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EDUCATION

Massachusetts Institute of Technology/ Woods Hole Oceanographic Institution Joint Program,
Cambridge, MA, Ph.D. in Oceanography, May 1988.

Harvard University, Cambridge, MA, A.M. in Chemistry, January 1981.

Cornell University, Ithaca, NY, A.B. in Chemistry, June 1979.

PROFESSIONAL EXPERIENCE

Swiss Federal Institute of Aquatic Science and Technology (Eawag) (2007 to present) Director.

Swiss Federal Institute of Technology Lausanne (EPFL) (2010 to present) Professor of
Environmental Chemistry, School of Architecture, Civil Engineering and Environmental
Engineering (ENAC).

Swiss Federal Institute of Technology Zürich (ETHZ) (2007 to present) Professor of Environmental
Biogeochemistry, Department of Environmental Sciences; affiliated faculty, Department of Civil,
Environmental, and Geomatic Engineering.

California Institute of Technology, Environmental Science & Engineering Department, (2009-2011)
Visiting Associate, (2002-2008) Professor, (1996-2002) Associate Professor; (2003-2006) Executive
Officer, Keck Laboratories for Bioengineering, Environmental Science & Engineering, and
Materials Science.

University of California, Los Angeles, Civil and Environmental Engineering Department, (1997-1999)
Adjunct Professor, (1995-1996) Associate Professor, (1991-1995) Assistant Professor.

Institute for Water Resources and Water Pollution Control (EAWAG), Dübendorf, Switzerland,
Chemistry Department, (1988-1991) Research Fellow.

Massachusetts Institute of Technology, Cambridge, MA, Ralph M. Parsons Laboratory for Water
Resources and Hydrodynamics, Department of Civil Engineering, (1982-1988) Research and
Teaching Assistant.

Harvard University, Cambridge, MA, Chemistry Department, (1979-1981) Research and Teaching
Assistant.

Cornell University, Ithaca, NY, Chemistry Department, (1978-1979) Teaching Assistant.

Mobil Oil Research and Development Corporation, Princeton, NJ, (Summer 1978) Summer Research
Intern

RESEARCH INTERESTS

Knowledge exchange at the interface of science with policy and practice

Biogeochemical cycling of trace metals and metalloids: microbial redox cycling; field studies of metal
redox cycling, mobilization, and sequestration

Water treatment processes for removal of inorganic contaminants: role of sorption in contaminant removal; design of novel sorbents

Mineral weathering and reactions at mineral surfaces: mechanisms and kinetics of dissolution and precipitation reactions; macroscopic, spectroscopic, and modeling studies of sorption processes

PUBLICATIONS

Papers in Professional Journals

- Hering, J.G. (2018) “Drink safely with biomimetic nanotechnology” (News and Views), *Nature Nanotechnology*, DOI: 10.1038/s41565-018-0326-5.
- Hering, J.G. (2018) “Women as Leaders in Academic Institutions: Personal Experience and Narrative Literature Review”, *Pure App. Chem*, xx:xx, <https://doi.org/10.1515/pac-2018-0603>.
- Biswakarma, J., Kang, K., Borowski, S., Schenkeveld, W., Kraemer, S., Hering, J.G., Hug, S., (2018) “Fe(II)-catalyzed ligand-controlled dissolution of iron(hydr)oxides”, *Environ. Sci. Technol.* xxx.
- Borowski, S.C., Biswakarma, J., Kang, K., Schenkeveld, W.D., Hering, J.G., Kubicki, J.D., Kraemer, S.M. and Hug, S.J. (2018) “Structure and reactivity of oxalate surface complexes on lepidocrocite derived from infrared spectroscopy, DFT-calculations, adsorption, dissolution and photochemical experiments”, *Geochim. Cosmochim. Acta*, <https://doi.org/10.1016/j.gca.2018.01.024>
- Senn, A.C., Hug, S.J., Kaegi, R., Hering, J.G. and Voegelin, A. (2018) “Arsenate co-precipitation with Fe(II) oxidation products and retention or release during precipitate aging”, *Water Research*, 131: 334-345.
- Hering, J.G., Katsoyiannis, I.A., Ahumada Theoduloz, G., Berg, M. and Hug, S.J. (2017) “Arsenic removal from drinking water: Experiences with technologies and constraints in practice”, *J. Environ. Eng ASCE*, DOI: 10.1061/(ASCE)EE.1943-7870.000122.
- Hoffmann, S, Pohl, C. and Hering J.G. (2017) “Methods and procedures of transdisciplinary knowledge integration: empirical insights from four thematic synthesis processes”, *Ecology and Society*, 22 (1):27, URL: <http://www.ecologyandsociety.org/vol22/iss1/art27/>.
- Hoffmann, S, Pohl, C. and Hering J.G. (2017) “Exploring transdisciplinary integration within a large research program: empirical lessons from four thematic synthesis processes”, *Research Policy*, <http://dx.doi.org/10.1016/j.respol.2017.01.004>.
- Senn, A.C., Kaegi, R., Hug, S.J., Hering, J.G., Mangold, S. and Voegelin, A. (2017) “Effect of aging on the structure and phosphate retention of Fe(III)-precipitates formed by Fe(II) oxidation in water”, *Geochim. Cosmochim. Acta*, 202: 341–360, <http://dx.doi.org/10.1016/j.gca.2016.12.033>.
- Hering, J.G. (2017) “Maintaining Trust and Objectivity in the Context of Use-Inspired Research” (letter to the editor), *Environ. Sci. Technol.* 51: 1054, DOI: 10.1021/acs.est.6b05825.
- Hering, J.G. (2016) “Do We Need More Research or Better Implementation through Knowledge Brokering?” *Sustainability Science*, 11:363-369 (published online June 2015) DOI: 10.1007/s11625-015-0314-8.
- Hering, J.G., Maag, S. and Schnoor, J.L. (2016) “A Call for Synthesis of Water Research to Achieve the Sustainable Development Goals by 2030” (Viewpoint) *Environ. Sci. Technol.* 50: 6122–6123, DOI: 10.1021/acs.est.6b02598.
- Hering, J.G., Giger, W., Hug, S.J., Kohler, H.P.E., Kretzschmar, R., Schwarzenbach, R., Sigg, L., Sulzberger, B., von Gunten, U., Zehnder, A.J.B. and Zobrist, J. (2016) “An American in Zurich: Jerry Schnoor as an Ambassador for U.S. Environmental Science and Engineering” (perspective), *Environ. Sci. Technol.* 50: 6597–6598, DOI: 10.1021/acs.est.5b06233.
- Hering, J.G., Sedlak, D.L., Tortajada, C., Biswas, A.K., Niwagaba, C. and Breu, T. (2015) “Local perspectives on water” *Science*, 349:479-480, DOI: 10.1126/science.aac5902 (policy forum)

- Kunz, N.C., Fischer, M., Ingold, K., Hering, J.G. (2015) “Drivers and barriers towards municipal wastewater recycling: A review of previous approaches and directions for future research”, *Water. Sci. Technol.* DOI: 10.2166/wst.2015.496.
- Senn, A.C., Kaegi, R., Hug, S.J., Hering, J.G., Mangold, S. and Voegelin, A. (2015) “Composition and structure of Fe(III)-precipitates formed by Fe(II) oxidation in water: Interdependent effects of phosphate, silicate and Ca”, *Geochim. Cosmochim. Acta*, 162: 220-246, DOI: 10.1016/j.gca.2015.04.032.
- Kunz, N., Fischer, M., Ingold, K., Hering, J.G., (2015) “Why do some water utilities recycle more than others? A Qualitative Comparative Analysis in New South Wales, Australia”, *Environ. Sci. Technol.* 49: 8287–8296, DOI: 10.1021/acs.est.5b01827.
- Stamm, C., Eggen, R.I.L, Hering, J.G., Hollender, J., Joss, A. and Schärer, M. (2015) “Micropollutant Removal from Wastewater: Facts and Decision-Making Despite Uncertainty” (Viewpoint), *Environ. Sci. Technol.*, 49: 6374-6375, DOI: 10.1021/acs.est.5b02242
- Hering, J.G., Dzombak, D.A., Green, S.A., Luthy, R.G. and Swackhamer, D. (2014) “Engagement at the Science–Policy Interface” (Viewpoint) *Environ. Sci. Technol.*, 48: 11031–11033, DOI: 10.1021/es504225t
- Tilley, E., Trande, L., Lüthi, C., Mosler, H.-J., Udert, K.M. Gebauer, H. and Hering, J.G. (2014) “Looking beyond technology: an integrated approach to water, sanitation and hygiene in low income countries” (Feature), *Environ. Sci. Technol.*, 48: 9965-9970, DOI: 10.1021/es501645d
- Rudolf von Rohr, M., Hering, J.G., Kohler, H.-P.E., von Gunten, U. (2014) “Column studies to assess the effects of climate variables on redox processes during riverbank filtration”, *Water Research*, 61: 263-275, DOI: 10.1016/j.watres.2014.05.018.
- Sternitzke, V., Janousch, M., Heeb, M. Hering, J.G, and Johnson, C.A. (2014) "Strontium Hydroxyapatite and Strontium Carbonate as Templates for the Precipitation of Calcium-Phosphates in the Absence and Presence of Fluoride", *J. Crystal Growth*, 396: 71-78, DOI: 10.1016/j.jcrysgro.2014.03.036.
- Diem, S., Rudolf von Rohr, M., Hering, J.G., Kohler, H.P., Schirmer, M., von Gunten, U. (2013) “NOM degradation during river infiltration: effects of the climate variables temperature and discharge”, *Water Research*, 47: 6585-6595, dx.doi.org/10.1016/j.watres.2013.08.028.
- Hering, J.G., Waite, T.D., Luthy, R., Drewes, J., and Sedlack, D. (2013) “A Changing Framework for Urban Water Systems”, *Environ. Sci. Technol.*, 47: 10721-10726, dx.doi.org/10.1021/es4007096.
- Hering, J.G and Eggen, R.I.L. (2013) “Interdisciplinary research to address societal issues” (perspective) *Environ. Sci. Technol.*, 47 :6730–6731, DOI: 10.1021/es402161g.
- Hering, J.G. and Ingold, K.M. (2012) “Water Resources Management: What Should Be Integrated?”, *Science*, 336: 1234-5. (policy forum)
- Sternitzke, V., Kaegi, R., Audinot, J.-N., Lewin, E., Hering, J.G. and Johnson, C.A. (2011) “Uptake of Fluoride from Aqueous Solution on Nano-Sized Hydroxyapatite: Examination of a Fluoridated Surface Layer”, *Environ. Sci. Technol.*, 46: 802-809, DOI: 10.1021/es202750t.
- Farnsworth, C.E., Voegelin, A. and Hering, J.G. (2012) “Manganese oxidation induced by water table fluctuations in a sand column”, *Environ. Sci. Technol.* 46: 277-284, DOI: 10.1021/es2027828.
- Hering, J.G., Hoffmann, S., Meierhofer, R., Schmid, M., and Peter, A. (2012) “Assessing the Societal Benefits of Applied Research and Expert Consulting in Water Science and Technology”, *GAIA*, 21 (2) 95-101.
- Hering, J., Hoehn, E., Klinke, A., Maurer, M., Peter, A., Reichert, P., Robinson, C., Schirmer, K., Schirmer, M., Stamm, C., and Wehrli, B. (2012) “Moving Targets, Long-Lived Infrastructure, and Increasing Needs for Integration and Adaptation in Water Management: An Illustration from Switzerland”, *Environ. Sci. Technol.*, 46: 112-118, DOI: 10.1021/es202189s.

- Hering, J.G., Swackhamer, D.L., and Schlesinger, W.H. (2012) “An Unparalleled Scientific Resource Endangered” (viewpoint) *Environ. Sci. Technol.* 46: 8525-8526, DOI: 10.1021/es3030512.
- Johnston, R.B., Berg, M., Johnson, C.A., Tilley, E., and Hering J.G. (2011) “Water and Sanitation in Developing Countries: Geochemical Aspects of Quality and Treatment”, *Elements*, 7(3): 163-168.
- Oelkers, E.H., Hering, J.G. and Zhu, C. (2011) “Water: Is there a Global Crisis?”, *Elements*, 7(3): 157-162.
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- Wildman, Jr., R.A and Hering, J.G. (2011) “Potential for release of sediment phosphorus to Lake Powell (Utah and Arizona) due to sediment resuspension during low water level”, *Lake and Reservoir Management*, 27: 365-375, dx.doi.org/10.1080/07438141.2011.632705.
- Wildman, Jr., R.A., Pratson, L.F., DeLeon, M., and Hering, J.G. (2011) “Physical, Chemical, and Mineralogical Characteristics of a Reservoir Sediment Delta (Lake Powell, USA) and Implications for Water Quality during Low Water Level”, *J. Environ. Qual.*, 40: 575–586, doi:10.2134/jeq2010.0323.
- Wildman, Jr., R.A, Chan, N.W., Dalleska, N.F., Anderson, M. and Hering, J.G. (2010) “Effect of Changes in Water Level on Sediment Pore Water Redox Geochemistry at a Reservoir Shoreline”, *Applied Geochemistry*, 25: 1902–1911, DOI: 10.1016/j.apgeochem.2010.10.005.
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- Farnsworth, C.E. and Hering, J.G. (2010) “Hydrous Manganese Oxide Doped Gel Probe Sampler for Measuring *In Situ* Reductive Dissolution Rates: I. Laboratory Development”, *Environ. Sci. Technol.*, 44:34-40, DOI: 10.1021/es901577q
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- Ferguson, M.A., Fernandez, D.P., and Hering, J.G. (2007) "Lowering the detection limit for arsenic: Outlook for a new PQL", *J. Amer. Water Works Assoc.*, 99(8): 92-98.
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Other Publications

- Hering, J.G. “Getting Water Research into Policy and Practice (GRIPP for Water)”, Clarke Prize lecture. National Water Research Institute (NWRI): Irvine, CA, 12 pp., <https://doi.org/10.5281/zenodo.1469682>.
- Hering, J.G. (2018) “Scientific publishing – why should academic research institutions be concerned?”, Open Science Framework Quick File, <https://osf.io/4an7c>.
- Hering, J.G. (2018) “Reconnecting academic research with societal needs through assessment”, Open Science Framework Quick File, <https://osf.io/kbcn2>.
- Hering, J.G. and von Waldow, H. (2017) Concept Note: Call for Management of Knowledge Relating to Freshwater and Sustainable Knowledge Management as a Public Good (version 2), <https://osf.io/28rhn/>.
- Hering, J.G. (2017) Water Data Portals: An Annotated List (versions 3 and 2: <https://osf.io/8mn3q/>; version 1: <https://doi.org/10.5281/zenodo.495080>)

- Hering, J., Thorleifson, H., van Geer, F., Verstraete, W. and Voss, V. (2015) “Scientific evaluation of programme area 2 Water resources (2007-2014) at the Geological Survey of Denmark and Greenland (GEUS)” Report 2015/27, GEUS, Copenhagen.
- Hering, J.G. (2014) “A virtual flood of information: open data for sustainable water management” Future Earth blog, <http://www.futureearth.info/blog/2014-aug-27/virtual-flood-information-open-data-sustainable-water-management>
- Hering, J.G. (2013) “Many paths to a common goal: water in context” Eawag Newsletter (online), http://www.eawag.ch/medien/publ/news/2013_na_01/01_e.pdf
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- Hering, J.G. (2012) “An End to Waste?” (editorial) *Science*, 337: 623, DOI:10.1126/science.1227092.
- Hering, J.G. and Schnoor, J. (2011) “Eawag at 75” (comment) *Environ. Sci. Technol.* 45: 9115, DOI: 10.1021/es203291e.
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- Hering, J.G. (2011) “The Future of Water in a Rapidly-Changing World”, *Eawag News*, 70e(June): 38-41.
- Hering, J.G. (2010) “Research for Development and Academic Career Trajectories: Opportunities and Challenges”, Annual Report of the ETHZ North-South Center.
- Anderson, P.A., Blum, J., Brantley, S.L., Chadwick, O., Chorover, J., Derry, L.A., Drever, J.I., Hering, J.G., Kirchner, J.W., Kump, L.R., Richter, D., and White, A.F. (2004) “Proposed initiative would study Earth's weathering engine”, *EOS Transactions*, 85(28): 1+.
- Hering, J.G. (1997) “Chinatown Revisited: Arsenic and the Los Angeles Water Supply”, *Engineering and Science*, vol. LX, No. 3, Calif. Inst. of Technol, Pasadena, CA, pp. 34-40.

Technical Reports

- Hering, J.G., Burris, D., Reisinger, H.J., and O’Day, P (2008) “Environmental Fate and Exposure Assessment for Arsenic in Groundwater”, Strategic Environmental Research and Development Program (SERDP) Final Report ER-1374.
- Min, J.H., Boulos, L., Brown, J.C., Cornwell, D.A., LeGoullec, Y., Coppola, E.N., Baxley, J.S., Rine, J.A., Hering, J.G., and Vural, N. (2005) “Innovative Alternatives to Minimize Arsenic, Perchlorate, and Nitrate Residuals”, Amer. Water Works Assoc. Res. Fndn. Report 91054F, Denver, CO.
- Hering, J.G. and Harmon, T.C. (2004) “Geochemical Controls on Chromium Occurrence, Speciation, and Treatability”, Amer. Water Works Assoc. Res. Fndn. Report 91043F, Denver, CO.
- Hering, J.G. and Elimelech, M. (1996) “Arsenic Removal by Enhanced Coagulation and Membrane Processes”, Amer. Water Works Assoc. Res. Fndn. Report 90706, Denver, CO.

Papers in Conference Proceedings

- Hering, J.G. (2010) “Monitored Natural Attenuation of Arsenic: Promises and Pitfalls from Two Case Studies” *GQ10: Groundwater Quality Management in a Rapidly Changing World* (Proc. 7th International Groundwater Quality Conference held in Zurich, Switzerland, 13–18 June 2010).
- Lee, G., Stewart, L., Gadtke, A. and Hering, J. (2002) “Hollywood, Health Goals, and Hexavalent Chromium: Cr(VI) Occurrence and Treatment in Southern California Groundwater”, Proceedings of the American Water Works Association Inorganic Contaminants Workshop, San Diego, CA, Feb. 3-5.
- Steinberg, L.J. and Hering, J.G. (2001) “Variations in Arsenic Concentrations within a Groundwater Distribution System”, Proceedings of the World Water and Environmental Resources Conference, ASCE, Orlando, FL, May 20-24.

- Min, J.H. and Hering, J.G., "Arsenate, Selenite, and Chromate Sorption by Fe(III)-Doped Alginate Gels", Proceedings of the 1997 Annual Meeting of the American Institute of Chemical Engineering, Los Angeles, CA, Nov. 16-21, 1997.
- Hering, J.G. and Chiu, V.P. "Arsenic Occurrence and Speciation in Groundwater, Hanford, CA: Implications for Health Effects and Treatment Options", Proceedings of the 1997 Canadian Society of Civil Engineers-American Society of Civil Engineers Environmental Engineering Conference, Edmonton, Alberta, Canada, July 23-25, 1997.
- Hering, J.G. "Arsenic Speciation in Environmental Systems: Consequences for Biogeochemistry, Toxicology, and Treatment", Proceedings of the Royal Australian Chemical Institute, 13th Symposium on Analytical Chemistry and 4th Environmental Chemistry Conference, Darwin, Australia, July 9-14, 1995.
- Hering, J.G. and Chen, P.Y., "The Effect of Source Water Composition on Arsenic Removal by Enhanced Coagulation", Proceedings of the National Meeting of the American Water Works Association, Anaheim, June 18-22, 1995, pp.C941-C951.
- Hering, J.G. and Elimelech, M., "International Perspectives on Arsenic in Groundwater: Problems and Treatment Strategies", Proceedings of the National Meeting of the American Water Works Association, Anaheim, June 18-22, 1995, pp. C1-C6.
- Hering, J.G. (1994) "Arsenic Removal by Coagulation Treatment: Current Models and Research Needs", Proceedings of the National Meeting of the American Water Works Association, New York, June 19-24, 1994.
- Hering, J.G. and Chen, P.Y. (1993) "Removal of inorganic contaminants from industrial wastewaters: Effects of pH and competing ions on adsorption and precipitation", Proceedings of the 66th Annual Conference and Exposition, Water Environment Federation, AC93-040-006.

PATENTS AND INVENTION DISCLOSURES

- Hering, J.G. and Min, J.H., Calcium-Iron(III)-Doped Alginate Gel Beads for Sorption of Arsenate and Selenate, U.S. Patent No. 6,203,709 (issued 3/20/2001).

AWARDS, PROFESSIONAL AFFILIATIONS, AND ACTIVITIES

- 2018**, laureate, Clarke Water Prize
- 2018 to present**, member, advisory committee to the IRGC Foundation
- 2018 to present**, member, advisory board for Sustainability Research SCNAT (and Future Earth National Committee)
- 2018 to present**, member, advisory board for td-net SCNAT
- 2018 to present**, member, IWA Global Water Award jury
- 2018 to present** Fellow, the Geochemical Society and European Association of Geochemistry
- 2017 to present** member, scientific advisory board, Ernst Strüngmann Forum, Frankfurt am Main, Germany
- 2017** Chair, Evaluation Panel "Instrument Leibniz-Forschungsverbund"
- 2017 to present** Honorary Fellow, IHE Delft, the Netherlands
- 2017 to present**, foreign member, Russian Academy of Natural Sciences
- 2016 to present** member, Swiss National Science Foundation Council.
- 2016** jury member, Microbials program, Gebert Rűf Foundation, Switzerland.
- 2016 to present** President, ETH Women Professors Forum (2012–2016 Vice President)
- 2015 to present** member, U.S. National Academy of Engineering

- 2015** recipient, IUPAC 2015 Distinguished Women in Chemistry or Chemical Engineering Awards, awarded at the 45th World Chemistry Congress, 9-14 August 2015, Busan, South Korea.
- 2015–2017** member, scientific advisory board, Helmholtz Zentrum für Umweltforschung (UFZ), Leipzig, Germany.
- 2015–2017** member, Swiss Hydrological Commission, Swiss Academy of Sciences.
- 2015** chair, evaluation committee for Programme area 2 Water resources (2007-2014) at the Geological Survey of Denmark and Greenland (GEUS), 26-29 May 2015, Copenhagen, Denmark.
- 2013–2014** member of organizing team for the session on “Water for All” at the 2014 IARU Congress: Global Challenges: Achieving Sustainability, Copenhagen, Denmark, 22-24 October 2014.
- 2013–2015** member, Swiss Experiment (phase 2) Advisory Board
- 2013–2017** member, scientific advisory board, AquaDiva, Friedrich-Schiller-Universität Jena, Germany.
- 2013–2015** Scientific Director, Center for Risk Analysis and Risk Governance (CRAG), EPFL, Lausanne.
- 2013–2015** member, Scientific and Technical Council, Integrated Risk Governance Council (IRGC), EPFL, Lausanne.
- 2012** O’Melia Distinguished Lecturer, Johns Hopkins University, Baltimore, MD, 1 November 2012.
- 2012–2014** member, panel on Terrestrial Water under Climate Change, Climate Service Center, Hamburg, Germany
- 2012–2015** member, Advisory Board, Water Institute, Stellenbosch University.
- 2012** member, faculty search committee, ETH Zürich, Professorship in Agricultural Economics.
- 2011–2015** member, visiting committee, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, Cambridge, MA
- 2011** member, faculty search committee, ETH Zürich, Professorship in Sustainable Agroecosystems.
- 2011** invited panelist, TED Global Conference, Edinburgh, UK, 13 July 2011.
- 2011** invited panelist, International Year of Chemistry, U.S. kick-off, Philadelphia, PA, 1 February 2011.
- 2010–2015** member of the board, Fondation pour l’Etude des Eaux du Léman.
- 2010–2011** member, faculty search committee, ETH Zürich, Professorship in Isotope Geochemistry.
- 2010 –2011** member of the scientific committee , EuCheMS International Conference on Chemistry and the Environment (ICCE 2011), Zürich, 11-15 September 2011.
- 2010–2011** co-organizer, Monte Verita workshop on “Chemodynamics and Biointerfaces: Bioavailability and biological effects of chemicals in the environment”, 23-27 October 2011.
- 2010–2012** member, Scientific Advisory Committee (SAC) of the Water Science Alliance, Helmholtz Center for Environmental Research.
- 2010–2011** member, faculty search committee, University of Bern-Eawag, Joint Professorship in Policy Analysis – Focus: Environment.
- 2010 to present** member, Board of Reviewing Editors, *Science*.
- 2009–2011** Guest Editor, *Elements* magazine, special issue on Water, to appear June 2011.
- 2009–2016** Chair, 2008-2009, Member, Advisory Board, Leibniz Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany.
- 2009–2017** member, ETH Board Committee on Competence Centers (BCC)
- 2009–2013** member, Board of Directors, NCCR North-South
- 2008** Feng Distinguished Lecturer, University of Massachusetts, Amherst, MA.

- 2008–2011** member, Research Advisory Group, UNESCO Center for Water Law, Policy, and Science, University of Dundee, Scotland.
- 2008 to present** member, GAIA Advisory Board
- 2008 to present** member, Eawag Equal Opportunity Committee.
- 2008–2009** member, Program Committee, Alliance for Global Sustainability Annual Meeting
- 2007–2009** member, Program Committee, AGU Chapman Conference.
- 2007–2010** member, ETH Board
- 2007–2017** member, Steering Board, Competence Center Environment and Sustainability (CCES)
- 2007–2009** Science Coordinating Team member, 2009 Goldschmidt Conference.
- 2007** Appointed Honorary Professor, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, China
- 2007** Appointed Guest Professor, Harbin Institute of Technology, China
- 2007** invited participant, Workshop on Frontier Research Directions in Civil and Environmental Engineering, U.S. National Science Foundation, Arlington, VA, 2-11 June.
- 2007** invited participant, Workshop on Basic Needs in Geosciences, U.S. Department of Energy, Bethesda, MD, 21-24 February.
- 2005** Member, Visiting Committee for the U.S. Dept. of Energy Environmental Molecular Sciences Laboratory, Richland, WA, May 17-19.
- 2005** Invited participant, EPA/NIEHS Workshop on Assessment and Disposal of Arsenic-Bearing Solid Residuals, Washington, DC, February 26-March 1.
- 2004** Invited participant, National Science Foundation/U.S. Department of Energy workshop on Water: Challenges at the Intersection of Human and Natural Systems, Richland, WA, September 16-17.
- 2004** Invited speaker, National Science Foundation workshop on Advancing the Quality of Water, Chapel Hill, NC, March 10-12 .
- 2004-2007** Associate Editor, *Environmental Science and Technology*
- 2003** Invited participant, National Science Foundation workshop on Weathering System Science, Baltimore, MD, October 19-21.
- 2003** Member, Visiting Committee for the Swiss Federal Institute for Environmental Science and Technology (EAWAG), Swiss Federal Institute of Technology, Zurich, Switzerland, September 28 - October 3.
- 2003** Co-organizer of an international workshop on “Biogeochemical Controls on the Mobility and Bioavailability of Metals in Soils and Groundwater”, Swiss Federal Institute of Technology, Ascona, Switzerland, March 2-7.
- 2002** Invited speaker, National Academy of Sciences, “Challenges for the Chemical Sciences in the 21st Century: Workshop on the Environment”, Irvine, CA, November 19-19,2002
- 2002-2003** Panel member, National Science Foundation, Hydrology Panel
- 2001** Invited participant, National Science Foundation workshop on Collaborative Large-Scale Engineering Assessment Network for Environmental Research, Stanford, CA, December 4-5.
- 2001-2003** Aldo Leopold Leadership Fellow
- 2000-2003** Editorial Advisory Board Member, *Environmental Science and Technology*
- 2000** Co-organizer of symposium on “Chemical Speciation and Reactivity in Water Chemistry and Water technology: A Symposium in Honor of James J. Morgan”, Environmental Chemistry Division, American Chemical Society 220th National Meeting, Washington, DC, August 20-25.

- 2000** Consultant, U.S. Environmental Protection Agency, Science Advisory Board, Drinking Water Committee.
- 2000** Panel member, National Science Foundation, Graduate Fellowship Panel, Arlington, VA, February 17-20.
- 1999** Co-organizer of symposium on "Interfacial and Colloidal Phenomena in Aquatic Environments", Environmental Chemistry Division, American Chemical Society 217th National Meeting, Anaheim, CA, March 21-25.
- 1999** Panel member, National Science Foundation, Graduate Fellowship Panel, Arlington, VA, February 5-7.
- 1998** Guest Editor, *Environmental Science and Technology*.
- 1998** Co-organizer of symposium on "Research and Education Challenges in Environmental Chemistry", Environmental Chemistry Division, American Chemical Society 216th National Meeting, Boston, MA, August 23-27.
- 1997** Invited participant in the National Academy of Sciences "Ninth Annual Symposium on Frontiers of Science," Irvine, CA, November 6-8.
- 1997** Invited session chair at National Science Foundation Workshop on "Research Needs for Coastal Pollution in Urban Areas", Milwaukee, WI, October 16-17.
- 1997** Invited participant at the Sandia National Laboratories workshop on "Natural Attenuation of Metals and Radionuclides," Albuquerque, NM, June 18-20.
- 1997** Co-organizer of symposium on "Redox Reactions in Natural and Engineered Aqueous Systems", Environmental Chemistry Division, American Chemical Society 213th National Meeting, San Francisco, CA, April 13-17.
- 1997** Panel member, National Science Foundation, Minority Graduate Fellowship Panel, Washington, DC, February 12-14.
- 1997** Panel member, U.S. Environmental Protection Agency Ad Hoc Subcommittee on Arsenic Research, Board of Scientific Counselors, Washington, DC, January 22-23.
- 1996** Invited participant in the National Academy of Engineering "Second Annual Symposium on Frontiers in Engineering," Irvine, CA, September 19-21.
- 1996** Invited speaker at the American Water Works Association Research Foundation Technology Transfer Conference, Costa Mesa, CA, August 1-2.
- 1996** Guest Editor, *Colloids and Surfaces A-Physicochemical and Engineering Aspects*.
- 1995** NSF Presidential Faculty Fellows Award
- 1995** Co-organizer of symposium on "Colloidal and Interfacial Phenomena in Aquatic Environments", Environmental Chemistry Division, American Chemical Society 209th National Meeting, Anaheim, CA, April 2-6.
- 1994** UCLA Faculty Career Development Award
- 1994** Invited speaker at the Gordon Research Conference on Environmental Sciences - Water, New Hampton, NH, June 20-24.
- 1994** Invited participant in the National Science Foundation Workshop on "Environmental Geochemistry and Biogeochemistry", Airlie, VA, May 18-21.
- 1994** Co-organizer of symposium on "Physical-Chemical Processes Controlling Contaminant Mobility in Aquatic Environments", Environmental Chemistry Division, American Chemical Society 207th National Meeting, San Diego, CA, March 13-17.
- 1994** Invited participant in the National Academy of Engineering workshop on "Academic Engineering Research in a Changing World: Issues, Problems, and Solutions", Irvine, CA, Feb. 18-20.

1993 *Who's Who in the World*, 11th ed.

1992 National Science Foundation Young Investigator Award.

1992 Invited discussion leader at the Gordon Research Conference on Environmental Sciences - Water, New Hampton, NH, June 15-19.

1990 Poster Session Chair, European Research Conference on Particles in Natural Waters and in Water Technology, Il Ciocco, Italy, Sept. 3-7.

1988 Student Research Award from the ACS Division of Environmental Chemistry for the paper "Slow Coordination Reactions in Aquatic Systems".

1975–1979 National Merit Scholar, Cornell University.

Member: American Association for the Advancement of Science, American Chemical Society, American Geophysical Union, American Society of Civil Engineers, American Society of Limnology and Oceanography, American Water Works Association, Association of Environmental Engineering and Science Professors, The Oceanography Society, Sigma Xi

Reviewer: *Environmental Science and Technology*, *Geochimica et Cosmochimica Acta*, *Deep-Sea Research*, *Journal of Environmental Engineering ASCE*, *Colloids and Surfaces*, *Journal of Physical Chemistry*, *Journal of the American Water Works Association*, *Nature*, *Separation Science and Technology*, *Water Environment Research*, U.S. National Science Foundation, U.S. Department of Energy, U.S. Department of Defense, U.S. Environmental Protection Agency, ACS/Petroleum Research Fund, Swiss National Science Foundation, Leibniz Association

Consulting: Ropes & Gray (2006), Kleinfelder (2005), Metcalf & Eddy (2004), Center for Law in the Public Interest (2004), Los Angeles Regional Water Quality Control Board (2004), Carollo Engineers (2002-2004), HDR Engineering (2001), Lahontan Regional Water Quality Control Board (2001), Southern California Coastal Water Research Project (2000-2001), Environmental Protection Agency Science Advisory Board (2000), Lord, Bissell & Brook (2000), Law Office of Irwin Stevenson (1999), TetraTech (1999), Pillsbury, Madison, and Sutro (1996), LaFollett, Johnson, de Haas, Fesler and Ames (1996), Zeneca (1995-1996)