

JHIH-SHYANG SHIH

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EDUCATION	Post-Doc., Engineering and Public Policy, Carnegie Mellon University Ph.D., System Analysis and Economics for Public Decision Making, Johns Hopkins University M.S., Environmental Systems, National Cheng-Kung University B.S., Environmental Engineering, National Cheng-Kung University	1991-1995 1985-1990 1981-1983 1977-1981
RESEARCH EXPERIENCE	Fellow, Resources for the Future Consultant, Resources for the Future AAAS-EPA Fellow, US EPA Research Associate, Department of Engineering and Public Policy, Carnegie Mellon University Consultant, Argonne National Laboratory	1998-present 1995-1997 1995 1991-1995 1995
TEACHING EXPERIENCE	Instructor, Mathematical Foundation for Public Decision Making, Part-Time Programs in Engineering and Applied Science, Whiting School of Engineering, The Johns Hopkins University	1997
HONORS AND AWARDS	Assistant Editor, International Journal of Society Systems Science The 2021 <i>ES&T</i> Best Paper Award. Policy Analysis Section. Second Joint Winner. RFF New Frontiers Fund Award AWWA Small Systems Division Best Paper Award Who's Who in Science and Engineering, 4th-Ed Director, Oversea Chinese Environmental Engineering and Scientist Association American Association for the Advancement of Science (AAAS)/EPA Fellow Ji-Dian Liang Fellowship Junior Scientist Traveling Award, NATO Advanced Study Institute Research Assistant Fellowship, The Johns Hopkins University Tuition Fellowship, The Johns Hopkins University Chairman of Chinese Graduate Student Association, The Johns Hopkins University Graduate Scholarship, National Cheng-Kung University	2007-present 2022 2012 2007 1998 1997-1998 1995 1994 1993 1987-1990 1985-1990 1986 1981-1983
INVITED REVIEWER	<i>Agricultural and Resource Economics Review, American Association for the Advancement of Science, American Journal of Agricultural Economics, Annals of Regional Science, Automatica, Energy Economics, Energy Policy, Environment and Development Economics, Environmental Science and Technology, Growth and Change, International Transactions in Operational Research, Journal of the Air and Waste Management Association, Journal of Environmental Economics and Management, Journal of Hazardous Materials, Journal of Policy Analysis and Management, Land Economics, Municipal Engineer, Science of the Total Environment, Socio-Economic Planning Sciences, Utility Policy, Water Resource Management, Argonne National Laboratory, Swarthmore College Honors Program examiner (Operations Research and Environmental Systems Engineering), U.S. Environmental Protection Agency (EPA), World Resource Institute.</i>	
CERTIFICATION	SAS certified base programmer for SAS 9 ESRI certifications for ArcGIS Desktop I and II EcoMod School certification for Practical General Equilibrium Modeling with GAMS. 2019.	
SKILLS	Software: GAMS, SAS, Stata, R, ArcGIS, Matlab, Analytica, IMPLAN, BenMAP, SPARROW, BASIN, ISCST3, SAS Enterprise Guide. Coding: FORTRAN, BASIC, Python, C, JAVA.	

Languages: English, Mandarin Chinese

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Shih, Jhih-Shyang, James E. Saiers, Shimon C. Anisfeld, Ziyang Chu, Lucija A. Muehlenbachs, and Sheila M. Olmstead (2015). "Characterization and Analysis of Liquid Waste from Marcellus Shale Gas Development." *Environmental Science & Technology*, Vol. 49, No. 16, pp. 9557–9565. doi: 10.1021/acs.est.5b01780.

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Nicolas E. Maxfield*, Richard A. Smith, Charles J. Vorosmarty, and Jhih-Shyang Shih. “Investigating the Response of Watershed Total Nitrogen to a Nexus of Climatic and Human Factors.” AGU Fall Meeting, New Orleans, LA, December 13-17, 2021. (iposter)

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Sheila Olmstead*, Jhih-Shyang Shih, Shimon Anisfeld, Jessica Chu, Lucija Muehlenbachs, and James Saiers. “Characterization of residual liquid waste from Marcellus Shale gas development and comparison with regional water quality monitoring capability.” American Chemical Society National Meeting, Denver, CO, March 2015.

Richard A Smith, Jhih-Shyang Shih, Gregory E Schwarz, John W Brakebill, Anne Hoos, Richard B Moore, Anne Walden Nolin, Celeste Journey and Molly Macauley. “Use of MODIS Data in Dynamic SPARROW Analysis of Watershed Loading Reductions. AGU Fall Meeting, San Francisco, 15-19 December 2014.

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