

Kai Loon Chen
CV

Curriculum Vitae

Kai Loon Chen

Johns Hopkins University
Department of Geography and Environmental Engineering
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Professional Experience

Johns Hopkins University, Department of Geography and Environmental Engineering
Assistant Professor, August 2008 to present

Yale University, Department of Chemical Engineering, Environmental Engineering Program
Ph.D., 2003–2008
Advisor: Professor Menachem Elimelech
Dissertation title: “Aggregation and Deposition of Nanoparticles in Aquatic Environments”

Yale University, Department of Chemical Engineering, Environmental Engineering Program
M.S., 2003–2004

National University of Singapore, Department of Civil Engineering, Center for Water Research
M.Eng., 2001–2003
Advisor: Professor Lianfa Song (currently at Texas Tech University)
Dissertation title: “Fouling Development in Full-Scale Reverse Osmosis Process: Characterization and Modeling”

University of Melbourne, Department of Civil Engineering
B.Eng., July–December 1999 (Student exchange)

National University of Singapore, Department of Civil Engineering
B.Eng., 1997–2001, First Class Honors

National Service, Singapore
1995–1997

Honors and Awards

- Ralph E. Powe Junior Faculty Enhancement Award 2009 presented by Oak Ridge Associated Universities
- 2008 Henry Prentiss Becton Graduate Prize presented by Yale University
- The C. Ellen Gonter Environmental Chemistry Award 2007 presented by the Division of Environmental Chemistry of the American Chemical Society
- Second best presentation at the 4th Robert M. Langer Graduate Student Symposium, December 1, 2006, Yale University, New Haven, Connecticut
- Yale University Graduate Fellowship and Faculty of Engineering Fellowship 2003
- National University of Singapore Research Scholarship, 2001–2003
- Third prize in Student Poster Competition at the North American Membrane Society 13th Annual Meeting, May 11–15, 2002, Long Beach, California

Awards to Students

- 2012 Graduate Student Award in Environmental Chemistry (ACS Division of Environmental Chemistry) to Khanh An Huynh

Professional Society Memberships

- American Chemical Society
- Association of Environmental Engineering and Science Professors

Graduate Student Supervision

1. Khanh An Huynh (Ph.D. student, 4th yr), Vietnam Education Foundation Fellow
2. Peng Yi (Ph.D. student, 4th yr)
3. Li Tang (Ph.D. student, 3rd yr), Dean Robert H. Roy Fellow
4. Wenyu Gu (M.S. student, 1st year)

Visiting Scientists

1. Dr. Myunghye Lim, National Research Foundation of Korea Postdoctoral Fellow

Former Graduate Students

1. Ji Yeon Hong (M.S.E. 2012, Johns Hopkins University)
2. Yung-Li Wang (M.S.E. 2011, Johns Hopkins University)
Current position: Ph.D. student with Dr. Ching-Hua Huang, Georgia Tech
3. Yue Yin (M.S.E. 2010, Johns Hopkins University)
4. Junwen Rao (M.S. 2009, Johns Hopkins University)
Current position: Paques Environmental Technology Co. Ltd, Shanghai
5. Wenqing Xu (M.S.E. 2009, Johns Hopkins University)
Current position: Ph.D. student with Dr. William Mitch, Yale University

Classes Taught

- 570.301 Environmental Engineering Fundamentals I
- 570.448 Physical and Chemical Processes in Environmental Engineering II
- 570.460 Environmental Colloidal Phenomena

Reviewer for Scholarly Journals

- ACS Applied Materials & Interfaces
- Chemosphere
- Colloid and Polymer Science
- Colloids and Surfaces A: Physicochemical and Engineering Aspects
- Environmental Chemistry
- Environmental Pollution
- Environmental Science & Technology
- Geochemical Transactions
- Journal of Biomedical Materials Research: Part A
- Journal of Colloid and Interface Science
- Journal of Contaminant Hydrology
- Journal of Hazardous Materials

- Journal of Nanoparticle Research
- Journal of Physical Chemistry
- Langmuir
- Nanomedicine
- Science of the Total Environment
- Water Research

Reviewer for Review Panels

- American Chemical Society Petroleum Research Fund
- Canada Foundation for Innovation
- Deutsche Forschungsgemeinschaft (DFG, German Research Foundation)
- Maryland Industrial Partnerships Program, University of Maryland, College Park
- National Science Foundation
- New Jersey Water Resources Research Institute
- US Agency for International Development
- US–Israel Binational Agricultural Research and Development Fund
- University of Wisconsin-Milwaukee Research Foundation, Bradley Catalyst Grant Program

Symposium Organizer and Session Chair

- *Environmental Aspects (session co-organizer)*, 86th American Chemical Society Colloid and Surface Science Symposium, June 10–13, 2012, Johns Hopkins University, Maryland.
- *Environmental Applications and Ecological Implications of Nanotubes, Nanowires, and Fullerenes (Division of Environmental Chemistry) (symposium co-organizer)*, American Chemical Society Spring 2012 National Meeting, March 25–29, 2012, San Diego, California.
- *Environmental Applications and Implications of Nanotechnology (Division of Environmental Chemistry) (symposium co-organizer)*, American Chemical Society Fall 2010 National Meeting, August 22–26, 2010, Boston, Massachusetts.
- *Colloidal and Interfacial Phenomena in Aquatic Systems (Environmental Division) (session co-chair)*, The American Institute of Chemical Engineers 2008 Annual Meeting, November 16–21, 2008, Philadelphia, Pennsylvania.

Invited Participation at Workshops

1. Nanotechnology Research Needs Workshop, Water Research Foundation, June 28–29, 2011, Denver, Colorado.
2. Advancing the Eco-Responsible Design and Disposal of Engineered Nanomaterials (Workshop 3), Rice University, March 9–10, 2009, Houston, Texas.

Journal Publications

(Underlined names indicate corresponding authors)

1. Petersen, E. J., Zhang, L., Mattison, N. T., O'Carroll, D. M., Whelton, A., Uddin, N., Nguyen, T., Huang, Q., Henry, T. B., Holbrook, R. D., and Chen, K. L., Potential Release Pathways, Environmental Fate, and Ecological Risks of Carbon Nanotubes, *Environmental Science and Technology*, 2011, 45, 9837–9856.
2. Huynh, K. A. and Chen, K. L., Aggregation Kinetics of Citrate and Polyvinylpyrrolidone Coated Silver Nanoparticles in Monovalent and Divalent Electrolyte Solutions, *Environmental Science and Technology*, 2011, 45, 5564–5571.

3. Ang, W. S., Tiraferri, A., Chen, K. L., and Elimelech, M., Fouling and Cleaning of RO Membranes Fouled by Mixtures of Organic Foulants Simulating Wastewater Effluent, *Journal of Membrane Science*, 2011, 376, 196–206.
4. Yi, P. and Chen, K. L., Influence of Surface Oxidation on the Aggregation and Deposition Kinetics of Multi-Walled Carbon Nanotubes in Monovalent and Divalent Electrolytes, *Langmuir*, 2011, 27, 3588–3599.
5. Nguyen, T. H., Chen, K. L., and Elimelech, M., Adsorption Kinetics and Reversibility of Linear Plasmid DNA on Silica Surfaces: Influence of Alkaline Earth and Transition Metal Ions, *Biomacromolecules*, 2010, 11, 1225–1230.
6. Chen, K. L., Smith, B. A., Ball, W. P., and Fairbrother, D. H., Assessing the Colloidal Properties of Engineered Nanoparticles in Water: Case Studies from Fullerene C₆₀ Nanoparticles and Carbon Nanotubes, *Environmental Chemistry*, 2010, 7, 10–27.
7. Chen, K. L. and Elimelech, M., Relating Colloidal Stability of Fullerene (C₆₀) Nanoparticles to Nanoparticle Charge and Electrokinetic Properties, *Environmental Science and Technology*, 2009, 43, 7270–7276.
8. Chen, K. L. and Elimelech, M., Interaction of Fullerene (C₆₀) Nanoparticles with Humic Acid and Alginate Coated Silica Surfaces: Measurements, Mechanisms, and Environmental Implications, *Environmental Science and Technology*, 2008, 42, 7607–7614.
9. Tiraferri, A., Chen, K. L., Sethi, R., and Elimelech, M., Reduced Aggregation and Sedimentation of Zero-Valent Iron Nanoparticles in the Presence of Guar Gum, *Journal of Colloid and Interface Science*, 2008, 324, 71–79.
10. Nguyen, T. H. and Chen, K. L., Role of Divalent Cations in Plasmid DNA Adsorption to Natural Organic Matter-Coated Silica Surface, *Environmental Science and Technology*, 2007, 41, 5370–5375.
11. Chen, K. L., Mylon, S. E., and Elimelech, M., Enhanced Aggregation of Alginate-Coated Iron Oxide (Hematite) Nanoparticles in the Presence of Calcium, Strontium, and Barium Cations, *Langmuir*, 2007, 23, 5920–5928.
12. Chen, K. L. and Elimelech, M., Influence of Humic Acid on the Aggregation Kinetics of Fullerene (C₆₀) Nanoparticles in Monovalent and Divalent Electrolyte Solutions, *Journal of Colloid and Interface Science*, 2007, 309, 126–134.
13. Chen, K. L. and Elimelech, M., Aggregation and Deposition Kinetics of Fullerene (C₆₀) Nanoparticles, *Langmuir*, 2006, 22, 10994–11001.
14. Chen, K. L., Mylon, S. E., and Elimelech, M., Aggregation Kinetics of Alginate-Coated Hematite Nanoparticles in Monovalent and Divalent Electrolytes, *Environmental Science and Technology*, 2006, 40, 1516–1523.
15. Mylon, S. E., Chen, K. L., and Elimelech, M., Influence of Natural Organic Matter and Ionic Composition on the Kinetics and Structure of Hematite Colloid Aggregation: Implications to Iron Depletion in Estuaries, *Langmuir*, 2004, 20, 9000–9006.
16. Song, L., Chen, K. L., Ong, S. L., and Ng, W. J., A New Normalization Method for Determination of Colloidal Fouling Potential in Membrane Processes, *Journal of Colloid and Interface Science*, 2004, 271, 426–433.
17. Chen, K. L., Song, L., Ong, S. L., and Ng, W. J., The Development of Membrane Fouling in Full-Scale RO Processes, *Journal of Membrane Science*, 2004, 232, 63–72.

Invited Talks

1. Emerging Approaches to Membrane Preparation and Modification for Enhancing Membrane Resistance to Fouling, The Water Institute Series, Purdue Calumet Water Institute, Purdue University in Calumet, Hammond, Indiana, December 1, 2011.
2. Aggregation and Deposition of Multiwalled Carbon Nanotubes in Aquatic Systems, ETH Zürich, Institute of Biogeochemistry and Pollutant Dynamics, Zürich, Switzerland, August 19, 2011.
3. Aggregation and Deposition of Multiwalled Carbon Nanotubes in Aquatic Systems, University of Geneva, School of Chemistry and Biochemistry, Geneva, Switzerland, August 18, 2011.
4. Deposition and Remobilization of Oxidized Multiwalled Carbon Nanotubes on Silica Surfaces: Implications for Environmental Fate and Transport, Goldschmidt, August 14–19, 2011, Prague, Czech Republic.
5. Deposition and Remobilization of Multiwalled Carbon Nanotubes on Silica Surfaces: Implications for Environmental Fate and Transport, 8th US-Korea Forum on Nanotechnology: Nanotechnology for Sustainability, April 4–5, 2011, Pasadena, California (poster presentation and short oral presentation).
6. Aggregation, Deposition, and Remobilization of Multiwalled Carbon Nanotubes: Implications for Environmental Fate and Transport, Temple University, Department of Civil and Environmental Engineering, March 18, 2011.
7. Aggregation, Deposition, and Release of Multi-Walled Carbon Nanotubes: Implications for Environmental Fate and Transport, October 12, 2010, Q-Sense, Linthicum, Maryland.
8. Probing Interfacial Interactions between Nanoparticles and Solid Surfaces in the Laboratory, NIST-Virginia Tech Workshop: Measuring up to Sustainable Water, September 9–10, 2010, Alexandria, Virginia.
9. Interaction of Fullerene (C₆₀) Nanoparticles with Silica Surfaces Coated With Natural Organic Matter: Implications for Fate and Transport, Society of Environmental Toxicology and Chemistry North America 30th National Meeting, November 19–23, 2009, New Orleans, Louisiana.
10. Fate and Transport of Nanoparticles in Aquatic Systems: Measurements and Environmental Implications, National Institute of Standards and Technology, Biomedical Science Division, Multiplexed Biomolecular Science Group, May 22, 2009.
11. Fate and Transport of Nanoparticles in Aquatic Systems, University of Delaware, Department of Plant and Soil Sciences, May 8, 2009.
12. Aggregation and Deposition of Nanoparticles in Aquatic Systems, University of Maryland, Baltimore County, Department of Civil and Environmental Engineering, May 6, 2009.
13. Aggregation and Deposition Kinetics of Nanoparticles in Aquatic Systems: Measurements, Mechanisms, and Environmental Implications, National University of Singapore, Division of Environmental Science and Engineering, Singapore, January 6, 2009.
14. Influence of Humic Acid on the Aggregation Kinetics of Fullerene (C₆₀) Nanoparticles in Monovalent and Divalent Electrolyte Solutions, American Chemical Society 234th National Meeting, August 19–23, 2007, Boston, Massachusetts.

Papers in Conference Proceedings

1. Chen, K. L. and Elimelech, M., Aggregation and Fate of Fullerene Nanoparticles in Aquatic Environments, NSTI Nanotech 2006, May 7–11, 2006, Boston, Massachusetts.

Conference Presentations

(Underlined names indicate presenting authors)

1. Chalew, T. A. C., Huang, H., Chen, K. L., and Schwab, K. J., The Fate and Cellular Toxicity of Silver, Zinc Oxide, Titanium Dioxide Engineered Nanoparticles in Water, Society of Environmental Toxicology and Chemistry North America 32nd National Meeting, November 13–17, 2011, Boston, Massachusetts.
2. Tang, L., Hong, J. Y., and Chen, K. L., Anti-Adhesive Properties of Polysulfone Membranes Modified with PAH/PAA Polyelectrolyte Multilayers, The American Institute of Chemical Engineers 2011 Annual Meeting, October 16–21, 2011, Minneapolis, Minnesota.
3. Chen, K. L. and Yi, P., Deposition and Remobilization of Oxidized Multiwalled Carbon Nanotubes on Silica Surfaces: Implications for Environmental Fate and Transport, Goldschmidt, August 14–19, 2011, Prague, Czech Republic.
4. Huynh, K. A. and Chen, K. L., Heteroaggregation of Multiwalled Carbon Nanotubes and Hematite Nanoparticles in Aquatic Environments: Implications for Carbon Nanotube Fate and Transport, 85th American Chemical Society Colloid and Surface Science Symposium, June 19–22, 2011, McGill University, Montreal, Canada.
5. Yi, P. and Chen, K. L., Influence of Solution Chemistry on the Deposition and Remobilization of Oxidized Multiwalled Carbon Nanotubes on Silica Surfaces, 85th American Chemical Society Colloid and Surface Science Symposium, June 19–22, 2011, McGill University, Montreal, Canada.
6. Chen, K. L. and Yi, P., Kinetics and Reversibility of Multi-Walled Carbon Nanotube Deposition on Silica Surfaces, American Chemical Society 241st National Meeting, March 27–31, 2011, Anaheim, California.
7. Huynh, K. A. and Chen, K. L., Aggregation Kinetics of Silver Nanoparticles in Monovalent and Divalent Electrolyte Solutions: Implications for Environmental Fate and Transport, American Chemical Society 240th National Meeting, August 22–26, 2010, Boston, Massachusetts.
8. Yi, P., Wepasnick, K., Smith, B. A., Fairbrother, D. H., and Chen, K. L., Influence of Solution Chemistry on the Deposition Kinetics of Oxidized Multi-Walled Carbon Nanotubes on Silica Surfaces, American Chemical Society 240th National Meeting, August 22–26, 2010, Boston, Massachusetts.
9. Chen, K. L., Interaction of Fullerene (C₆₀) Nanoparticles with Silica Surfaces Coated With Natural Organic Matter: Implications for Fate and Transport, Society of Environmental Toxicology and Chemistry North America 30th National Meeting, November 19–23, 2009, New Orleans, Louisiana.
10. Chen, K. L., Interaction of Fullerene (C₆₀) Nanoparticles with Silica Surfaces: Measurements, Mechanisms, and Environmental Implications, Association of Environmental Engineering and Science Professors Conference, July 22–28, 2009, University of Iowa, Iowa City, Iowa.
11. Chen, K. L. and Elimelech, M., Influence of Solution Chemistry on the Deposition Kinetics of Fullerene Nanoparticles on Silica Surfaces, 83rd American Chemical Society Colloid and Surface Science Symposium, June 14–19, 2009, Columbia University, New York, New York.
12. Chen, K. L. and Elimelech, M., Aggregation of Fullerene (C₆₀) Nanoparticles in Monovalent and Divalent Electrolytes: Implications for Fate, Transport, and Bioavailability, The American Institute of Chemical Engineers 2008 Annual Meeting, November 16–21, 2008, Philadelphia, Pennsylvania.

13. Chen, K. L. and Elimelech, M., Interaction of Fullerene (C₆₀) Nanoparticles with Humic Acid and Alginate Coated Silica Surfaces: Implications for Fate and Transport, The American Institute of Chemical Engineers 2008 Annual Meeting, November 16–21, 2008, Philadelphia, Pennsylvania.
14. Elimelech, M., Chen, K. L., Saleh, N., and Kang, S., Aggregation Kinetics of Carbon-Based Nanomaterials in Aquatic Systems: Measurements and Environmental Implications, Chemodynamics of Ecosystems, October 26–31, 2008, Monte Verità, Ascona, Switzerland.
15. Chen, K. L. and Elimelech, M., Deposition Kinetics of Fullerene (C₆₀) Nanoparticles on Silica Surfaces: Influence of Surface Modification with Humic Acid and Alginate, Chemodynamics of Ecosystems, October 26–31, 2008, Monte Verità, Ascona, Switzerland.
16. Chen, K. L. and Elimelech, M., Deposition Kinetics of Fullerene Nanoparticles on Silica Surfaces Coated with Humic Acid and Alginate, 82nd American Chemical Society Colloid and Surface Science Symposium, June 15–18, 2008, North Carolina State University, Raleigh, North Carolina.
17. Tiraferrì, A., Chen, K. L., Sethi, R., and Elimelech, M., Reduced Aggregation and Sedimentation of Zerovalent Iron Nanoparticles in the Presence of Guar Gum, 3rd International Symposium on Permeable Reactive Barriers and Reactive Zones, November 8–19, 2007, Rimini, Italy.
18. Chen, K. L. and Elimelech, M., Aggregation Kinetics of Fullerene (C₆₀) Nanoparticles in the Presence of Humic Acid, The American Institute of Chemical Engineers 2007 Annual Meeting, November 4–9, 2007, Salt Lake City, Utah.
19. Chen, K. L. and Elimelech, M., Electrokinetic Properties and Stability of Engineered Fullerene (C₆₀) Nanoparticles in Aqueous Solutions, The American Institute of Chemical Engineers 2007 Annual Meeting, November 4–9, 2007, Salt Lake City, Utah.
20. Chen, K. L. and Elimelech, M., Influence of Humic Acid on the Aggregation Kinetics of Fullerene (C₆₀) Nanoparticles in Monovalent and Divalent Electrolyte Solutions, American Chemical Society 234th National Meeting, August 19–23, 2007, Boston, Massachusetts (*Invited Talk*).
21. Chen, K. L. and Elimelech, M., Aggregation and Deposition Kinetics of Fullerene (C₆₀) Nanoparticles in Aquatic Environments, Association of Environmental Engineering and Science Professors Conference, July 28–August 1, 2007, Virginia Tech, Blacksburg, Virginia.
22. Chen, K. L. and Elimelech, M., Influence of Humic Acid on the Aggregation Kinetics of Fullerene (C₆₀) Nanoparticles, 81st American Chemical Society Colloid and Surface Science Symposium, June 24–27, 2007, University of Delaware, Newark, Delaware.
23. Chen, K. L. and Elimelech, M., Influence of Synthesis Technique on Electrokinetic Properties of Fullerene (C₆₀) Nanoparticles in Aqueous Solutions, 81st American Chemical Society Colloid and Surface Science Symposium, June 24–27, 2007, University of Delaware, Newark, Delaware.
24. da Silva, A.K., Chen, K.L., Estes, M. K., and Elimelech, M., Elucidating Adsorption Behavior of Norovirus and Fullerene Nanoparticles Using QCM-D, Quartz Crystal Microbalance with Dissipation (QCM-D) World Conference, December 2, 2006, Fairmont Copley Plaza, Boston, Massachusetts.
25. Chen, K. L. and Elimelech, M., Aggregation and Deposition Kinetics of Fullerene (C₆₀) Nanoparticles in Aquatic Systems, 4th Robert M. Langer Graduate Student Symposium, December 1, 2006, Yale University, New Haven, Connecticut.
26. Nguyen, T. H. and Chen, K. L., Adhesion of Plasmid DNA to Natural Organic Matter Coated Mineral Surfaces, The American Institute of Chemical Engineers 2006 Annual Meeting, November 12–17, 2006, San Francisco, California.

27. Chen, K. L. and Elimelech, M., Aggregation and Deposition Kinetics of Fullerene Nanoparticles onto Quartz Surface, The American Institute of Chemical Engineers 2006 Annual Meeting, November 12–17, 2006, San Francisco, California.
28. Chen, K. L., Mylon, S. E., and Elimelech, M., Mechanism of Enhanced Aggregation of Alginate-Coated Hematite Nanoparticles in the Presence of Calcium, Strontium, and Barium Cations, The American Institute of Chemical Engineers 2006 Annual Meeting, November 12–17, 2006, San Francisco, California.
29. Chen, K. L. and Elimelech, M., Aggregation and Deposition Kinetics of Fullerene Nanoparticles in Monovalent and Divalent Electrolytes, 80th American Chemical Society Colloid and Surface Science Symposium, June 18–21, 2006, Colorado University, Boulder, Colorado.
30. Chen, K. L., Mylon, S. E., and Elimelech, M., Enhanced Aggregation of Alginate-Coated Hematite Nanoparticles: Influence of Divalent Cations on Gel-Network Formation, 80th American Chemical Society Colloid and Surface Science Symposium, June 18–21, 2006, Colorado University, Boulder, Colorado.
31. Chen, K. L. and Elimelech, M., Aggregation and Deposition Kinetics of Fullerene Nanoparticles in Aquatic Environments, Interfaces Against Pollution 4th International Conference, June 4–7, 2006, Granada, Spain.
32. Chen, K. L. and Elimelech, M., Aggregation and Deposition Kinetics of Fullerene Nanoparticles in Aquatic Environments, 26th New England Workshop on Complex Fluids, March 10, 2006, Yale University, New Haven, Connecticut.
33. Chen, K. L., Mylon, S. E., and Elimelech, M., Enhanced Aggregation of Alginate-Coated Hematite Nanoparticles, The American Institute of Chemical Engineers 2005 Annual Meeting, October 30–November 4, 2005, Cincinnati, Ohio.
34. Chen, K. L., Mylon, S. E., and Elimelech, M., Aggregation of Alginate-Coated Hematite Nanoparticles in Monovalent and Divalent Electrolytes, American Chemical Society 230th National Meeting, August 28–September 1, 2005, Washington, DC.
35. Chen, K. L., Mylon, S. E., and Elimelech, M., Influence of Alginate and Ionic Composition on Aggregate Structure of Hematite Colloids, American Chemical Society 230th National Meeting, August 28–September 1, 2005, Washington, DC.
36. Chen, K. L., Mylon, S. E., and Elimelech, M., Influence of Alginate and Ionic Composition on the Stability of Hematite Colloids, 79th American Chemical Society Colloid and Surface Science Symposium, June 12–15, 2005, Clarkson University, Potsdam, New York.
37. Chen, K. L., Mylon, S. E., and Elimelech, M., Aggregation Kinetics of Alginate-Coated Hematite Colloids in Divalent Electrolytes, 79th American Chemical Society Colloid and Surface Science Symposium, June 12–15, 2005, Clarkson University, Potsdam, New York.
38. Chen, K. L., Mylon, S. E., and Elimelech, M., Influence of Solution Chemistry on the Aggregation Kinetics of Alginate-Coated Hematite Colloids, American Chemical Society 229th National Meeting, March 13–17, 2005, San Diego, California.
39. Mylon, S. E. and Chen, K. L., Influence of Natural Organic Matter and Ionic Composition on the Kinetics and Structure of Hematite Colloid Aggregation: Implications for Iron Depletion in Estuaries, American Chemical Society 228th National Meeting, August 22–26, 2004, Philadelphia, Pennsylvania.
40. Mylon, S. E., Chen, K. L., and Elimelech, M., Influence of Natural Organic Matter and Ionic Composition on the Kinetics and Structure of Hematite Colloid Aggregation: Implications to Iron Depletion in Estuaries, 78th American Chemical Society Colloid and Surface Science Symposium, June 20–23, 2004, Yale University, New Haven, Connecticut.

41. Chen, K. L., Song, L., Hu, J., Ong, S. L., and Ng, W. J., A New Normalization Method for Fouling Characterization of Feed Waters in Membrane Processes, North American Membrane Society 14th Annual Meeting, May 17–21, 2003, Jackson Hole, Wyoming.
42. Chen, K. L., Song, L., Ong, S. L., and Ng, W. J., Modeling of Fouling Development in a Spiral-Wound RO Membrane Element, 12th KAIST-KU-NTU-NUS Symposium on Environmental Engineering, June 26–29, 2002, National Taiwan University, Taipei, Taiwan, Republic of China.
43. Chen, K. L., Song, L., Ong, S. L., and Ng, W. J., Modeling the Fouling Development of Membrane Fouling in a Full-Scale RO Process, North American Membrane Society 13th Annual Meeting, May 11–15, 2002, Long Beach, California.

Poster Presentations

(Underlined names indicate presenting authors)

1. Chen, K. L. and Yi, P., Influence of Solution Chemistry on the Deposition Kinetics and Remobilization of Oxidized Multiwalled Carbon Nanotubes, Association of Environmental Engineering and Science Professors Conference, July 10–12, 2011, University of South Florida, Tampa, Florida.
2. Chen, K. L. and Yi, P., Deposition and Remobilization of Multiwalled Carbon Nanotubes on Silica Surfaces: Implications for Environmental Fate and Transport, Gordon Research Conference 2011 – Environmental Nanotechnology, May 29–June 3, 2011, Waterville Valley, New Hampshire.
3. Chen, K. L. and Yi, P., Deposition and Remobilization of Multiwalled Carbon Nanotubes on Silica Surfaces: Implications for Environmental Fate and Transport, 8th US-Korea Forum on Nanotechnology: Nanotechnology for Sustainability, April 4–5, 2011, Pasadena, California.
4. Yi, P., Wepasnick, K., Smith, B. A., Fairbrother, D. H., and Chen, K. L., Deposition Kinetics of Multi-Walled Carbon Nanotubes on Silica Surfaces: Measurements and Environmental Implications, Gordon Research Conference 2010 – Environmental Sciences: Water, June 20–25, 2010, Holderness, New Hampshire.
5. Huynh, K. A. and Chen, K. L., Aggregation of Silver Nanoparticles in Aquatic Environments, Johns Hopkins Institute for NanoBioTechnology 4th Annual Symposium, April 29, 2010, Johns Hopkins University, Baltimore, Maryland.
6. Yi, P., Wepasnick, K., Smith, B. A., Fairbrother, D. H., and Chen, K. L., Influence of Solution Chemistry on the Deposition Kinetics of Multi-Walled Carbon Nanotubes on Silica Surfaces, Johns Hopkins Institute for NanoBioTechnology 4th Annual Symposium, April 29, 2010, Johns Hopkins University, Baltimore, Maryland.
7. Chen, K. L., Deposition of Fullerene (C₆₀) Nanoparticles on Silica Surfaces: Implications to Environmental Fate and Transport, Johns Hopkins Institute for NanoBioTechnology 3rd Annual Symposium, May 18, 2009, Johns Hopkins University, Baltimore, Maryland.
8. Chen, K. L. and Elimelech, M., Deposition Kinetics of Fullerene (C₆₀) Nanoparticles on Silica Surfaces: Influence of Surface Modification with Humic Acid and Alginate, Chemodynamics of Ecosystems, October 26–31, 2008, Monte Verità, Ascona, Switzerland.
9. Chen, K. L. and Elimelech, M., Deposition Kinetics of Fullerene Nanoparticles on Silica Surfaces Coated With Humic Acid and Alginate, Gordon Research Conference 2008 – Environmental Sciences: Water, June 22–27, 2008, Holderness, New Hampshire.

10. Tiraferrri, A., Chen, K. L., Sethi, R., and Elimelech, M., Guar Gum Reduces Aggregation of Zerovalent Iron Nanoparticles and Enhances Their Mobility in Porous Media, nanoECO: Nanoparticles in the Environment – Implications and Applications, March 2–7, 2008, Monte Verità, Switzerland.
11. Chen, K. L., Mylon, S. E., and Elimelech, M., Enhanced Aggregation of Colloidal Hematite Resulting from the Adsorption of Alginate: Influence of Divalent Cations on Gel-Network Formation, The Geological Society of America 2006 Annual Meeting, October 22–25, 2006, Philadelphia, Pennsylvania.
12. Chen, K. L. and Elimelech, M., Aggregation and Fate of Fullerene Nanoparticles in Aquatic Environments, NSTI Nanotech 2006, May 7–11, 2006, Boston, Massachusetts.
13. Mylon, S. E., Goergen, A. G., Chen, K. L., and Elimelech, M., Influence of Alginate on the Electrokinetic Properties and Aggregation Kinetics of Hematite Nanoparticles, American Chemical Society 231st National Meeting, March 26–30, 2004, Atlanta, Georgia.