Stella Bezergianni, PhD

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Education

Lehigh University, Bethlehem, PA

Ph.D. in Chemical Engineering, January 2001

Ph.D. dissertation: Assessment of Multivariable Controller Performance

Research Advisor: Professor Christos Georgakis

G.P.A.: 3.7/4.0

Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης

Engineering Diploma in Chemical Engineering, June 1995

Dissertation: Flow Studies of Air Bubbles in Water

Anatolia College of Thessaloniki, Greece

High school diploma, June 1990

Awards

Wenzel Award for best presentation in the Ph.D. Qualifying Exams, Lehigh University, 1996. Foundation of social scholarships scholastic honors, Aristotle University of Thessaloniki, 1995.

Academic Experience

Center for Research & Technology Hellas (CERTH), Chemical Process Engineering & Research Institute, Lab of Environmental Fuels and Hydrocarbons

Researcher (June 2005-Present)

- Research on catalytic hydroprocessing of biomass for biofuels production
- Scientific Advisor of the EU LIFE+ project: «Demonstration of a sustainable & effective 2nd generation biofuels application in an urban environment» (January 2010-December 2012)
- Scientific Advisor of the Greek Biofuels Technology Platform (November 2006-December 2008)
- Scientific Advisor of the technical seminar "Bioenergy and Blofuels" (18-29 February 2008)
- Coordination of the Biofuels' Technology Platform of Thessaly
- Coordinate research program MOHLOS supported by the General Secretariat for Research & Development of the Greek Ministry of Development ("Development of infrastructure supporting innovation for the production of clean fuels with the method of hydrocracking)
- Development of hydrocracking model

University of Western Macedonia, Department of Energy Source Management

Teaching Assistant (Sept 2007 – Present)

Technologies of Exploitation and Management of Hydrocarbons (ME 223)

Centre for Research & Technology Hellas

Lecturer (February 2008)

2nd Generation Biofuels

Center for Research & Technology of Thessaly

Lecturer (November 2007)

Biodiesel production from energy crops / Biodiesel production technologies

Lehigh University, Bethlehem, PA, Department of Chemical Engineering, Advisor: Professor Christos Georgakis

Research Assistant (June 1996 – December 2000)

- Developed a new controller assessment methodology based on the Relative Variance Assessment Index.
- Extracted current / effective controller structure and parameters from closed-loop historical data.
- Identified process and disturbance models using subspace identification methodology.
 - Evaluated the robustness of the current control structure.
- Estimated the effect of potential improvement of the current control structure.
- Applied statistical monitoring tools for the assessment of plant-wide control structures.

Academic Experience (cont'd)

Lehigh University, Bethlehem, PA, Department of Chemical Engineering, Project advisor: Professor Christos Georgakis

OSI Project Consultant (September 1997 – May 2000)

Coordinated the projects of four undergraduate students involved in research projects in the Opportunities for Student Innovation Program, organized by Lehigh University in cooperation with various industries.

Lehigh University, Bethlehem, PA, Department of Chemical Engineering, Instructor: Professor William L. Luyben

Teaching Assistant (Fall 1997)

Process Design I (ChE 233)

Assisted student projects and helped use of HYSIS simulation environment.

Lehigh University, Bethlehem, PA, Department of Chemical Engineering, Instructor: Professor Cesar Silebi

Teaching Assistant (Fall 1995)

Methods of Analysis in Chemical Engineering (ChE 201)

Aristotle University of Thessaloniki, Greece, Department of Chemical Engineering, Advisor: Professor Stavros Nychas

Research Assistant (June 1994 – May 1995)

- Performed experimental investigation of bubble interactions in air-water bubble column. Flow visualization achieved using high-speed video photography.
- Studied the effect of a nozzle assembly configuration on bubble interactions.
- Examined parametric effect of gas flow rate on bubble size and dynamics.

Industrial Experience

ExxonMobil Refining & Supply, ESSO Nederland BV, Rotterdam NL

Process Technical Assistance Section

Senior Engineer on Assignment (May 2003–June 2005)

- Real Time Optimization for Hydroprocessing Unit Project.
 - Project scoping, Model Development, Online Configuration, Commissioning
- DMC for Hydroprocessing Unit Project
 - Plant-test, Model Identification, Configuration
- Control Systems
 - Controller tuning, Control System Design (ACL) and configuration (ACS)
- Real Time Optimization course
 - Taught Real Time Optimization course in European Engineering Headquarters (Fawley UK)

ExxonMobil Research & Engineering, Fairfax VA, USA

Advanced Control & Optimization Group

Senior Engineer (March 2001–April2003)

- Real Time Optimization for Hydroprocessing Units.
 - Model development and Online Support
- Experience with Refining Processes

FMC Corporation, Princeton, NJ, Chemical Products Group

Research Consultant (June 1997 – September 1997)

- Multivariate statistical analysis of calciner data in terms of a data management project.
 - Quantified the current process variability and identified contributing sources
 - Assessed the impact of potential reduction of the variability of manipulated variables and disturbances on the output variability

Air Liquide, Thessaloniki, Greece

Process Engineer (July 1993 – September 1993)

Studied the process control structure of an air-separation cryogenic plant.

Publications

Publications in scientific journals

- Bezergianni, S., Dimitriadis, A., Sfetsas, T., and Kalogianni, A., Hydrotreating of waste cooking oil for biodiesel production. Part II: Effect of temperature on hydrocarbon composition, *Bioresource Technology*, **101**(19), pp. 7658-7660, 2010
- **Bezergianni, S.**, Dimitriadis, A., Kalogianni, A. and Pilavachi, P.A., Hydrotreating of waste cooking oil for biodiesel production. Part I: Effect of temperature on product yields and heteroatom removal, *Bioresource Technology*, **101**(17), pp. 6651-6656, 2010
- Bezergianni, S., Voutetakis, S., Kalogianni, A., Catalytic hydrocracking of fresh and used cooking oil, *Industrial Engineering Chemistry Research*, **48**(18), 8402-8406, 2009
- **Bezergianni, S.**, Kalogianni, A., Hydrocracking of used cooking oil for biofuels production, *Bioresource Technology*, **100**(17), pp. 3927-3932, 2009
- Bezergianni, S., Kalogianni, A., Vasalos, I.A., Hydrocracking of vacuum gas oil-vegetable oil mixtures for biofuels production, *Bioresource Technology*, **100**(12), pp. 3036-3042, 2009
- Aggeli, K., Kalavrouziotis. I. K., **Bezergianni, S.**, A Proposal Of A Treated Wastewater Reuse Design System In Urban Areas, *Fresenius Environmental Bulletin*, **18**(7b), pp. 1295-1301, 2009
- Lappas, A.A., **Bezergianni, S.**, Vasalos, I.A. Production of Biofuels via Co-processing in Conventional Refining Processes, *Catalysis Today*, **145** (1-2), pp. 55-62, 2009
- Bezergianni, S., and Kalogianni, A., An application of principal component analysis for monitoring and disturbance detection of a hydrotreating process, *Industrial & Engineering Chemistry Research Journal*, **47**(18), 6972-6982, 2008
- Bookis, I. Ph., **Bezergianni, S.**, Grammelis, P., Bridgwater, A.V., CFB air-blown flash pyrolysis. Part II: Operation and experimental results, *Fuel*, **86**(10-11), pp. 1387-1395, 2007
- Bookis, I. Ph., Grammelis, P., **Bezergianni, S.**, Bridgwater, A.V., CFB air-blown flash pyrolysis. Part I: Engineering design and cold model performance, *Fuel*, **86**(10-11), pp. 1372-1386, 2007
- **Bezergianni, S.** and Georgakis, C., Evaluation of Controller Performance Use of Models Derived by Subspace Identification, *Int'l Journal of Adaptive Control and Signal Processing*, **17**, pp 527-552, 2003.
- Bezergianni, S. and Georgakis, C., Controller Performance Assessment Based on Minimum and Open-loop Output Variance, *Control Engineering Practice*, **8**, pp 791-797, 2000.

Publications in conference proceedings

- Karonis, D., **Bezergianni, S.**, Chilari, D. and Kelesidis, E., Maximizing the yield of biodiesel from waste cooking oil hydroprocessing by cut-point optimization, *Proceedings Am. Chem. Soc., Div. Fuel Chem.*, **55** (1), 2010
- Kalogeras K., Bezergianni, S., Kazantzi, V. and Pilavachi, P.A., On the prediction of properties for diesel / biodiesel mixtures featuring new environmental considerations, *Proceedings of the 20th European Symposium on Computer Aided Process Engineering ESCAPE20, 28*, pp 973-978, Naples, Italy, June 6-9, 2010
- **Bezergianni, S.**, Voutetakis, S., Kalogianni, A., Temperature effect on hydrotreating of used cooking oil, *Proceedings of the 5th Dubrovnik Conference on Sustainable Development of Energy, Water and Environmental Systems*, Dubrovnik, Croatia, September 29-October 3, 2009
- **Bezergianni, S.**, Kalogianni, A., Dimitriadis, A., Fuels production from coprocessing of petroleum fractions and vegetable oil, 7th National Conference in Chemical Engineering, Patra, 3-5 June 2009
- Dimitropoulos, V., Lemonidou, A., **Bezergianni, S.**, Avraam, D., Vasalos, I., Mathematical model for simulating a hydrocracking reactor, 7th National Conference in Chemical Engineering, Patra, 3-5 June 2009
- Christodoulou, P., Kazantzi, V, **Bezergianni, S.**, Gounaris, K., The sustainability of beet sugar production in comparison with other sugar crops, *Proceedings of the 1st European Society for Sugar Technology (ESST) Conference*, Rotterdam, 18-20 May 2009
- **Bezergianni, S.**, Kazantzi, V., The Biofuels Technology Platform of Thessaly, Greece, *Proceedings of the Global Conference on Global Warming*, Istanbul, Turkey, July 6-10, 2008
- Aggeli, K., **Bezergianni, S**, and Kalavrouziotis, I.K., Potential to reuse of wastewaters in civil centres A preliminary study in Agrinion, Greece, *AQUA 2008: 3rd International Conference of Water Science and Technology with Emphasis on water and Climate*, Athens, 16-19 October 2008

Publications in conference proceedings (cont'd)

- Heracleous, E., Lappas, A., **Bezergianni, S.**, Vasalos, I.A., Biofuels Production with Respect to Environmental Commitments, *Proceedings of Meeting "Energy and Environment"*, Athens Academy, April, 2008
- **Bezergianni, S.**, Kazantzi, V., Biofuels Technological Platform, *Proceedings of the 2nd National Conference of Renewable Energy Sources and Energy Productivity (ENERTECH 2007*), Athens, 18-21 October 2007
- Kalavrouziotis I. K., Deligiannakis J., Pantazis, V., Hatzopoulos J., Filintas A., Kalafountzos D., and Bezergianni S., 2007. "Facing irrigation problems in the prefectures of Argolida and Lakonia by utilizing processed liquid wastes". Proceedings of the 2nd International Conference on "Environment Water Resources Management Advance Technologies to Save Water", SPM, Athens Greece. July 2-3, 2007
- Μπεζεργιάννη, Σ., και Χριστοδούλου, Π., Η ανταγωνιστικότητα παραγωγής Βιοαιθανόλης με Ελληνικές Πρώτες Ύλες, 6° Πανελλήνιο Συνέδριο Χημικής Μηχανικής, Αθήνα, 31 Μαΐου-2 Ιουνίου 2007
- Heracleous, E., Lappas, A., Bezergianni, S., Vasalos, I.A., and Haase, F., Environmental Benefits on a Life Cycle Basis of Using Biomass-Derived Bio-Oil For Domestic Heating, Hellenic Chemical Engineering Conference, Athens, May 31st-June 2nd 2007
- Christodoulou, P., and **Bezergianni, S.**, The competitiveness of bioethanol production from sugar beet, Proceedings of General Assembly Meeting of International Commission for Sugar Technology, Rostock/Warnemünde, Germany, 13-16 May 2007
- Μπεζεργιάννη, Σ., Λάππας, Α., Βουτετάκης, Σ., Βασάλος, Ι., Βιοκαύσιμα και βιοδιυλιστήριο, Πρακτικά 8^{ου} Εθνικού Συνεδρίου για τις Ήπιες Μορφές Ενέργειας, Θεσσαλονίκη, Μάρτιος 2006
- **Bezergianni, S.** and Georgakis, C., A Control Performance Index Based On Minimum And Open-Loop Output Variance, *Proceedings of the World Congress of IFAC*, Beijing, China, 1999.
- **Bezergianni, S.** and Georgakis, C., A Control Performance Index Based On Minimum And Open-Loop Output Variance, Presented at the 1998 Annual AIChE Conference, Miami, Florida, 1998.
- **Bezergianni, S.** and Georgakis, C., Relationship between PCA and Process Models for the Assessment of Controller Performance, *Proceedings of American Control Conference*, Albuquerque, New Mexico, 1997.

Other publications

- Voulouvoutis, A., Kouridis, C., Koufodimos, G., Bezergianni, S., Fontaras, G., Transportation fuels and sustainable development, Study of the Technical Professional Chamber – Sector of Central Macedonia, June 2008
 - http://portal.tee.gr/portal/page/portal/teetkm/DRASTHRIOTHTES/OMADESERGASIAS/oe_kausima.pdf
- **Bezergianni, S.**, 2nd generation biofules The solution to the imminent energy crisis, *Modern Technical Review*, 191, April 2008
- **Bezergianni, S.** Controller Performance Assessment, *PhD Thesis*, Lehigh University, PA, USA, June 2001.
- **Bezergianni, S.** and Georgakis, Assessment of Multivariable Controller Performance, *CPMC Internal Report*, no.**29**, Lehigh University, PA, USA, October, 2000.
- **Bezergianni, S.** and Georgakis, Assessment of Multivariable Controller Performance, *CPMC Internal Report*, no.**28**, Lehigh University, PA, USA, October, 1999.
- **Bezergianni, S.** and Georgakis, Assessment of Controller Performance Using Operating Data Driven Models, *CPMC Internal Report*, no. **26**, Lehigh University, PA, USA, April, 1998.
- **Bezergianni, S.** and Georgakis, Application of Statistical Monitoring Tools on a Calcination Process, *CPMC Internal Report*, no.**25**, Lehigh University, PA, USA, October, 1997.
- **Bezergianni, S.** and Georgakis, C., Assessment of Controller Performance Using Operating Data Driven Models, *CPMC Internal Report*, no.**24**, Lehigh University, PA, USA, April, 1997.
- **Bezergianni, S.** and Georgakis, C., Monitoring, Diagnosis, and Improvement of Automatic Process Control Systems, *CPMC Internal Report*, no.**23**, Lehigh University, PA, USA ,October, 1996.
- **Μπεζεργιάννη, Σ.**, Αλληλεπίδραση Φυσαλίδων σε Στήλη Νερού, Διπλωματική εργασία, Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης, Ιούνιος 1995.

Presentations in conferences / meetings

- Kalogianni, A, **Bezergianni, S.**, Statistical Process Control of Hydrocracking Processes, poster presentation, *7th National Scientific Conference of Chemical Engineering*, Patra, June 2-5, 2009
- **Bezergianni, S.**, Kazantzi, V., Biofuels Technological Platform of Thessaly, 2nd Business Panorama, Larisa, September 2009
- **Bezergianni, S.**, Biofuels Technological Platform of the Regional Innovation Pole of Thessaly, Conference of the Regional Innovation Pole of Crete, Iraklio, October 9-11, 2008
- **Bezergianni, S.**, Production of 2nd generation biofuels, Meeting: «Best practices and current situation in the field of biofuels », Municipality of Micra, 2 July 2008
- **Bezergianni, S.**, Comparative assessment of hydrocracking catalysts under particular operating conditions, *Open conference: "Development of Infrastructure Supporting Innovation for the Production of Clean Fuels via the Hydrocracking Method"*, CERTH, Thessaloniki, 30th of June 2008
- Dimitriadis A., **Bezergianni, S.**, Fuels production from coprocessing of petroleum fractions and vegetable oil, *Open conference: "Development of Infrastructure Supporting Innovation for the Production of Clean Fuels via the Hydrocracking Method"*, CERTH, Thessaloniki, 30th of June 2008
- Kalogianni, A., **Bezergianni, S.**, Statistical process control of hydrocracking processes, *Open conference: "Development of Infrastructure Supporting Innovation for the Production of Clean Fuels via the Hydrocracking Method"*, CERTH, Thessaloniki, 30th of June 2008
- Dimitropoulos, V., Avraam, D., **Bezergianni, S.,** Lemonidou, A., Mathematical simulation model of hydrocracking reactor, *Open conference: "Development of Infrastructure Supporting Innovation for the Production of Clean Fuels via the Hydrocracking Method"*, CERTH, Thessaloniki, 30th of June 2008
- **Bezergianni, S.** and Kazantzi, V., Biofuels Technological Platform of Thessaly, Greece, Presented at the Global Conference on Global Warming, July 6-10, Istanbul, Turkey, 2008
- Kalogianni, A. And **Bezergianni, S.**, Application of Principal Component Analysis on a Hydrotreating Process, Poster presentation in CAPE Forum, Thessaloniki, 7-8 February 2008
- **Bezergianni, S.**, Production of 2nd generation Biofuels, Meeting "Enforcing biofuels chains for the local development of European countries, Thessaloniki, 5 February, 2008.
- Kalavrouziotis, I. K., Deligiannakis, I., Pantazis, V., Hatzopoulos, I., Filindas, A., Kalfountzos, D., and Bezergianni, S., Treating irrigation problems in the prefectures of Argolida and Lakonia using treated waste water", 2nd Unternational Conference entitled "Environment Sustainable Management of Water Resources Advanced Technologies for Water Conservation, Athens, July 2007
- Bezergianni, S., Biofuels Technology Platform, Symposium on Energy Crops for Biofuels Production, Xanthi, May 2007
- **Bezergianni, S.**, Kazantzi, V., Biofuels Technology Platform of Thessaly, 2nd National Conference of Alternative Fuels and Biofuels, Lake Plastira, April 2007
- **Bezergianni, S.**, Biodiesel Production, Use, Possibilities, Meeting: "Production and Use of Biofuels", Kozani, December 2006
- **Bezergianni S.**, 2nd Generation Biofuels, Meeting of Engineering Professional Chamber "Biofuels and their Developmental Role for Industry and Agriculture", Thessaloniki, November 2006
- Heracleous, E., Bezergianni, S., Haase, F., and Vasalos, I., Biofuels and their Environmental Impact, 46th Congress of European Regional Science Association (ERSA), Volos, Greece, September 2006
- **Bezergianni, S.**, "The Present and Future of Biofuels in Greece", Conference on *Bioenergy in Greece* of the Greek-German Professional Chamber, May 2006
- **Bezergianni, S.**, Lappas, A., and Vasalos, I., "Biofuels and Biorefineries", Meeting on *Biodiesel Chains*, Athens, February 2006
- **Bezergianni, S.**, Lappas, A., and Vasalos, I., "Biofuels and Biorefineries", Presentation in the *New technologies for energy in the region of Western Macedonia*, Ptolemaida, 2005
- **Bezergianni, S.** and Georgakis, C., "A Control Performance Index Based On Minimum And Open-Loop Output Variance", Presented at the 1998 Annual AIChE Conference, Miami, Florida, 1998.
- Bezergianni, S. and Georgakis, C., "Relationship between PCA and Process Models for the Assessment of Controller Performance", Presented at the 1997 American Control Conference, Albuquerque, New Mexico, 1997.

Participation in conferences/congresses/meetings

- Participation in 6th International Congress for Biofuels Fuels of the Future, Berlin, 1-2 December 2008
- Participation in European Refiners Association Annual Meeting, Paris, 11-13 March 2008
- Participation in International Symposium of "Hydrocarbon Catalysis and Catalytic Engineering: Present Status and Perspectives", Sifnos, Greece, June 2007
- Participation in "2006 European Biofuels Forum", Warsaw, Poland, November 2006
- Participation in the 1st meeting of the European Biofuels Technology Platform "Biofuels in the European Union: A vision for 2030 and beyond", Brussels, Belgium, June 2006
- Participation in the international meeting "Biofuels Markets", Brussels, Belgium, February 2006
- Συμμετοχή σε συνέδριο "Νέες ενεργειακές τεχνολογίες στην περιφέρεια Δυτ. Μακεδονίας", Κοζάνη, Δεκέμβριος 2005
- Συμμετοχή σε ημερίδα "Βιοκαύσιμα Το βιοντίζελ στην Ελληνική Αγορά", Θεσσαλονίκη, Νοέμβριος 2005
- Participation and chairman in the international conference: "American Institute of Chemical Engineers Annual Meeting, 2003", San Francisco, USA, November 2003
- Participation in international conference: "Aspen World Conference", Washington, USA, October 2002
- Participation in international conference: "American Institute of Chemical Engineers Annual Meeting, 2001", Reno, USA, November 2001
- Participation in international conference: "American Institute of Chemical Engineers Annual Meeting, 1998", Miami, USA, November 1998
- Participation in international conference: "American Control Conference", Philadelphia, USA, June 1998

Ph.D. desertation supervision

• Dimitropoulos Vasilis: «Hydroprocessing of vegetable oil and gasoil mixtures, Aristotle University of Thessaloniki – Academic supervisor: prof. Lemonidou Aggeliki

Diploma thesis supervision

- Karabatzaki Konstantina: "Application of controller assessment indices", University of Western Macedonia, Kozani (June 2009) Academic supervisor: Prof. Pilavakis Petros Grade 10/10
- Kalogeras Konstantinos, "Predicting properties of fossid diesel biodiesel mixtures", University of Western Macedonia, Kozani (March 2009) Academic supervisor: Prof. Pilavakis Petros Grade 10/10
- Dimitriadis Athanasios, "Coprocessing fuels from biomass», University of Western Macedonia, Kozani (June 2008) Academic supervisor: Prof. Pilavakis Petros Grade 10/10
- Antoniou Nikolaos, "Hydrotreating catalyst assessment", Aristotle University of Thessaloniki (to be submitted May 2008) - Academic supervisor: Prof. Lemonidou Aggeliki – Grade 10/10

Special skills

Computers

Proficient use of all Microsoft office programs (Word, PowerPoint, Access Database, Excel)

Programming in MATLAB, Fortran, C++

DMO (Real Time Optimization Software)

Programming in ACL (ACS platforms)

DMC+ WebView for DMC PlantTest and Operation

Latex (for scientific writing)

System administrator of Chemical Engineering HYSYS Lab

Languages

Greek

English (Cambridge & Michigan Proficiency)

French (Certificat de la langue Française)

Spanish & Dutch

Seminars

Environmental management seminar (University of Macendonia, October 2008)

Applications of Heterogeneous Catalysis (University of Houston, 12-16 May 2008)

Biomass utilization for the production of biofuels & electric energy (CERTH, 5-13 December 2005)

Research projects

Research projects

Time period	Project title	Participation as scientific advisor
7/10/2010- 28/2/2011	Collaboration with TOYOTA Europe for performing R&D work on Biodiesel Stability. Budget 44.838 €	V
1/6/2010- 31/5/2012	Collaboration with KiOR Inc for performing R&D work on "Hydrotreating of Biooil". Budget 95.000€	V
1/1/2010- 31/12/2012	European Environment Program LIFE+ Project title: "Demonstration of a sustainable & effective 2 nd generation biofuels application in an urban environment" (BIOFUELS-2G). Budget 1.416.350€	V
1/11/2006- 15/12/2008	Regional Innovation Poles of Thessaly, funded by the program Competitiveness Project title: «Biofuels Technological Platform of Thessaly", of the Budget 125.000€	V
1/4/2006- 30/6/2008	Program MOHLOS entitled "Infrastructure development supporting innovation and business dexterity of research public bodies", Action 1.3.1. Project title: "Development of infrastructure supporting innovation for the production of clean fuels with the method of hydrocracking" Budget 1.000.000€	
1/2/2007- 31/5/2008	Program "People networks of research and technological education". Funded by program Competitiveness, Action 8.3.6 Project title: «Energy Crops – Production, Exploitation and Marketing Biofuels in Greece». Budget 35.000€	√
1/3/2002- 28/2/2006	Development of Research Centers with the participation of end users. Support of Laboratories which collaborate with businesses and research users. Program AKMON. Funded by Competitivess, Action 4.2.2 Project title: "Application of catalyst evaluation technology for the oil industry" Budget 2.083.640€	

Technical studies

Time period	Project title	Participation as scientific advisor
1/4/2008- 30/6/2008	Study of the Technical Chamber of Greece – Department of Central Macedonia entitled: "Transportation fuels and sustainable development" http://portal.tee.gr/portal/page/portal/teetkm/ DRASTHRIOTHTES/OMADESERGASIAS/oe_kausima.pdf	√
5/10/2005- 30/9/2007	Study of the Ministry of Agricultural Development and Food entitled: "Potential of reusing municipal waste and sludge of biological treatment plants in soil and cultivations in Argolida and Lakonia for irrigation purposes" (ΕΠΑΑΥ 2006) – University of Ioannina	

Activities

- LIFE+ expert / Presentation of EU Environmental Program LIFE+ in Athens and Cyprus (June 2010)
- Member of the scientific committee of the Institute of Democracy Konstantinos Karamanlis (May 2010)
- Member of the energy committee of the Technical Professional Chamber of Greece (2008-2010)
- LIFE+ expert / Presentation of EU Environmental Program LIFE+ in Athens and Cyprus (June 2009)
- Representative of the National Engineering Profession Chamber Central Macedonia Division in the committee for coordinating and promoting the energy strategy for the Municipality of Thessaloniki (EU Program «Intelligent Energy Europe-PEPESEC» (2009)
- Member of the organization committee for the 7th national chemical engineering conference (Patra, June 2009)
- LIFE+ expert / Presentation of EU Environmental Program LIFE+ in Athens and Cyprus (September-October 2008)
- Organize open-to-the-public meeting "Production of Biofuels in Thessaly: Research and Technology Development", (Kalabaka, 24 October 2008)
- Scientific advisor of the Strategic Research Agenda and Deployment Strategy of the Biofuels Technological Platform (October 2008)
- Scientific advisor of the Vision Paper "Biofuels in Greece A vision for 2030 and beyond" of the Biofuels Technological Platform (June 2008)
- Organization of conference "Biofuels Technology Platform in Thessaly" (Volos, 21 June 2008)
- Member of the scientific team for research study on "Transportation fuels and Sustainable developemt"
- Scientific advisor organizer of seminar "Bioenergy and Biofuels" (18-29 February 2008, Thessaloniki, Greece)
- Organization of conference "Energy crops in Thessaly" (Karditsa, 15 December 2007)
- Coordinator of the organization committee (of the Chemical Engineering Association) for a conference entitled: "Energy and Environment for Western Macedonia", Kozani, June 2006
- Active member of the Chemical Engineering Association of Central and Western Macedonia
- Co-chair in Process & Control Systems Monitoring Session, Annual AIChE Meeting, San Francisco, CA, USA (Nov 2003)
- Active member of American Institute of Chemical Engineers (AIChE) since 1995
- President of Chemical Engineering Graduate Student Association (Lehigh University, 1996-1997)
- Greek teacher in the Greek School of the Saint Nicholas Orthodox Greek church (Bethlehem, PA) since 1997