

D. CONFERENCE PROCEEDINGS

1. Dionysios D. Dionysiou and Marina Tsianou, Crystallization of Calcium Magnesium Acetate (CMA) for Environmental Applications, *Proceedings of the Symposium "Changing the Course of Production: A Student-Faculty Conference on Pollution Prevention in Manufacturing & Services"*, October 22-23, 1994, MIT, Cambridge, Massachusetts.
2. Xiwang Qi, Dionysios D. Dionysiou, and Y. S. Lin, Terbium-doped strontia-ceria perovskite type proton conducting membranes, *Proceedings of the 5th International Conference on Inorganic Membranes*, pp. 588-591, June 22-26 1998, Nagoya, Japan.
3. Dionysios D. Dionysiou, Ganesh Balasubramanian, Makram T. Suidan, Evangelia Bekou, Isabelle Baudin and Jean-Michel L  n  , Photocatalytic Treatment of Organic Contaminants in Water Using a Novel TiO₂ Rotating Disk Reactor, *Proceedings of the Research Symposium: Physical and Chemical Processes, WEFTEC '99, the 72nd Annual Water Environment Federation (WEF) Conference and Exposition*, October 9-13, 1999, New Orleans, Louisiana.
4. Dionysios D. Dionysiou, Makram T. Suidan, Isabelle Baudin, and Jean-Michel L  n  , Degradation of Organic Contaminants in Drinking Water and Wastewater Using a Rotating Disk Photocatalytic Reactor: Factors Affecting Interfacial Transport, Adsorption and Reaction, *Proceedings of Nanotechnology in Catalysis, the 221st ACS National Meeting*, April 1-5, 2001, San Diego, California.
5. Dionysios D. Dionysiou, Makram T. Suidan, Isabelle Baudin, and Jean-Michel L  n  , Rotating Disk Photocatalytic Reactor (RDPR): Fundamental and Applied Studies for its Development and Evaluation for the Destruction of Recalcitrant Organic Contaminants in Water, *Proceedings of The First International Congress on Ultraviolet Technologies, Application of UV Processes-Part II*, paper D2-7, pp. 1-14, June 14-16, 2001, Washington, D.C.
6. Arturo A. Burbano, George P. Anipsitakis, Dionysios D. Dionysiou, Teri L. Richardson and Makram T. Suidan, Treatment of MTBE-Contaminated Water: Studies on MTBE Mineralization using the Fenton's Reagent. *Proceedings of The 7th International Conference on Advanced Oxidation Technologies for the Treatment of Water and Air (AOT-7)*, pp. 159-161, June 25-29, 2001, Niagara Falls, Ontario, Canada.
7. Arturo A. Burbano, Dionysios D. Dionysiou, Makram T. Suidan, Isabelle Baudin and Jean Michel L  n  . Development of Highly Active, Mechanically-Stable Thin Films of TiO₂ Nanocatalyst Immobilized on Stainless Steel: Performance Evaluation Using a Rotating Disk Photocatalytic Reactor (RDPR). *Proceedings of The 6th International Conference on TiO₂ Photocatalytic Purification and Treatment of Water and Air (TiO₂-6)*, pp. 127-128, June 25-29, 2001, Niagara Falls, Ontario, Canada.
8. Dionysios D. Dionysiou and Makram T. Suidan, Oxidation of Organic Contaminants Using a Thin-Film Rotating Disk Photocatalytic Reactor (RDPR): Effect of Oxygen Concentration in

- the Gas Phase and Influence of Oxygen Mass Transport in the Liquid Film, *Proceedings of Environmental Chemistry of the 222nd ACS National Meeting*, Vol. 41, No. 2, Environmental Chemistry Awards, paper 29, pp. 756-761, August 26-30, 2001, Chicago, Illinois.
9. Arturo A. Burbano, Dionysios D. Dionysiou, Teri L. Richardson and Makram T. Suidan, Remediation of MTBE-Contaminated Water: Studies on the Degradation of MTBE Intermediates Using the Fenton's Reagent. *Proceedings of Environmental Chemistry of the 222nd ACS National Meeting*, Vol. 41, No 2, Remediation of Water and Soil Contaminated with Gasoline Oxygenates: *In Situ* and *Ex situ* Treatment Technologies, paper 29, pp. 469-473, August 26-30, 2001, Chicago, Illinois.
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 11. George P. Anipsitakis and Dionysios D. Dionysiou, Degradation of Organic Contaminants in Water and Wastewater with Transition Metal-Catalyzed Chemical Oxidation, *Proceedings of the Division of Environmental Chemistry, Vol. 42, No. 1, pp.48-51, paper 122, 223rd ACS National Meeting*, April 7-11, 2002, Orlando, Florida.
 12. Arturo A. Burbano, Dionysios D. Dionysiou, Teri L. Richardson and Makram T. Suidan, MTBE Degradation Using the Fenton's Reagent: The Effect of Ferrous and Ferric Iron Mixtures on the Efficiency of the Overall Reaction. *Proceedings of the Division of Environmental Chemistry, Vol. 42, No. 1, pp. 52-57, paper 123, 223rd ACS National Meeting*, April 7-11, 2002, Orlando, Florida.
 13. Arturo A. Burbano, Dionysios D. Dionysiou, Makram T. Suidan, Isabelle Baudin and Jean Michel Laine, Performance Evaluation of Highly-Active, Mechanically Stable Thin Films of TiO₂ Nanocatalyst Immobilized on Stainless Steel: Influence of Selected Process Conditions Using a Rotating Disk Photocatalytic Reactor, *Proceedings of the International World Water Congress (IWA)*, Melbourne, Australia, April 7-12, 2002, paper e21548a, pp. 1-6.
 14. George P. Anipsitakis and Dionysios D. Dionysiou, Destruction of Persistent Organic Contaminants in Water with a Novel and Highly Efficient Oxidizing Reagent. *Proceedings of the 34th Mid-Atlantic Industrial & Hazardous Waste Conference*, September 20-21, 2002, New Brunswick, New Jersey.
 15. Qiaolin Yang and Dionysios D. Dionysiou, Application of Water-Immiscible Room Temperature Ionic Liquids in Extraction and *In-Situ* Photolytic Degradation of Chlorophenols. *Proceedings of the 34th Mid-Atlantic Industrial & Hazardous Waste Conference*, September 20-21, 2002, New Brunswick, New Jersey.
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WEFTEC' 2002, the 75th Annual Water Environment Federation (WEF) Conference and Exposition, September 28-October 2, 2002, Chicago, Illinois.

17. George P. Anipsitakis and Dionysios D. Dionysiou, Development of a More Efficient Transition-Metal Based Chemical Oxidant Than the Fenton's Reagent for the Degradation of Chloroaromatics in Water, *Proceedings of WEFTEC' 2002, the 75th Annual Water Environment Federation (WEF) Conference and Exposition, September 28-October 2, 2002, Chicago, Illinois.*
18. Qiaolin Yang and Dionysios D. Dionysiou, Degradation of Organic Contaminants in Room Temperature Ionic Liquids Using Advanced Oxidation Technologies. *Proceedings of the AIChE 2002 Annual Meeting, November 3-8, Indianapolis, Indiana, Session: Reactions in Benign Solvents, paper 233i, pp. 1-5.*
19. George P. Anipsitakis and Dionysios D. Dionysiou, Destruction of Chlorinated Aromatics in Water with Sulfate Radicals- An Alternative Oxidizing System Based on the Fenton's Reagent Chemistry. *Proceedings of The 8th International Conference on Advanced Oxidation Technologies for Water and Air Remediation (AOTs-8), November 17-22, 2002, Toronto, Ontario, Canada.*
20. Arturo A. Burbano, Dionysios D. Dionysiou and Makram T. Suidan, MTBE Oxidation Using Fenton's Reagent: Effect of Humic Substances-Based Iron Chelates at Neutral pH. *Proceedings of The 8th International Conference on Advanced Oxidation Technologies for Water and Air Remediation (AOTs-8), November 17-22, 2002, Toronto, Ontario, Canada.*
21. Qiaolin Yang and Dionysios D. Dionysiou, *In-situ* Destruction of Chlorinated Aromatics in Water Immiscible Room Temperature Ionic Liquids Using Advanced Oxidation Technologies. *Proceedings of The 8th International Conference on Advanced Oxidation Technologies for Water and Air Remediation (AOTs-8), November 17-22, 2002, Toronto, Ontario, Canada.*
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23. Qianrui Wang, Daekeum Kim, Dionysios D. Dionysiou, George A. Sorial, and Dennis Timberlake, Mercury Pollution in Natural Waters, *Proceedings of the Division of Environmental Chemistry, 226th ACS National Meeting, September 7-11, 2003, New York, Vol. 43, No. 2.*
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25. Arturo A. Burbano, Dionysios D. Dionysiou, and Makram T. Suidan, Influence of Oxidant Concentration on the Remediation of MTBE-Contaminated Water Using Fenton Reagent. *Proceedings of the 9th International Conference on Advanced Oxidation Technologies for Water and Air Remediation (AOTs-9)*, October 25-30, 2003, Montreal, Quebec, Canada.
26. Qiaolin Yang and Dionysios D. Dionysiou, UV-based Photolytic Destruction of Chlorinated Phenols and Polycyclic Aromatic Hydrocarbons in Room Temperature Ionic Liquids. *Proceedings of the 9th International Conference on Advanced Oxidation Technologies for Water and Air Remediation (AOTs-9)*, October 25-30, 2003, Montreal, Quebec, Canada.
27. Yongjun Chen and Dionysios D. Dionysiou, Preparation of Super-Hydrophilic TiO₂ Coatings with Enhanced Photocatalytic Activity and Good Mechanical Stability for Water Purification. *Proceedings of the 8th International Conference on TiO₂ Photocatalysis: Fundamentals and Applications (TiO₂-8)*, October 25-30, 2003, Montreal, Quebec, Canada.
28. Hyeok Choi, Kai Zhang, Dionysios D. Dionysiou, Daniel B. Oerther and George A. Sorial, Membrane Filtration Performance with Activated Sludge of Continuous Stirred-Tank Reactor and Plug Flow Reactor for the Treatment of Paper Mill Wastewater: Membrane Fouling, *Proceedings of the International Water Association Specialty Conference on Water Environment-Membrane Technology*, June 2004, Seoul, Korea, pp. 809-816.
29. Hyeok Choi, Kyesang Yoo, and Dionysios D. Dionysiou, TiO₂ Nanoparticles and Films for the Fabrication of Photocatalytic Membranes Using Ionic Liquid- and Surfactant-based Self Assembling Sol-Gel Methods, *Proceedings of the Eighth International Conference on Inorganic Membranes*, July 18-21 2004, Cincinnati, Ohio.
30. George P. Anipsitakis and Dionysios D. Dionysiou, UV/Transition Metal-mediated Activation of Common Oxidants in Water, *Proceedings of the Symposium Environmental Chemistry Awards, Division of Environmental Chemistry, 228th ACS National Meeting*, August 22-26, 2004, Philadelphia, Pennsylvania.
31. Yongjun Chen and Dionysios D. Dionysiou, Immobilized TiO₂ Powder Films on Stainless Steel Prepared Using Combined Alkoxide Sol-Gel and Colloidal Suspension Preparation Methods II: The Role of Calcination Temperature, *Proceedings of the Symposium Oxidation and Reduction Technologies for Water Treatment, Division of Environmental Chemistry, 228th ACS National Meeting*, August 22-26, 2004, Philadelphia, Pennsylvania.
32. Hyeok Choi and Dionysios D. Dionysiou, Preparation of Anatase Nanostructured TiO₂ Particles Using Surfactant-assisted Sol-Gel Methods, *Proceedings of the Division of Environmental Chemistry, 228th ACS National Meeting*, August 22-26, 2004, Philadelphia, Pennsylvania.

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34. George P. Anipsitakis and Dionysios D. Dionysiou, Effect of UV and Transition Metals for the Activation of Oxidants in Water. *Proceedings of WEFTEC' 2004, the 77th Annual Water Environment Federation (WEF) Conference and Exposition*, October 2-6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.
35. Kai Zhang, Hyeok Choi, George A. Sorial, Dionysios D. Dionysiou and Daniel B. Oerther, Examining the Initiation of Biofouling in Membrane Bioreactors Treating Pulp and Paper Wastewater, *Proceedings of WEFTEC' 2004, the 77th Annual Water Environment Federation (WEF) Conference and Exposition*, CD-ROM, 8 pages, October 2-6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.
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37. Maria G. Antoniou, Yongjun Chen and Dionysios D. Dionysiou*, Advanced Water Purification: Towards Meeting NASA's Advanced Life Support Requirements. *Proceedings of "Photocatalytic and Advanced Oxidation Processes for Treatment of Air, Water, Soil and Surfaces"* D. F. Ollis and H. Al-Ekabi (Eds), University of Western Ontario Press, London, Ontario, Canada, 2004.
38. Rachel C. Copeland, Darren Lytle and Dionysios D. Dionysiou, Arsenic Desorption from Drinking Water Distribution System Solids. *Proceedings of The 1st International Conference on Environmental Science and Technology*, January 23-26, 2005, New Orleans, Louisiana.
39. Zhang, K., H. Choi, G. Sorial, D. Dionysiou, and D.B. Oerther, "Identifying Bacterial Populations Highly Correlated with Irreversible Membrane Biofouling in MBR Systems," 4th Activated Sludge Population Dynamics Meeting, International Water Association, Gold Coast, Australia, July 17-20, 2005, 8 pages, (in review).
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35th International Conference on Environmental Systems (ICES) and the 8th European Symposium on Space Environmental Control Systems (ESSECS), July 11-14, Rome, Italy, 2005, 7 pages.

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43. Erick R. Bandala, Roberto C. Moreno, Ernesto Juárez, Pierrick Girard, and Dionysios D. Dionysiou, Solar Driven TiO₂ Photocatalytic Disinfection of Water Using a Low Radiative Solar Collector (6 pages). In: D.Y. Goswami, S. Vijayaraghaven, R. Campbell-Howe (Eds.) Proceedings of the ISES 2005 Solar World Congress, August 6-12, Orlando, Florida, USA. ISBN 0-89553-177-1.