Nasrin R. Khalili, Ph.D.
Curriculum Vitae

Associate Professor
Environmental Management and Sustainability Program
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Current Position

- Associate Professor of Environmental Management, Stuart Graduate School of Business, Illinois Institute of Technology.

Education

- B.Sc. Organic Chemistry (1978); Faculty of Science, Tehran University, Tehran, Iran
- M.S.P.H. Environmental Engineering (1984); Environmental and Sanitary Engineering Department, School of Public Health and Institute of Public Health Research, Tehran University, Tehran, Iran
- Ph.D. Environmental Engineering (1992); Pritzker Department of Environmental Engineering, Illinois Institute of Technology, Chicago, Illinois.

Work Experience

- Associate Professor of Environmental Management, Stuart School of Business IIT (2002-present)
- Associate Professor and Academic Director of the Environmental Management and Sustainability Program, Stuart School of Business (2002-2006)

- Guest Research Faculty, Argonne National Laboratory (1997-2007)
- Assistant Professor of Environmental Engineering and Director of Environmental Management Technical Program, IIT Department of Chemical and Environmental Engineering, Chicago, IL (1995- 2002)
- Visiting Assistant Professor, Pritzker Department of Environmental Engineering, Illinois Institute of Technology, Chicago, IL (1992-1995)

LEADERSHIP POSITIONS
ACADEMIC PROGRAM DEVELOPMENTS AND MANAGEMENT

- Technical Director of Environmental Management Program (1995-2002).
- Academic Director of The Environmental Management and Sustainability Program (2002-2006)
- Design of an Inter-Disciplinary Research Program and Inter-Professional Course Between Pforzheim University of Applied Sciences, Germany, and IIT Stuart School of Business (Phase I: 2012-2013)

- Design of a Collaborative Research-Focused Program with Zhaw School of Business and Law in Winterthur, Switzerland (May 2012-present).
- Design and Advising Ph.D. Program in Operation with Concentration In Environmental Management and Sustainability, Stuart School of Business (2006-present)
- Design of Environmental Engineering Curriculum, at International School of Technology (IST) in Krakow, Poland (a collaborative program between IIT and International School of Technology at School of Mining and Metallurgy AGH university)(1996-1998).
- Developing, Managing and Teaching Courses and Promoting Research between IIT Department of Chemical and Environmental Engineering, Stuart School of Business and International School of Technology (IST) in Poland (1998-2007).
- Design of the first Interdisciplinary Undergraduate Business Curriculum at Stuart School of Business (2004-2006).
- Design of Interdisciplinary Senior Design Courses between IIT Stuart School of Business and Monterey Tech, Chemical Engineering Department in Monterey, Mexico (2004-2006).

Honors and Awards

- Motorola Technology and Business Plan Competition Advisor, May 2008 (first place)
- National I2P Competition, Advisor, San Jose, CA, April 2006 (first prize winner)
- Julia Beveridge Awards, March 2001*The major selection criteria have been the educational contributions, university services and student/faculty evaluation of the nominee.*
- Member of Environmental Management Advisory Group at Northern Illinois University Advisory Group is responsible for the overall design and direction of the EMS undergraduate program at NIU (2000).

Areas of Specialization

- Environmental Management Systems, Pollution Prevention, Control Strategies,
- Strategic Planning and Design of Management Systems Specific to Sustainable Supply Chain Management.
- Design of Multi-Criteria Decision Making Models in Support of Sustainable Economic Development, and Industrial Inclusion of the Cleaner Production Programs
- Environmental Economics, Cost valuation, and Climate Change Management
- Application of Statistical Tools in Managerial Decision Makings

RESEARCH
RESEARCH INTEREST AND EXAMPLE PROJECTS

Dr. Khalil's area of specialization ranges from synthesis and development of catalysts and adsorbents for removal of pollutants from industrial waste streams (*Pollution prevention and clean production*) to analysis of environmental economics and cost valuations for sustainability projects, development of energy portfolio models; and design, and verification of multi-criterion decision-making approaches to assessing environmental and sustainability projects. In addition to developing two patents for designing new processes for converting waste sludge to activated carbon, and a catalyst to remove NOx. Dr. Khalili's research projects between 2005-2007 have

resulted in design of an award-winning water purification system called "KlarAqua" in 2006. She has also co-designed and copyrighted a computer program in 2007 titled "Environmental Attribute Calculator" (EAC) to assist energy management programs at a wide range of industrial and commercial buildings.

Dr. Khalili research experience and specific interests are in Development of Models Specific to Greening the Operations; Design, and Verification of Multi-Criterion Decision Making Approaches to Assessing Environmental and Sustainability Projects; Sustainable Environmental Management System Designs (SEMS); Sustainable Energy Portfolio Development (including energy systems environmental foot prints); Design of Pollution Prevention and Clean Production Strategies, and Sustainability Projects Design, Assessment, and Optimization.

Her most recent work is focused on:

- Human capital development via education: the role of academia in creating awareness, knowledge, and capabilities that can support sustainable development globally.

- Design of pathways to Cleaner Production in the Americas through integration of business, engineering and environmental education, which she has been working on during the last 18 years. This work involves working with universities, government agencies, and industries in development of strategies for successful implementation of Cleaner Production programs in Latin America, specifically in Costa Rica, El Salvador, Peru, Dominican Republic, Honduras, and Guatemala (2012-2015)

- Illinois Smart Grid Innovation Cluster Development via which her research students are working with small businesses and startups in energy sector to identify and manage both opportunities and challenges that emerging businesses in the energy sector would face (2010-present)

- Dr. Khalili is the author of a text/reference book titled "Practical Sustainability: From Grounded Theory to Emerging Strategies" Palgrave McMillan, NY (January 4, 2011), a workbook for minimizing exposure to emissions at gas utility sites (2002), and more than 40 refereed publications and peer-reviewed conference proceedings.

Active Research Grants

- **Pathways to Cleaner Production in the Americas through Integration of Business, Engineering and Environmental Education "Higher Education for Development, Knowledge, Partnership, Results, Pathways to Cleaner Production, Co-PI. ($758,996-$1,000,000) (2012-2015).**
    - Higher Education for Development (HED), with funding support from the United States Department of State's Bureau of Oceans and International Environmental and Scientific Affairs, supported this grant for three years to promote higher education partnership aimed at promoting sustainable manufacturing and economic growth in Latin America. The initiative will help create a modern workforce to implement cleaner production practices, meeting the goals of

Pathways to Prosperity in the Americas. The multi-national effort, known as "Pathways to Cleaner Production in the Americas," integrates business, engineering, and environmental education as a collective response to the need for technically innovative skills training in industry across the Americas. The partners will enhance academic training and curricula in cleaner production and sustainable industrial development to improve environmental performance and productivity of micro-, small- and medium-sized enterprises (MSMEs) in pathways countries. The work will be completed in collaboration with the World Environment Center and the National Cleaner Production Centers.

- **Illinois Smart Grid Innovation Cluster <u>CO-PI</u>. ($1,500,000) (2010-present):**
  - This project seeks to attract and support smart grid innovators in order to: Enhance market opportunities, Accelerate business and product development, Create jobs, and Advance deployment of a smarter grid. The Regional Innovation Cluster is supported through the U.S. Small Business Administration (SBA) as one of 10 "Innovative Economies," and identified as the only smart grid-focused innovation cluster in the country. The Cluster provides a platform to promote business growth and entrepreneurial activity by providing technical and business support to smart grid start-ups and small businesses, continuously identifying and disseminating technical and product needs, and connecting innovators to market opportunities and capital in order to speed the path to commercialization. ISGRIC also engages leading corporations, investors and policy makers to ensure the regional smart grid cluster grows in a deliberate and sustainable manner.

- **Design of Sustainable Entrepreneurial Economic Development (SEED) models to promote economic development in small towns and rural areas (2009-2011**).
  - The SEED project's main goal is to explore opportunities and potential for developing regional clusters to drive economic growth and strengthen competitiveness of businesses in small towns. The SEED model is built on the "link" among regional and local entities, natural resources, government resources, and involvement of the community and community leaders. The links provided through SEED program also focus on benchmarking, training and connecting small businesses (Venture System) with new ideas, technologies, and development and financing opportunities. The SEED project also focuses on initiatives that can establish mentoring and networking opportunities between the towns and the Stuart School of Business faculty.

- **Development of Strategies for Sustainable Operation and Energy Management at Cook County, IL. <u>PI/Co-PI</u> ($400,000.00 total grant) (2010-2011).**
  - Project analyzed energy use practices at Cook County and Suburbs and provided suggestions for designing a management system that can support sustainable use of energy and material conservation at Cook County, IL.

- **Design of Water Purification Systems and Implementation Strategy for Low Income Countries <u>PI</u>**. (**NCIIA, September 2006, $13,500.00, September 2005, $16,000.00, EPA P3, October 2006, $ 9,500.00)).** (**2005-2008**)

- KlarAqua is dedicated to providing an affordable filtration system that effectively eliminates bacteria and turbidity from contaminated water in developing communities. Partnered with Monterrey Tech University, KlarAqua has been currently focusing its attention to certain regions of Mexico, but plans to eventually provide clean drinking water in all homes internationally. Its main goals will be to promote health and hygiene, but economic development in target regions will also be of value to the local inhabitants.

Other Projects

- An Innovative Approach to Energy Storage: A Multi-stakeholder Business Model for V2G Infrastructure Evolution (IIT- Pforzheim University in Germany)
- EPA Air Monitoring Project in collaboration with Indiana University, ($82,700.00) , (2002-2014)
- ANL, Research Grant ($20,000.00), (2006-2007)
- I2P Award, $15,000.00 with a match from IIT (2006)
- Design of Biochar Catalyst from Industrial Sludge (ERIEF Seed Grant $10,000),(2000)
- Post-Consumer Waste Management in Plastic Industry (2010)
- Wetland Design and Management, (2004)
- Waste Management at Alcohol Production Industry, (2004)

Book Publications

Book:

- Nasrin R. Khalili, 2011, Practical Sustainability: From Grounded Theories to Emerging Strategies, Palgrave McMillan, NY.

Chapter Book:

- Nasrin R. Khalili, 2009, "Chapter Book: Reducing Liability Risk Through Best Environmental Practices *Risk Management in Finance: Six Sigma and other Next Generation Techniques* Anthony Tarantino, Deborah Cernauskas, John Wiley&Sons, , PP-208-227

Patent and Computer Programs:

- Nasrin R. Khalili, Eduardo Coma, 2010, Computer program "Environmental Attribute Calculator" (EAC), 2007 to assist energy audit and management in office buildings.
- Khalili, N.R., Arastoopour, H., and Wolhof, L. 2000. "Synthesizing Carbon from Sludge" Patent # 6,030,922.
- Khalili, N.R., Arastoopour, H., 2000. " Synthesis of Carbon-based Catalyst for NO_X removal from Sludge" Patent #6,362,127 B1.

Peer Reviewed Papers

- Nasrin R. Khalili*, David Ehlrich, and Khaldoun Dia-Eddine. 2013. "A Qualitative Multi-Criteria, Multi Stakeholder Decision Making Tool for Sustainable Waste Management". Progress in Industrial Ecology, an Int. J. (PIE), Vol. 8, Nos. ½.
- Nasrin R. Khalili*, Ying Zhang, 2013 "Carbon Management: Voluntary Programs, Regulations, and Corporate Strategies. Global Perspective on Engineering Management (GPEM) Journal, Vol. 2 Iss. 3, PP. 145-153.

- Nasrin R. Khalili, Susana Duecker, 2012 "Application of Multi-Criteria Decision Analysis in Design of Sustainable Envi ronmental Management Systems. J.Clean. Prod, 47, 188 (DOI. *10.1016/j.jclepro.2012.10.044*
- Nasrin R. Khalili, (2008). "Environm ental Health Risk". *Encyclopedia of Quantitative Risk Assessment and Analysis,* Melnick, E., and Everitt, B.(eds). John Wiley & Sons, Ltd, Chichester, UK, pp 574- 580.
- Nasrin R. Khalili, (2008). "What is Hazardous Material? " *Encyclopedia of Quantitative Risk Assessment and Analysis,* Melnick, E., and Everitt, B.(eds). John Wiley & Sons, Ltd, Chichester, UK, pp 1873-1877.
- Nasrin R. Khalili, Thomas M. Jacobius, Joaquín Acevedo M, Enrique Ortiz Nadal, 2007, "Education without Borders: Developm ent of an Interdisciplinary Project Based Course between IIT and ITESM". *Latin American and Caribbean Journal of Engineering Education.*
- V.S. Donepudi, N.R. Khalili*, R. Kizilel and J.R. Selm an. 2002. "Purification of Hard Chromium Plating Baths- Options and Challenges" *American Electroplating Surface Finishing Journal,* pp.62-65.
- G. Sandí, N. R. Khalili, W . Lu, and J. Prakash. 2002 "Electrochemical Performance of Carbon Materials Derived from Paper Mill Sludge". *Journal of Power Sources*. 2003 - 144.206.159.178
- Kenneth C. Littrell, Nasrin R. Khalili *, Marta Cam pbell, Giselle Sandí, and P. Thiyagarajan, 2002. "Micro Structural Analysis of Ac tivated Carbons Prepared f rom Paper Mill Sludge by S ANS and BET" *Journal of Chemistry of Materials*, 14, pp. 327-333.
- Cengiz, P.A., Abbasian J., Khalili, N.R., Sl imane, R.B., Ho, K.K., 2002. "Develop ment of Durable and Reactive Regenerable Sorb ents for High Tem perature Flue Gas Desulfurization" *International Journal of Environment and Pollution*, Vol 14, Nos. 1-2, pp. 82-101.
- Khalili*, N.R. Ca mpbell, M., Sandi, G. Wenquan Lu, and Igore V. Barsokov, 2001. "Physical and E lectrochemical Properties of a Carbon-based Material Produced from Paper Mill Sludge" *Journal of New Materials for Electrochemical Systems*, 4, pp. 267-274.
- Khalili*, N.R. Thom as. S. 2001. "Application of Lung Deposition Model in Carcinogenic Risk Assessm ent of PAHs", *Australian Journal of Environmental Health*, V1, No.3, pp. 18-31.
- Khalili*, N.R., Vyas, J.D., Weangkaew, W., Westfall, S.J., Parulekar, S.J. and Sherwood, R. 2002" Synthesis and Characterization of Activated Carbon and Bioactive Adsorbent Produced from Paper Mill Sludge", *Journal of Purification and Separation Technology*, 26, pp. 295-304.
- Sufuoglu, A., Odabasi*, M., Tasdem ir, Y., Khalili, N.R., and Holsen T. 2001." Temperature Dependence of Gas-Phase Sem ivolatile Organic Com pound Concentration in Chicago Air". *Atmospheric Environment*, 35, pp. 6503-6510.
- Khalili*, N.R., Hitendra, J., and Ha mid Arastoopour. 2000. " Synthesis and Characterization of Catalysts Produced from Paper Mill Sludge: I. Determ ination of NO_X Removal Capability "*Journal of Hazardous Material*, B80, pp. 207-221

- Khalili*, N.R., Pan, M . and Sandi G. 2000. "Determination of the Surface Fractal Dimension of Activated and Disordered Ca rbons Using Gas and Li quid Phase Isotherm Data" *Carbon,* V38, pp. 573-588.
- Khalili*, N.R., Campbell, M., Sandi, G, a nd Golaz, J. 2000. "Production of Micro- and Mesoporous Carbon from Paper Mill Sludge : I: Effect of Zinc Chloride Activation." *Carbon,* V 38, pp: 1905-1915.
- Khalili*, N.R., Chaib, E., Parulekar, S. 2000. " Performance Enhancement of Batch Aerobic Digesters Via Additi on of Digested Sludge" *Journal of Hazardous Material*, B76, pp.91-102.
- Khalili*, N.R., Scheff, P.A., and Holsen, T.M. 1995. " PAH Source Fingerprint for Coke Ovens, Diesel and Gasoline Engines, Highway Tunnels, and W ood Combustion Emissions" *Atmospheric Environment*, Vol.29, No.4, pp. 533-542.
- Khalili*, N.R. and Etzwiller, A. " Rela tionship Between the Method of Production, Surface Functional Groups and Adsorption Capa bility of a Series of Carbon-Based Adsorbents Produced f rom Biosolids" to be su bmitted to *Air and Waste Management Journal*, *December 2004.* .

Paper Accepted Conditionally

- Nasrin R. Khalili*, Susanna Duecker, W eslynne Ashton and Francisco Chavez. 2013-2014. "From Cleaner Production to Sustainable Development: The Role of Academ ia". Submited to the Journal of Cleaner Production, Under Revision.

Papers Under Review

- G. Haddadian, M. Khodayar, and N. Kha lili*. 2013. "Optim al Hourly Scheduling of Distributed Battery Storage in Sec urity-Constrained Economic Operation of Electric Power Systems with Em ission Constraints. Submitted to the journ al of Energy for Sustainable Development
- G. Haddadian[a], M. Khodayar [b], N. Khalili* [a] . 2013 " Sustainabl e Power Generation Scheduling with Variable Energy Resources , Thermal Generating Units, and Electric Vehicle Storage for V2G Deployment ". Submitted to the Journal of Sustainable Energy Technologies and Assessments

Working Papers (2011-present)

- Nasrin R. Khalili, Yilong Luo, Susanna Duecker. "Impact of Critical Material Management on Economic of Sustainable Development".
- Chia-Hang Li, Nasrin R. Khalili, Yilong L uo, Environmental Health and Food Safety Oriented Supply Chain Management Model.
- Nasrin R. Khalili and Mohammed Seid Abtew. "Energy Portfolio Design for Sustainable Economic Development": Part I : Model Development and Verification for Grid Systems
- Nasrin R. Khalili and Mohammed Seid Abtew. "Energy Portfolio Design for Sustainable Economic Development": Part II : Model De velopment and Verification for Grid –Off Grid Systems
- Nasrin R. Khalili, 2013. "Design of an Ecology of Knowledge for Sustainability."

Peer-Reviewed Proceedings

- Nasrin R. Khalili*, Whynde M. Melaragno, 2009, "Estim ating GHG Em issions and Carbon Footprint and Or ganizational Risks " *Conference Proceedings, Air and Waste Management Association Practical Sustainability Conference*, St. Louis, MO, May 7-8 2009,
- Whynde M. Melaragno (Corresponding Author), Nasrin R. Khalili***,** 2009**, "**A Roadmap to Sustainability" *Conference Proceedings, Air and Waste Management Association Practical Sustainability Conference*, St. Louis, MO, May 7-8 2009,
- Jinting Liu, Navid Sabbaghi, Nasrin R. Khalili, 2009, "Improving Energy Efficiency and Carbon Reduction at th e Illinois Institute of Technology *"Conference Proceedings, Air and Waste Management Association Practical Sustainability Conference*, St. Louis MO, May 7-8 2009,
- Khalili, N. R. 2008, Ec onomics, Industrial Environmental Risk Mitigation and Corporate Competitiveness, *Conference Proceeding*, *Air and Waste Management Annual Conference*, Portland, Oregon,
- Khalili, N. R. et al., 2008, Developm ent of a Cost Effective and Efficient Sorbent for Mercury Emission Control, *Conference Proceeding*, *Air and Waste Management Annual Conference,* Portland Oregon,
- Melaragno, W.M., Davi la Tueme, C.Z, Car mona, E.A., Anderson, T.C., Khalili, N. R*., 2008, Design and Im plementation of an Effective Environm ental Management System for Stuart School of Business at Illinois Institu te of Technology, *Conference Proceeding*, *Air and Waste Management Annual Conference,* Portland, Oregon.
- Nasrin R. Khalili, July 2007, "Environmental Risk and Corporate Competitiveness" *Joint Statistical Meeting, Salt Lake City, Utah.*
- Nasrin R. Khalili, Thomas M. Jacobius, Joaquin Acevedo M. and Enrique Ortiz Nadal. 2007. Development and Outcom e Analysis of a Joint Entrepreneurial Course Between Illinois Institute of Technology and Tecnologico de Monterrey. *NCIIA 11th Conference Proceeding, March 25.*
- Joaquin Acevedo[1,*], Enrique O rtiz[1], Flavio Marin [1] and Nasrin R. Khalili [2]. 2006, Introducing Social Awareness in a Design Course Project for Engineers, *ALE Conference*, Monterrey, Mexico.
- Nasrin R. Khalili etal., June 2006" Edu cation without Borders: Development of an Interdisciplinary Project Based Educational Program " *Fourth LACCEI International Latin American and Caribbean Conference for Engineering and Technology (LACCET'2006), "Breaking Frontiers and Barriers in Engineering: Education, Research and Practice"21-23 June 2006, Mayagüez, Puerto Rico*
- Nasrin R. Khalili etal., June 2006" Design, Characterization, and Economic Analysis of a Low Cost W ater Purification System for Me xico"*Fourth LACCEI International Latin American and Caribbean Conference for Engineering and Technology (LACCET'2006), "Breaking Frontiers and Barriers in Engineering: Education, Research and Practice"21-23 June 2006, Mayagüez, Puerto Rico.*
- Nasrin R. Khalili, 2005, "Development and Characterization of a Gold-Based Catalyst for Removal of Mercury". 2 nd China Inte rnational Symposium on Persis tent Toxic Substances, May 15-18, Beijing, China
- Nasrin R. Khalili, 200 5, Development of Bio Catalyst for Rem oval of Phenol fro m industrial Waste, Beijing Institute of Technology, Beijing, China.

- Nasrin R. Khalili, 200 3, "Challenges and Opport unities of Develop m ent an Ef fective Environmental Management System for Educational Institutions" Presented at 2003 Bell Conference, Fort Lauderdale, Fl.
- Harvey Smith[1], Nasrin R. Khalili [2],2003. Analysis of the Educational Aspects of EMS Education for Diverse Student Populations" Presented at 2003 Bell C onference, Fort Lauderdale, Fl.
- Nasrin R. Khalili [1], Satya N. Varadhi [2], Vipul J. Sirvastava [2], and Bru ce A. Scamoffa , 2002. "Ambient Air Monitoring and Risk Assessm ent at Gas Utility In dustry" P*roceedings*. 15th Annual International Conference and Exposition on S ite Remediation Technologies and Environmental Management in the Utility Industry.
- G. Sandí, N. R. Khalili, W. Lu, and Jai Prakash. Electrochemical Performance of Carbons Derived from Paper Mill Sludg e. *Extended Abstract,*11th International Meeting on Lithium Batteries, Monterey, CA, and June 23-28, 2002.
- N. R. Khalili*, Y. Otake, N. Kanomata, E. Furuya, "Relatio nship Between Freundlich-Type Equation Constants and Molecula r Orbital Properties" presented at *2001 AIChE Annual Meeting*, Reno, NV, November 4-10.
- K.C. Littrell*, N.R. Khalili, M.C ampbell, G.Sandi, and P.Thiyagarajan. "Structural Characterization of Activated Carbon Adsorb ents Prepared from Paper Mill Slud ge", Applied Physics, *Proceedings*, International Conference on Neutron Scattering, Münich, September 9-13, 2001.
- Khalili*, N.R., Hitendra, J. Julius, C. 2001 " Development and Characterization of Novel Carbon-based Adsorbents an d Catalysts from Sludge" *Proceedings*, 14th Annual International Conference and Exposition on Site Remediation Technologies and Environmental Management in the Utility Industry.
- Ahmed, M.I., Khalili*, N.R., Donepudi, V.S., Smotkin, E.S., and S elman, J.R. "In-Process Contaminant Removal from Hard Ch romium Plating Baths Using a Fuel Cell Electrode Ion-Exchange Membrane Process (FCMP)". *Proceedings*, AESF/EPA Conference, Orlando, FL, January 2001.
- Cengiz, P., Abbasian, J., Slimane, R.B., Ho, K.K., Khalili, N.R. 2001. "Form ulation and Characterization of Improved Regenerable So rbents for Flue Gas Desulfurization". 26th International Technical Conference on Coal Utilization & Fuel Systems, Clearwater, Florida, USA, 5-8 March 2001. *Proceedings* of the International Technical Conference on Coal Utilization and Fuel Systems, Vol. 26, pp. 893-898.
- Cengiz, P.A., Abbasian, J., Slimane, R.B., Williams, B.E., Khalili, N.R., Ho, K.K., 2000. "Regenerable Copper-Based Sorbents for Hi gh Temperature Flue Gas Desulfurization". 25th International Technical Conference on Coal Utilization & Fuel Systems, Clearwater, Florida, USA, 6-9 March 2000. *Proceedings* of the Inte rnational Technical Conference on Coal Utilization and Fuel Systems, Vol. 25, pp. 605-616.
- Sandi, G., Khalili*, N.R., Littrel, K., and Thiagarajan, P., 2000" Pore Structure of Activated Carbons Produced from Paper Mill Sludge Using Sm all Angle Neutron Scattering " *Proceedings*, American Chemical Society Meeting, San Francisco, CA, March 26 to 31, Division of Fuel Chemistry.
- Abbasian, J., Slim ane, R.B., Carty, R. H., Cengiz, P.A., Khalili, N.R., 1 999. "Development of Im proved Sorbents for the Moving-B ed Copper Oxide Process". 24th International Technical Conference on Coal Utilization & Fuel Sys tems; Clearwater,

Florida, USA, 8-11 March 1999. *Proceedings* of the International Technical Conference on Coal Utilization and Fuel Systems, Vol. 24, pp. 681-692.

- Abbasian, J., Cengiz, P.A., Slim ane, R.B., Williams, B.E., Khalili, N.R., Carty, R.H., 1999. "Development and Characterization of Improved Sorbents for Removal of SO_2 and NO_x from Flue Gas". *1999 AIChE Annual Meeting*, Dallas, Texas, October 31-November 5, 1999.
- Cengiz, P.A., Abbasian, J., Slim ane, R.B., Williams, B.E., Khalili, N.R., Carty, R.H., 1999. "Development of I mproved Supported Copper Oxide Sorbents for Flue Gas Desulfurization". AIChE 2000 Spring National Meeting, Atlanta, March 5-9, 2000.
- Jain, H*, Khalili, N.R., Arastoopour, H. " NO_X Removal using a Novel Carbon-based Catalyst Produced from Paper Mill Sludge". *1999 AIChE Annual Meeting*, Dallas, TX.
- Walhof, L. Khalili*. N.R., a nd Arastoopour, H. 1998. " Effect of Pyrolysis Tem perature on Preparation of Activated Carbon from Biosolids".*Proceedings.* The 12th Annual Residuals and Biosolids Managem ent Conference of the Water Environm ent federation, pp. 605-612.
- Khalili, N.R.*, Pan, M. and Sandi G. 1997." Fractal Analysis of Granular A ctivated Carbons Using Isotherm Data". *Proceedings* of the 214 th- ACS National Meeting, September 7-11, 1997, Las Vegas, NV.
- Parkhurst R., Khalili, N.R*. 1997. " Pl astic Recycling Optim ization at Abbott Laboratories" *Proceedings* of the Air & W aste Management Association's 90th Annual Meeting and Exhibition, June 8-13, Toronto, Ontario, Canada.
- Khalili, N.R*. et al., 1995. "Comparison of Mass size Distribution and Flux of Sulfate and Nitrate in Urban and Non-Urban Areas" *Proceedings*. ASCE National Environmental Engineering Conference, Pittsburgh, Pennsylvania.
- Khalili, N.R.*, Scheff, P.A., and Holsen, T.M. " PAH and PM_{10} Receptor Modeling In Chicago" *Proceedings* 85th Annual Meeting of th e Air and W aste Management Association, Kansas City, MO, (June 1992).

Conference Presentations and Seminars

- Nasrin R. Khalili, Abagail McW illiams, and Rodney C Shrader, 2013. "Developing Sustainable Enterprises for the Bottom of the Pyram id". SMS Annual Conference, Atlanta, September 2013.
- Nasrin R. Khalili. June 2011." Planning Sustainab ility in Organizatio n DNA" 11th International Conference on Knowledge, Culture and Change in Organizations, Madrid, Spain.
- ASSE Workshop, April 2007.
- Engineering Design and Business Plan Devel opment for Clay-Based Water Purification Systems, Tecnológico de Monterrey, Mexico, January 2006.
- Development of a W ater Treatment Program for Access to Saf e Drinking W ater in Developing Countries, International School of Technology, Krakow, PL . December 2005.
- Analysis of Clay-Based Water Purification Systems: A Technical and Social Approach, Tecnológico de Monterrey, Mexico, October 2005,
- Khalili. N.R., Econom ic Advantages of Material Substitution and Pollu tion Prevention Options and Alternatives Chicago land Safety Conference (CSC), September 28, 2005.

- Nasrin.R.Khalili [1], Arikrishnan Chandrasekaran [2], Mital Desai [2], Victor H.Perez-Luna [3], Development and Characterization of a Novel Sorbent (NV-XRC) for Gas Phase Mercury Emissions, 2nd International Symposium on Persistent Toxic Substances Beijing, China May 15-18 2005.
- Khalili, NR. Fundamental of Bio Treatment Processes. Beijing Institute of Technology, Beijing, China, May 2005.
- Khalili, N.R. Desai. M., Engineering and Economic Aspects of Developing a Gold Plated Catalyst for Removal of Mercury , International School of Technology, Krakow, PL . March 2005.
- Analysis of Environmental Systems, Department of Chemical Engineering, Monterey Tech, Monterey, Mexico, September, 2004.
- Development and Analysis of a Novel Catalyst for Mercury Emission Control, Stuart Graduate School of Business Faculty research seminar. October 2004.
- Fundamentals of Environmental Management System Design, Illinois Environmental Conference, Chicago Illinois, August 2002.
- Analysis of Catalysts Layer of Fuel Cell Used for In-Process Removal of Contaminants from Chromium Plating Solutions, Department of Chemistry, Argonne National Laboratory, September 2001.
- Recycling and Reuse of Biosolid as Adsorbent For Environmental Applications. Department of Chemical Engineering, University of Illinois in Chicago, April 2000.
- Moderator of Academic Women in Science, Engineering &Technology Roundtable, "Expanding the Pipeline Conference." Sponsored by Women's Bureau, U.S. Department of Labor, July, 2001.

Ph.D. Dissertation Advisor

- Ph.D. Committee Chair and Main Advisors: 4 Ph.D. Students, one in collaboration with Electrical engineering (2009-present)
- Ph.D. Committee Member Electrical Engineering/Sustainable Energy Systems: 6 Ph.D. projects (2005-present)

Reviewer

- Journal of Cleaner Production (2011-present)
- Academy of Management (ONE) Journal (2009)
- Water Research Journal, 2004
- Journal of Pollution Prevention, (2003-2005)
- Journal of Purification and Separation Technology, (2002-2008)
- Canadian Journal of Environmental Research,(2000)
- Journal of Hazardous Waste Material, January 2001
- Carbon, (2001-2002)
- Chemosphere, (August 2001)
- New Materials for Electrochemical Systems, (2001-2004)
- Journal of Atmospheric Environment (1994-1996)

Editorial Board

- A new peer-reviewed, open access journal titled Journal of Waste Management, Hindawi Publishing Corporation, (2012-present)

- International Journal of Environmental Science and Technology, Center for Environment and Energy Research Studies, Graduate School of the Environment, Science and Research Campus, IAU, P.O.Box 14155-775, Tehran, Iran (2007-2010)

CURRICULUM DEVELOPMENT AND TEACHING

Dr. Khalili's main teaching responsibilities have been in undergraduate to Ph. D courses focusing on Chemical Transport and Fate in the Environment, Air and Water Pollution Control, Hazardous Waste Management, Design of Pollution Control and Prevention Strategies, Carbon Management, Water Management, Managerial Decision Making Tools/Models , Sustainable Supply Chain Management, Strategic Planning for Sustainability Through Design of Integrated Waste Management Models, Development of Business Case for Environmental Management Projects, Environmental Health and Occupational Risk Assessment and Management, and Ph.D. Seminars focusing on Models of Sustainability.

New Course Developments (2005-2012)

- BUS 305: Operation and Supply Management (Spring 2014)
- EMS 526-MBA526: Sustainable Supply Chain Management (Spring 2013)
- IPRO 350 (UG research Course): An Innovative Approach to Energy Storage: A Multi-stakeholder Business Model for V2G Infrastructure Evolution (IIT- Pforzheim University in Germany) (Spring 2013)
- EMS 508/503 : Pollution Prevention and Pollution Control Strategy (Core: Fall 2011)
- EM 554 : Environmental Economics and Climate Change (Core/Advanced Elective) (Spring 2011)
- EM517/EMS 512: Environmental and Occupational Risk Assessment and Management (Core/ Elective (Fall 2011)
- EMS 513: Solid and Hazardous Waste Management and Remediation (Advanced Elective) (Spring 2012)
- MBA 507: Application of Statistical Models in Decision Making (Core MBA) (2002-2008)
- EM 514: Carbon Management (Core) (Spring 2010)
- EM 597/MSC 596: Seminar in Models of Sustainable Economic Development (Elective Ph.D.) (Spring 2009)
- EM 554: Environmental Economics (2007-2008)
- EM 516: Water Resource management (2007-2009)
- SSB 550: A Management/Entrepreneurial course at Stuart Graduate School of Business (2005-2006)
- IPROs (Inter- Professional Undergraduate Courses): (1995, 1996, 2005-2008, and 2013)
- IPRO(s) Development of an Innovative Interdisciplinary Entrepreneurial Course in Collaboration with Tecnológico de Monterrey, in Mexico, December 2005, Spring 2006, fall 2007.

IIT Campus Wide Educational Collaboration (2002-2013)

- Teaching a total of nine undergraduate Inter-Professional Project Design (IPRO) courses campus wide: AY 2005-2006 (2), and 2006-2007 (2), AY 2008 (2), A Y 2011 (2), AY 2013 (1).

International Seminar-Based Teaching Experience (2002-present)

- International Week Lecture at Zhaw School of Management an d Law, Switzerland (2012).
- Foundation for Research and Technology (FRTEM), New-Delhi India,(Air and Water Pollution Control (2004)
- International School of Tec hnology School of Mining and Me tallurgy Krakow, Poland (1998-2007)

International Academic Program Development/Educational Collaboration (2002-present)

- Working with 11 universities in Latin America focusing on design of academic programs (2012-present).
- An Innovative Approach to Energy Storag e: A Multi-stakeholder Business Model for V2G Infrastructure Evolution (IIT- Pforzheim University in Germany) (Spring 2013)
- Initiating educational collabo ration between International S chool of Technology/School of Mining and Metallurgy in Krakow, Poland and Stuart Graduate School of Business.
- Initiating educational collaboration between Middle East Technical University in T urkey and Stuart Graduate School of Business. The focus of the program was on develop m ent of an Environm ental Management Program at Middle East Technical University and enhancement of student/faculty exchange programs (September 2002).
- Initiating collaborative work between Argonne National Laboratory (ANL), Ga s Technology Institute (GTI) and EM Program/ IIT Center for Sustainable Enterprise.
- Developing a new course on In troducing Environmental Management System Design. This course was offer ed to EM, MBA a nd Law students with an Environm ental Management concentration.
- Teaching a full Ph.D. course on " Environmen tal Risk Assessm ent" at In ternational School of Technology, School of Mini ng and Metallurgy, K rakow, Poland, October *1995-2008*,
- Collaborating and Advising Students in Senior Project Course, Tecnológico de Monterrey, in Mexico (2006-2008).
- Teaching a full course" Hazardous Waste Mana gement and Environm ental Project Cost Valuation, at International School of Technology, School of Mining and Metallurgy, February 2007, Krakow, Poland,
- Teaching a full course on Introdu ction to Environmental Engineering and Manage m ent at International School of Technology, Sc hool of Mining and Metallurgy, May 2006, Krakow, Poland,
- Teaching a full course" Hazardou s Waste Management" at International Schoo l of Technology, School of Mining and Metallurgy, March 2005, Krakow, Poland.
- Teaching a full course on Fundamental of En vironmental Engineering at In ternational School of Technology, School of Mining an d Metallurgy, (2004 and 2005) Krakow, Poland.
- Teaching a course at FRTEM on Air and Water Pollution Control", FRTEM, New-Dehli, India, August 2004.
- Developing and teaching on-line course during AY 2003-2004 (EM 508).
- Teaching 6 1/2 courses during AY 2002-2003 (September 2002-May 2004).
- Teaching 7 EM and MBA courses during AY 2003-2004 (September 2003-May 2004).

- Teaching a full course at IST in Poland (March 2004).
- Development of an online course for EM certificate program in India (October 2003-February 2004),

Other Activities and Achievements

Student Competition Advisor

- IBM Great Mind Challenge" Business Social" Spring 2012
- Design of Gas Stations of the Future, 2010
- Motorola Innovation In Design And Business Planning (first place, 2008)
- National I2P Competition, San Jose, Ca, April 2006 (first prize winner)
- International I2P competition, October 2006, Austin, Texas
- Motorola Innovation In Design And Business Planning (first place, 2008)

Professional Affiliations

- Strategic Management Society
- Academy of Management
- Air and Waste Management Association.
- Environmental Economics and Management Association

UNIVERSITY SERVICES

- Business School Dean Review Committee (2010-2011)
- Stuart Tenure and Promotion (AUCOPT) Committee (2003-present)
- University Faculty Council Committee (2009-2011)
- Wagner Institute for Sustainable Energy Research (WISER) Faculty Affiliate at IIT (2009-present)
- Campus Wide Sustainability Curriculum Development Committee (2009-2011)
- EMS Committee (2008-present)
- Advisor to SEMSA student association, (2007)
- Chair of Professional Development Committee at Stuart, (2007-2008),
- Member of the AUCOPT Committee, Curriculum Committee (2007-2008),
- A Member of Faculty Recruiting Committee (2006-2007)
- Academic Director of the EM program (2002-2006)
- Development of Curriculum for Undergraduate Business Program (2003-2005).
- Advisory Board for Undergraduate Business Program (2004-2005)
- Developing 4+1 M.S. program in Environmental Management between Northern Illinois University and Stuart Graduate School of Business (Fall 2002).
- Developing EM Concentration within IIT SGSB MBA Program (September 2002).
- Developing an On-line Certificate Program in Environmental Management.
- Developing and Teaching on-line courses for the newly developed certificate program in India (AY 2003-2004).