Nam, M.P. Rajesh, S. Kapila, D. Forciniti, V. Flanigan, C. Schasteen and S. Lorbert, "Synthesis and Characterization of α- Hydroxy Acid and Amino Acid Co-Oligomers" Abstracts of Papers, 19<sup>th</sup> International Symposium on the Separation and Analysis of Proteins, Peptides and Polynucleotides, Delray Beach, FL, Oct. 31 Nov. 3, 1999
- 218. P. Nam, P. Dawson, D. Hagen, S. Kapila, and P. Whitefield, "A Tandem Differential Mobility Analyzer – Inductively Coupled Plasma Mass Spectrometer System for Particulate Matter Characterization", Abstracts of Papers, 47th Conference on American Society for Mass Spectrometry, Dallas, TX, June, 1999
- 219. Y. Liske, <u>P. Nam</u>, B. Ricker, S. Kapila, V. Flanigan, "Characterization of Ammonium Bisulfate Combustion Products", Abstracts of Papers, 50<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 7-12, 1999
- 220. <u>P. Nam</u>, P. Dawson, S. Kapila, P. Whitefield, D. Hagen, and S. Chelli, "Development of an On-Line, Real-Time Monitoring System for the Characterization of Particulate Matter", Abstracts of Papers, 50<sup>th</sup> Pittsburgh Conference, Orlando, FL, March 7-12, 1999
- 221. <u>P.K. Nam</u>, S. Kapila, D. Forciniti, C. Schasteen, and S. Lorbert, "Synthesis and Characterization of Hydroxy and Amino Acid Oligomers", Abstracts of Papers, 22<sup>nd</sup> International Symposium on High Performance Liquid Phase Separations and Related Techniques, St. Louis, MO (May, 1998)
- 222. X. Zhang, S. Kapila, and <u>P.K. Nam</u>, "Impact of Atmospheric Conditions on the Vapor Phase Phototransformation of Polychlorinated Aromatics", Abstracts of Papers, 49<sup>th</sup> Pittsburgh Conference, New Orleans, LA (March, 1998)
- 223. <u>P.K. Nam</u>, A. LaRouch, S. Kapila, and V. Flanigan, "Comprehensive Characterization of Obscurant Smoke Aerosols and Evaluation of Alternative Aerosol Materials", Abstracts of Papers, 49<sup>th</sup> Pittsburgh Conference, New Orleans, LA (March, 1998)
- 224. U.R. Srirangam, <u>P.K. Nam</u>, and S. Kapila, "Determination of Cholesterol Oxides in Biological Matrices with Supercritical Fluid Chromatography Mass Spectrometry", Abstracts of Papers, 49<sup>th</sup> Pittsburgh Conference, New Orleans, LA (March, 1998)
- 225. M. Gehrke, S. Kapila, <u>P.K. Nam</u>, V. Flanigan, and V. Rao, "Rapid Determination of Nitroaromatic Vapors", Abstracts of Papers, 49<sup>th</sup> Pittsburgh Conference, New Orleans, LA (March, 1998)
- 226. Q. Liu, <u>P.K. Nam</u>, S. Kapila, T. Clevenger, "Degradation of Polychlorinated Biphenyls in Contaminated Soils Irradiated with Gamma-Rays", Abstracts of Papers, 49<sup>th</sup> Pittsburgh Conference, New Orleans, LA (March, 1998)
- 227. P.K. Nam, A. LaRouch, S. Kapila, V. Flanigan, and P. Whitefield, "Application of Two-Dimensional Gas Chromatography for the Characterization of Obscurant Smoke Aerosols", Abstracts of Papers, Midwest ACS Meeting, Lake of Ozark, MO (October, 1997)

- 228. S. Kapila, A. LaRouch, <u>P.K. Nam</u>, and V. Flanigan, "Elimination of Polyaromatic Hydrocarbons (PAHs) Emission During Obscurant Smoke Generation: Evaluation of alternative Aerosol Materials", Abstracts of Papers, Midwest ACS Meeting, Lake of Ozark, MO (October, 1997)
- 229. X. Zhang, S. Kapila, and <u>P.K. Nam</u>, "Vapor Phase Phototransformation of Polychlorinated Aromatics", Abstracts of Papers, Midwest ACS Meeting, Lake of Ozark, MO (October, 1997)
- 230. M.A. Gehrke, S. Kapila, <u>P.K. Nam</u>, V. Flanigan, and V. Rao, "Rapid Determination of Nitroaromatic Vapors", Abstracts of Papers, Midwest ACS Meeting, Lake of Ozark, MO (October, 1997)
- 231. U.R. Srigangam, <u>P.K. Nam</u>, and S. Kapila, "Application of Supercritical Fluid Chromatography Mass Spectrometry for the Determination of Cholesterol Oxides in Biological Matrices", Abstracts of Papers, Midwest ACS Meeting, Lake of Ozark, MO (October, 1997)
- 232. <u>P.K. Nam</u>, Q. Liu, S. Kapila, T.E. Clevenger, and R. Curry, "Chemical Characterization of Gamma-Ray Induced Products of Polychlorinated Biphenyls", Abstracts of Papers, 12th Conference on Hazardous Waste Research, Kansas City, MO (May 1997)
- 233. J.W. King, J.H. Johnson, <u>K.S. Nam</u>, J.M. Snyder, S.L. Taylor, "Supercritical Fluid Extraction of Foods Approaches and Mechanism", Abstracts of Papers, Pittsburgh Conference, Chicago, IL (February, 1994)
- 234. <u>K.S. Nam</u> and J.W. King, "Quantitative Determination of Chemical Contaminants in Food Samples by SFE and Enzyme Immunoassay", Abstracts of Papers, 5th International Symposium on Supercritical Fluid Chromatography and Extraction, Baltimore, MD (January, 1994)
- 235. <u>K.S. Nam</u> and J.W. King, "SFE Analysis of Toxicants" and "SFE/Immunoassay for Pesticide in Meat Products", Abstracts of Papers, 14th Annual USDA Food Safety Research Program Planning Workshop, College Park, MD (December, 1993)
- 236. <u>K.S. Nam</u> and J.W. King, "Coupled SFE/SFC/GC System for the Trace Analysis of Pesticide Residues in Fatty Food Samples", Abstracts of Papers, 206th ACS National Meeting, Chicago, IL (August, 1993)
- 237. K.S. Nam and J.W. King, "SFE/Immunoassay for Pesticide Detection in Meat Products", Abstracts of Papers, 107th AOAC International Meeting, Washington, DC (July, 1993)
- 238. J.W. King, S.E. Abel, <u>K.S. Nam</u>, J.M. Snyder, and S.L. Taylor, "Post Extraction Techniques for Simplifying Supercritical Fluid Extracts", Abstracts of Papers, 205th ACS National Meeting, Denver, CO (March/April 1993)
- 239. <u>K.S. Nam</u>, "SFE/SFC/GC Instrumentation and Environmental Applications", Abstracts of Papers, Midwest SFC User's Group Meeting, Champaign, IL (October, 1992)
- 240. S. Kapila, <u>K.S. Nam</u>, M.H. Liu, and R.K. Puri, "Evaluation of SFE for Eliminating Interferences During Multiresidue Pesticide Analysis", Abstracts of Papers, Midwest AOAC Meeting, Champaign, IL (June, 1992)
- 241. <u>K.S. Nam</u>, S. Kapila, and R.K. Puri, "Evaluation of SFE for Eliminating Sulfur Interferences During the Determination of Multiresidue Pesticides from Sediments", Abstracts of Papers, 4th International Symposium on Supercritical Fluid Chromatography and Extraction, Cincinnati, OH (May, 1992)
- 242. S. Kapila, <u>K.S. Nam</u>, M.H. Liu, R.K. Puri and A.F. Yanders, "Promises and Pitfalls of Supercritical Fluid Extraction in Polychlorinated Compound Analysis", Abstracts of Papers, 11th International Symposium on Chlorinated Dioxins and Related Compounds, Research Triangle Park, NC (September, 1991)
- 243. <u>K.S. Nam</u>, S. Kapila, R.K. Puri, D.S. Viswanath and A.F. Yanders, "Evaluation of Supercritical Fluid Extraction (SFE) Based On-Line Systems", Abstracts of Papers, Conference on Hazardous Waste Research, Manhattan, KS (May, 1991)
- 244. <u>K.S. Nam</u> and S. Kapila, "Coupled SFE/SFC/GC System for Rapid Analysis of Xenobiotics", Abstracts of Papers, 3rd International Symposium on Supercritical Fluid Chromatography and Extraction, Park City, UT (January, 1991)
- 245. S. Kapila, <u>K.S. Nam</u>, M.H. Liu, R.K. Puri and A.F. Yanders, "Supercritical Fluid Based System for Extraction and On-line Analysis of Xenobiotics", Abstracts of Papers, 25th ACS Midwest Regional Meeting, Manhattan, KS (November, 1990)

- 246. M.H. Liu, S. Kapila, <u>K.S. Nam</u>, T.E. Clevenger and A.F. Yanders, "Role of Entrainers in Supercritical Fluid Extraction of Chlorinated Aromatics from Soils and Biological Matrices", Abstracts of Papers, 10th International Symposium on Polychlorinated Dioxins and Related Compounds, Bayreuth, Germany (October, 1990)
- 247. <u>K.S. Nam</u>, S. Kapila, A.F. Yanders and R.K. Puri, "A Multiple Sample Extraction and On-line System for the Analysis of Chlorinated Compounds", Abstracts of Papers, 10th International Symposium on Polychlorinated Dioxins and Related Compounds, Bayreuth, Germany (October, 1990)
- 248. <u>K.S. Nam</u>, S. Kapila, R.K. Puri and A.F. Yanders, "A Supercritical Fluid Based On-line Extraction/Analysis System for Rapid Multiresidue Determinations", Abstracts of Papers, Seventh International Congress of Pesticide Chemistry, Hamburg, Germany (August, 1990)
- 249. L. Isbell, S. Kapila, <u>K.S. Nam</u>, A.F. Yanders, R.K. Puri and D.S. Viswanath, "Application of Support Bonded Siloxanes and Supercritical Carbon Dioxide for Ultratrace Analysis of Organochlorine Compounds", Abstracts of Papers, Conference on Hazardous Waste Research, Manhattan, KS (May, 1990)
- 250. <u>K.S. Nam</u>, S. Kapila, A.F. Yanders, R.K. Puri and D.S. Viswanath, "Supercritical Fluid Extraction and cleanup Procedures for Determination of Xenobiotics in Biological Samples", Abstracts of Papers, Conference on Hazardous Waste Research, Manhattan, KS (May, 1990)
- 251. W.R. Lower, M.W. Thomas, B.M. Judy, R.K. Puri, C.E. Orazio, <u>K.S. Nam</u>, A.F. Yanders and S. Kapila, "Movement and Fate of 2,3,7,8-tetrachlorodibenzo-p-dioxin in Fauna at Times Beach", Abstracts of Papers, 9th International Symposium on Polychlorinated Dioxins and Related Compounds, Toronto, Canada (September, 1989)
- 252. <u>K.S. Nam</u>, S. Kapila, A.F. Yanders and T.E. Clevenger, "An On-Line Extraction and Clean-Up Procedures for Determination of Xenobiotics in Biological Tissue Samples", Abstracts of Papers, 9th International Symposium on Polychlorinated Dioxins and Related Compounds, Toronto, Canada (September, 1989)
- 253. <u>K.S. Nam</u>, S. Kapila, D.S. Viswanath, T.E. Clevenger and A.F. Yanders, "Application of Supercritical Fluid Extraction for Multiresidue Pesticide Analysis", Abstracts of Papers, Conference on Hazardous Waste Research, Manhattan, KS (May, 1989)
- 254. <u>K.S. Nam</u>, S. Kapila, D.S. Viswanath, J. Johansson and A.F. Yanders, "Application of Supercritical Fluid Extraction of Biological Tissue Samples for Determination of Polychlorinated Organic", Abstracts of Papers, 8th International Symposium on Chlorinated Dioxins and Related Compounds, Umea, Sweden (August, 1988)
- 255. <u>K.S. Nam</u>, S. Kapila, D.S. Viswanath, G. Pieczonka and B.V. Mallu, "Supercritical Fluid Extraction of Hazardous Chemicals from Fish Tissue", Abstracts of Papers, International Symposium on Supercritical Fluids, Nice, France (October, 1988)

### **MEDIA EXPOSURE:**

- 1. Rolla Daily News "Biomedical engineers develop 'smart' sensor bandages", published Feb. 4, 2021; <a href="https://lermagazine.com/market-mechanics/biomedical-engineers-develop-smart-sensor-bandages">https://lermagazine.com/market-mechanics/biomedical-engineers-develop-smart-sensor-bandages</a>
- 2. Webpage Article. December 2010. Discover Missouri S&T, "Paul Nam: Saving the world with green slime", <a href="http://discover.mst.edu/2010/12/saving-the-world-with-green-slime.html#more">http://discover.mst.edu/2010/12/saving-the-world-with-green-slime.html#more</a>
- 3. Webpage Article. Oct. 29, 2010. KBIA, Columbia, MO, "Fueling hope in algae", http://www.kbia.org/news/fueling-hope-in-algae
- 4. Webpage Article. Oct. 27, 2010. Harvest Public Media, "Fueling hope in algae", http://www.harvestpublicmedia.org/article/fueling-hope-algae
- 5. News Blog. Oct. 6, 2010. Harvest Public Media, "You can lead algae to water, but you can't make them...produce fuel?", <a href="http://www.harvestpublicmedia.org/blog/you-can-lead-algae-water-you-can%E2%80%99t-make-them%E2%80%A6produce-fuel">http://www.harvestpublicmedia.org/blog/you-can-lead-algae-water-you-can%E2%80%99t-make-them%E2%80%A6produce-fuel</a>
- 6. Webpage Article. June 24, 2010. Missouri Farmer Today, "Researchers turn algae into biofuel", <a href="http://www.missourifarmertoday.com/articles/2010/07/16/news/algae3.txt">http://www.missourifarmertoday.com/articles/2010/07/16/news/algae3.txt</a>

- 7. Oilgae. September 13, 2009. <a href="www.oilgae.com/.../missouri-univs-partner-with-coal-power.html">www.oilgae.com/.../missouri-univs-partner-with-coal-power.html</a>
  Researchers at Lincoln University in Jefferson City already have been growing algae in labs while others at Missouri University of Science and Technology in Rolla have been ...
- 8. Advanced Biofuels USA. August 27, 2009. <a href="http://advancedbiofuelsusa.info/missouri-cooperatives-partner-with-universities-on-carbon-capture-research">http://advancedbiofuelsusa.info/missouri-cooperatives-partner-with-universities-on-carbon-capture-research</a>
- 9. "Missouri Cooperatives Partner with Universities on Carbon Capture Research" St. Louis Beacon. July 30 2009.http://www.stlbeacon.org/nation/part\_two\_of\_two\_about\_cleaner\_coal
- 10. May 2009. Rural Missouri, "Algae to Energy: Innovative project seeks to reduce carbon dioxide emissions and create new fuels", page 12
- 11. April 22, 2009, Missouri TV News, "Algae Biofuels", TV stations (KY3, KMBC, KFVS)
- 12. April 16, 2009. University of Missouri System video for 2009 Missouri Energy Summit promotion, "Turning Algae Into Fuel", <a href="http://www.youtube.com/watch?v=PoiAKcIls6s">http://www.youtube.com/watch?v=PoiAKcIls6s</a>
- 13. March 27, 2009. Associated Electric Cooperative Inc, "March 31 ribbon cutting launces Chamois Power Plant algae experiment to reduce carbon dioxide"
- 14. 2009. Associated Electric Cooperative Inc., "Chamois Power Plant algae experiment", <a href="http://aeci.org/chamoisalgae.aspx">http://aeci.org/chamoisalgae.aspx</a>
- 15. November 2008. Spectrum (UM magazine) Vol. 35, No. 5, "Missouri S&T researchers show how green slime could help save the world"
- 16. Oct 6, 2008. The Rolla Daily News, "S&T pushes limits"
- 17. Sept 15, 2008. Springfield Business Journal, "Associated electric partners in green research project"
- 18. Sept 10, 2008. CNBC.com, "From CO2 to algae to biofuel?"
- 19. Sept 5, 2008. Associated Press, "Mo power plants to cut emissions by growing algae". The story was picked up by Forbes.com; MSN.com; yahoo.com; Herald-Dispatch.com; Portfolio.com; News-Leader, Springfield, MO; Herald-Leader, Lexington, Kentucky; KRCG and News Tribune, Jefferson City, MO; Kansas City Star, MO
- 20. Sept 4, 2008. National Rural Electric Cooperative Association, "Missouri cooperatives partner with universities on carbon capture research"
- 21. June 2005. Wildlife Conservation Magazine. "The hellbender needs help", pages 51-54
- 22. February 12, 2005. 30-minute broadcast of hellbender research on Public Broadcasting System (PBS). Film provided by MDC
- 23. October 25, 2004. Columbia Daily Tribune, "Team of biologist hell-bent on saving fading salamanders", page 2A
- 24. October 24, 2004. ST. Louis Post-Dispatch, "Scientists seek to save once-thriving hellbender" Front page, A12-A13. The story was later picked up by Associated Press, Kansas City Star, Kansas City television station KCTV-5, and Columbia Daily Tribune
- 25. "Hellbender Mystery" TV show produced by Missouri Outdoors TV and Missouri Department of Conservation. 2003
- 26. July 23, 2003. Star-Crawford Mirror in Steelville. "UMR Biologist Tries to Save the Ozark Hellbender"
- 27. June 18, 2003. Sullivan Independent News. "UMR Biologist Tries To Save the Ozark Hellbender"
- 28. June 17, 2003. Park Hills Daily Journal. "Researchers looking to save Ozark salamanders from extinction"; St. Louis Post-Dispatch. "Scientists Study Decline of Local Salamander the Ozark Hellbenders"
- 29. June 16, 2003. Camdenton Lake Sun Leader. "On a mission for Ozark salamanders"; Cape Girardeau Southeast Missourian. "Researchers looking to save Ozark salamanders"; Moberly Monitor Index. "Researchers look to save salamanders"; Parksville Daily Express & News. "Researchers Fight to Save Ozark Salamanders from Extinction"; News-Leader in Springfield. "Hellbenders"
- 30. June 15, 2003. Springfield Sunday News-Leader. "Hellbenders" page. 1A, 8A-9
- 31. June 15, 2003. The Associate Press State & Local Wire (in Ganisville, MO). "Researchers looking to save Ozark salamanders from extinction".

- 32. May 2003. Rolla Channel 16. Hellbender Research

- 33. May 11, 2003. Rolla Daily News. "UMR Biologist Works to Save Ozark Hellbender".
  34. December 2002. Alumni Magazine. "Saving the Hellbender".
  35. March 2001. Missouri Water News by Missouri Water Resources Research Center, "Detection and biological assessment of endocrine disruptors in Missouri sewage treatment plants"