# Ravi Jain

# Academic Background

B.S., M.S. Civil Engineering, California State University, Sacramento
Ph.D. Civil Engineering, Texas Tech University
M.P.A. Management and Public Policy, Harvard University
Additional graduate studies at Massachusetts Institute of Technology
Littauer Fellow in Public Administration, Harvard University
Fellow at Churchill College, Cambridge University

# Academic and Other Related Experience



2000 - Present Dean and Professor, School of Engineering and Computer Science (University of the Pacific) 1992 - 2000 Associate Dean for Research and International Engineering Program, Director Environmental Engineering Management Graduate Program, and Executive Director Interdisciplinary Research Centers; Professor Civil and Environmental Engineering (University of Cincinnati) 1990 - 1992 Founding Director, Army Environmental Policy Institute (an affiliate of the University of Illinois Urbana-Champaign) 1984 - 1993 Research Affiliate, Massachusetts Institute of Technology 1974 - 1993 Adjunct Professor, University of Illinois, Urbana-Champaign 1971 - 1989 Chief Environmental Division, U.S. Army Corps of Engineers, Construction Engineering Research Laboratory (an affiliate research organization of the Univ. of Illinois, Urbana-Champaign) 1985 - 1986 Fellow Churchill College, Cambridge University (on leave from the Research lab) 1961 - 1969 Consulting Engineer, Supervising Engineer, California Department of Water Resources and consulting firms

# **Teaching Interests**

- Managing Science Technology and Innovation
- Environmental Assessment and Policy
- Engineering Project Management
- Hazardous and Toxic Waste Management

### **Research Interests**

- Environmental Assessment, Restoration, and Policy
- Sustainability Metrics and Indicators
- Sustainable Materials for Infrastructure
- Technology Transfer, Commercialization, and the Innovation Process

# Selected Publications (published 15 books, over 180 journal articles, book chapters, and technical reports)

Books

Ray, C. and R. K. Jain (Eds), *Drinking Water Treatment - Focusing on Appropriate Technology and Sustainability*, Springer, New York, 2011, pp. 302.
Jain, R. K., H. C. Triandis, and C. Wagner-Weick, *Managing Research, Development and Innovation*, John Wiley, NY, 2010, pp. 415.
Sikdar, S., P. Glavic, and R. Jain (Eds), *Technological Choices for Sustainability*, Springer-Verlog, New York, 2004, pp. 441.
Jain, R. K., L. V. Urban, G. S. Stacey, H. E. Balbach and M. D. Webb, *Environmental Assessment*, McGraw Hill, NY, Second Edition, 2002, pp. 667.
Susskind, L. E., R. K. Jain and A. O. Martyniuk, *Better Environmental Policy Studies - How to Design and Conduct More Effective Analyses*, Island Press, Washington D. C., 2001, pp. 200.
Jain, R.K. and H.C. Triandis, *Management of Research and Development Organizations-Managing the Unmanageable*, John Wiley, NY, 1997, pp. 336. (Enlarged second edition, includes new chapters on: University Research Enterprise, Dealing With Diversity in R&D Organizations, Strategic Planning, and Global Perspectives on Innovation.) Translated into Chinese language, 2008.

# **Journal Articles**

Jain, R. K., "Drinking Water Security and Sustainability," *Journal*, *Clean Technology and Environmental Policy*, Vol. 12, No. 2, 2011.

Jain, R. K., Guest Editor Special issue, "Solid Waste Management: Focusing on Sustainability," *International Journal of Environmental Technology and Management*, Vol. 13, No. 1, 2010, pp. 1-112. Borglin, S., J. Shore, H. Worden, and R. Jain, "An Overview of the Sustainability of Solid Waste Management at Military Installations." *International Journal of Environmental Technology and Management*, Vol. 13, No. 1, 2010, pp. 51-83.

Sun, H., R. Jain, K. Nguyen, and J. Zuckerman, "Sialite Technology - Sustainable Alternative to Portland Cement," *Journal, Clean Technologies and Environmental Policy*, Vol. 12, No. 5, 2010, pp. 503-516. Stringfellow, W., R. Jain, "Engineering the Global Ecosystem," *Journal, Clean Technology and Environmental Policy*, Vol. 12, No. 3, 2010, pp. 197-203.

Lee, L., R. Jain, "The Role of FRP Composites in a Sustainable World," *Journal, Clean Technologies and Environmental Policy*, Vol. 11, No. 3, September 2009, pp. 247-249.

Jain, R. K., B. Shanahan, and C. Roe, "Broadening the Appeal of Engineering - Addressing Factors

Contributing to Low Appeal and High Attrition," *Journal*, *IJEE*, Vol. 25, No. 3, February 2009, pp. 405-418.

Jain, R. K., "Global Climate Change: Impacts and Policy Options," *Journal, Clean Technologies and Environmental Policy*, Vol. 10, No. 1, February 2008, pp. 1-5.

Jain, R.K., Guest Editor Special Issue, "Sustainable Deconstruction Recycle Strategies," *International Journal of Environmental Technology and Management*, Vol. 8, No. 2/3, 2008, pp. 113-321.

Jain, R.K., R. George, and R. Webster, "Sustainable Deconstruction and Role of Knowledge-Based Systems," *International Journal of Environmental Technology and Management*, Vol. 8, No. 2/3, 2008, pp. 261-274.

Jain, R.K., "Clean Technologies: Implementation and Technology Transfer Challenges," Journal Clean Technologies and Environmental Policy, Vol. 9, No. 2, May 2007, pp. 77-79.

Jain, R. K., Guest Editor Special Issue, "Building Deconstruction - - Environmental, Economic and Technological Issues," *International Journal of Environmental Technology and Management*, Vol. 6, No. 3 / 4 2006, pp. 233-420.

Jain, R. K., "Sustainability: Metrics, Specific Indicators and Preference Index," *Journal, Clean Technologies and Environmental Policy*, Vol. 7, No. 2, March 2005, pp. 71-72. [Most viewed Journal paper, 2005]
Jain, R. K., Guest Editor Special Issue, "International Perspectives on Selected Environmental Issues," *International Journal of Environmental Technology and Management*, Vol. 5, No. 2/3, 2005, pp. 117-317.
Jain, R. K., Guest Editor Special Issue, "Environmental and Economic Issues," *International Journal of Technology Transfer and Commercialisation*, Vol. 4, No. 3, 2005, pp. 255-420.

Premus, R., and R. Jain, "Technology Transfer and Regional Economic Growth Issues," *International Journal of Technology Transfer and Commercialisation*, Vol. 4, No. 3, 2005, pp. 302-317.

Mortz, D., C. Ray, and R. Jain, "Major Environmental Problems Facing the Hawaiian Islands," *International Journal of Technology Transfer and Commercialisation*, Vol. 4, No. 1, 2005, pp 79-104.

Jain, R. K., "Coal-fired Power Plants - - Science, Technology and Environmental Policy Issues", *Journal*, *Clean Technologies and Environmental Policy*, Vol. 6, No. 2, April, 2004, pp. 73-74.

Potential of Emerging Technologies", *International Journal of Technology Transfer and Commercialisation*, **Vol. 2, No. 1**, 2003, pp. 32-50.

Premus, R., N. Sanders and R. Jain, "Role of the University in Regional Economic Development: the U.S. Experience," *International Journal of Technology Transfer and Commercialisation*, Vol. 2, No. 4, 2003, pp. 369-383.

Martyniuk, A., R. Jain and H. Stone, "Critical Success Factors and Barriers to Technology Transfer: Case Studies and Implication," *International Journal of Technology Transfer and Commercialisation*, Vol. 2, No. 3, 2003, pp. 306-327.

Singh, R., and R. K. Jain, "Improving Local Economies Through Technology Transfer: Utilizing Incubators to Facilitate Cluster Development," *International Journal of Technology Transfer and Commercialisation*, Vol. 2, No. 3, 2003, pp. 249-262.

Jain, R. K., "Sustainable Development - Differing Views and Policy Alternatives," *Journal*, *Clean Technologies and Environmental Policy*, Vol. 4, No. 4, December 2002, pp. 197-198.
Smith, E., H. Zaghloul, and R. Jain, "Plasma Arc Thermal Destruction Applications -Technology Transfer Opportunities," *International Journal of Technology Transfer and Commercialisation*, Vol. 1, No. 4, 2002, pp. 373-384.

### **Editor Book Series and Journals**

**Coeditor-in-Chief** of *International Journal - Clean Technologies and Environmental Policy*, Springer Publisher 2001 - present.

**Editor-in-Chief** of *International Journal - Environmental Engineering and Policy*, Springer Publisher 1998 - 2002.

Associate Editor, International Journal of Technology Transfer and Commercialisation, Inderscience Publisher, 2000 - present.

Associate Editor, International Journal of Environment and Pollution, Inderscience Publisher, 2000 - present

Associate Editor, *International Journal of Environmental Technology and Management*, Inderscience Publisher, 2000 - present.

**Coeditor** (with Professor Lawrence Susskind--MIT) *Environmental Policy--Issues and Strategies*, book series by Island Press 2000 - 2006. Three books published.

**Review Book Manuscripts** Prior to Acceptance for McGraw Hill, Academic Press, and Wiley, 1990 - present.

**Coeditor** (with Professor Susskind - MIT) *Strategies for Sustainability*, new book series by *Springer*;-(Europe's largest science and engineering publisher) 2007 - present.

### **Professional Affiliations**

- American Society of Civil Engineers
- American Society of Engineering Education
- American Association for the Advancement of Science
- Association of Environmental Engineering Professors
- International Association for Impact Analysis
- International Society for Industrial Ecology
- Professional Engineer, State of California

### Honors

- Tau Beta Pi, National Engineering Honor Society
- Phi Kappa Phi, National Honor Society
- Sigma Xi, National Research Honor Society
- Who's Who in Engineering
- Who's Who in Science and Engineering

- Who's Who in Environmental Engineering
- Who's Who in American Men & Women of Science
- Member, American Academy of Environmental Engineers, 1983
- Fellow, American Society of Civil Engineers, 1985
- Member, New York Academy of Sciences, 1997
- Fellow, American Association for the Advancement of Science, AAAS, 2004