

## **CURRICULUM VITAE**

**Soroosh Sorooshian, Ph.D., N.A.E.,** Distinguished Professor  
*Dept. of Civil and Environmental Engineering and Dept. of Earth System Science*  
*Director, Center for Hydrometeorology and Remote Sensing (CHRS)*  
*The Henry Samueli School of Engineering,*  
*University of California, Irvine*  
*E/4130 Engineering Gateway, Irvine, CA, 92697-2175*  
*Tele: (949) 824-8825; FAX: (949) 824-8831*  
*Email: soroosh@uci.edu*

### **EDUCATION**

Ph.D. Engineering (Water Resources and Hydrologic Systems Analysis), UCLA, 1978  
of Dissertation: "Considerations of Stochastic Properties in Parameter Estimation  
of Hydrologic Rainfall-Runoff Models," 248 p., Director: John A. Dracup  
Engineer Degree Systems Engineering, UCLA, 1977  
M.S. Operations Research, UCLA, 1973  
B.S. Mechanical Engineering (highest honor), California Polytechnic State  
University (Cal Poly), San Luis Obispo, California, 1971

### **EXPERIENCE**

#### **University of California at Irvine, Irvine, California**

2003-present Distinguished Professor Depts. of Civil & Environmental Engineering and Earth System  
Science  
2003-present Director, Center for Hydrometeorology & Remote Sensing (CHRS), Dept. of Civil &  
Environmental Engineering, The Henry Samueli School of Engineering  
2003-present Director, World Lab Center for Hydrometeorology and Water Resources Engineering

#### **University of Arizona, Tucson, Arizona**

2004-present Adjunct Professor, Dept. of Hydrology and Water Resources  
2000-8/2003 Founding Director, NSF Science and Technology Center on "Sustainability of semi-Arid  
Hydrology and Riparian Areas" (SAHRA)  
8/96-2004 Professor and Regents Professor (Since 2000), Dept. of Hydrology and Water Resources  
8/89-8/96 Department Head and Professor, Dept. of Hydrology and Water Resources;  
Professor, Dept. of Systems and Industrial Engineering  
8/87-8/89 Professor of Hydrology and Water Resources and Systems and Industrial Engineering  
1/83-7/87 Associate Professor of Hydrology and Water Resources

#### **Case Western Reserve University, Cleveland, Ohio**

7/78-12/82 Assistant Professor of Systems Engineering and Civil Engineering

### **AREAS OF RESEARCH INTEREST**

Surface hydrology, hydroclimate modeling, application of remote sensing in hydrology, rainfall-runoff modeling, flood forecasting and control, identification and stochastic parameter estimation, watershed management, system simulation and analysis, operations research, decision analysis

### **HONORS AND AWARDS**

Walter Orr Roberts Lecturer in Interdisciplinary Sciences Award, American Meteorological Society, 2009  
– "*For bridging the interdisciplinary gap between hydrology, meteorology, and remote sensing.*"  
Orange County Engineering Council (OCEC) Distinguished Engineering Educator Award (2009)

American Society of Civil Engineers (ASCE) Orange County Branch 2007-2008 Distinguished Engineering Educator  
UNESCO Great Man-made River Prize, 2007 awarded to UCI Center for Hydrometeorology and Remote Sensing (CHRS) and NSF STC SAHRA (Sustainability of semi-Arid Hydrologic and Riparian Areas) Member, International Academy of Astronautics (IAA), 2007  
Fellow, Japan Society for the Promotion of Science (JSPS) Award, 2006, 1998, 1989  
Robert E. Horton Memorial Lectureship, American Meteorological Society, 2006 - *"For significant contributions for estimating precipitation from space-based imagery and for application to semi-arid region hydrology and water resources management."*

NASA Distinguished Public Service Medal, 2005 - *"For your distinguished record in providing scientific leadership for global water cycle research and assuring that NASA science is well integrated into international programs"*

William Nordberg Memorial Lectureship, NASA Goddard Scientific Colloquium, 2004

Member, National Academy of Engineering (NAE), 2003 -*"For the development of flood forecasting models used worldwide in hydrologic services"*

Fellow, International Water Resources Association (IWRA), 2001

Group Honor Award for Excellence, U.S. Department of Agriculture, for *"leading a multi-agency effort to provide critical hydroecological information and new measurement for sustaining our precious semi-arid natural resources"*, 2001

Regents Professor, University of Arizona, 2000

Fellow, American Association for the Advancement of Science (AAAS), 1997

Fellow, American Meteorological Society (AMS), 1995

Fellow, American Geophysical Union (AGU), 1994-*"For ingenious application of Stochastic methods in Hydrology that are of immense value in rainfall-runoff modeling and evaluating hydrologic response to climate change"*

Fellow, Udall Center for Studies in Public Policy, University of Arizona, Tucson, AZ 1993

Life Member, Phi Kappa Phi, 1988

Life Fellow, Indian Association of Hydrologists, Roorkee, India

### **HEARINGS AND TESTIMONIES**

Testimony for the hearing before the National Ocean Policy Study of the Committee on Commerce, Science, and Transportation, U.S. Senate on: Authorizations for the National Oceanic and Atmospheric Administration's Atmospheric and Satellite Programs, Chaired by Senator Kerry of Massachusetts, May 19, 1987.

Testimony on the "Potential Impacts of the El Nino and the Implications for Water Management Decisions in the U.S. Southwest" to the Subcommittee on Water and Power of the U.S. House of Representatives Committee on Resources, Washington, D.C., October 30, 1997.

### **PROFESSIONAL ACTIVITIES**

#### **Professional Societies**

American Association for the Advancement of Science (AAAS); American Geophysical Union (AGU); American Meteorological Society (AMS); American Society of Civil Engineers (ASCE); American Water Resources Association (AWRA), International Water Resources Association (IWRA), International Association of Hydrological Sciences (IAHS)

#### **Editorial**

1983-1988: Associate Editor, *Water Resources Research*  
1988-1992: Editor, *Water Resources Research*  
1993-2001: Editorial Board of *Iranian Journal of Water Resources Engineering*  
1995-2005: Member, Editorial Board, UNESCO International Hydrological Programme  
1996-2001: Special Editor for Hydrology, *Bulletin of the American Meteorological Society*  
1999-present: Editorial Board, *Scientia Iranica: International Journal of Science and Technology*  
2000-present: Editorial Board, *Advances in Water Resources*, Elsevier Publishing Company  
2002-2005: Associate Editor, Climate Change of the Encyclopedia of Hydrological Sciences

2002-present: Editorial Board, *Computer-Aided Civil and Infrastructure Engineering*  
 2004-present: Associate Editor/Editorial Board, *International Journal of Ocean & Oceanography*  
 2007-present: Associate Editor, *Journal of Hydrology*  
 2008-present: Member, Editorial Board IEEE Systems Journal  
 2009-present: Member, Editorial Board, Iranian Journal of Science and Technology (IJST)

### **Committee and Panel Assignments**

#### **International**

1981-1989: Member, Working Group of Water Resources of the International Federation of Automatic Control (IFAC)  
 1983-1987: Member, Hydrology 2000 Working Group, International Association of Hydrological Scientists (IAHS)  
 1991-1992: Member, Science Panel, GEWEX Continental-Scale International Project (GCIP), World Climate Research Programme  
 1992-1999: Member, Science Steering Committee, International Satellite Land Surface Climatology Program (ISLSCP)  
 1993-1999: Member, International Geosphere-Biosphere Programme (IGBP), Data Information System (DIS) Soils Working Group  
 1997-1999: Member, Global Energy and Water Cycle Experiment (GEWEX) Scientific Steering Group  
 1997-present: U.S. Member, World Meteorological Organization (WMO) Commission for Hydrology (CHy)  
 1997-2008: Director, World Laboratory Center in Hydrologic Sciences and Water Resources Engineering  
 1999-2008: Chair, GEWEX Scientific Steering Group, WCRP Joint Scientific Committee  
 6/1999: Member, International Organizing Committee (IOC), Third International Scientific Conference on the Global Energy and Water Cycle Experiment (GEWEX), Beijing, China, June 1999  
 2000-01: Member, Frontier Research System for Global Change (FRSGC) Panel, Tokyo, Japan  
 9/2001: Co-Chair, Organizing Committee, International Program Committee, 4<sup>th</sup> International Scientific Conference on the Global Energy and Water Cycle Experiment (GEWEX), Paris, France, September 2001  
 2002-2007: Member, UNESCO Theme Advisory Board of the Sixth Phase of the International Hydrological Programme, Theme Area 1: Global Change and Water Resources  
 2002: Corresponding Member for Section 1, International Academy of Astronautics  
 2004-Present: Member, Executive Committee of G-WADI UNESCO  
 2005: General Chair, 5th International Scientific Conference on the Global Energy and Water Cycle (GEWEX), Irvine CA, June 20-24, 2005  
 2006-2011: Member, Scientific Committee of the Ettore Majorana Foundation and Centre for Scientific Culture (EMFCSC)  
 2005: Director of 2005 International Summer School on Atmospheric and Oceanic Sciences (ISSAOS), L'Aquila, Italy, August 29- September 2, 2005  
 2006-Present: Member, U.S. National Committee for the International Hydrological Programme (IHP-UNESCO)  
 2009: World Meteorological Organization Intergovernmental Panel on Climate Change Fifth Assessment Report (AR5) (WMO IPCC AR5)  
 2009\_Present: NERC United Kingdom Changing Water Cycle Programme Advisory Group (NERC-UK)

#### **National**

##### **American Geophysical Union (AGU)**

1984-1987: Program Chair and Member of Program Committee for Fall Meetings, Hydrology Section  
 1984-2002: Member, Executive Committee, Hydrology Section  
 1994-1996: Chair, Langbein Lecture Selection Committee, Hydrology Section  
 1994-1996: Member, Publications Committee, Hydrology Section  
 1996-1997: Chair, Editorial Search Committee for *Reviews of Geophysics*  
 1996-1998: Chair, AGU Nominations Committee  
 1996-1998: Chair, Fellows Selection Committee, Hydrology Section

1996-1998: President-Elect, Hydrology Section  
1998-2000: President, Hydrology Section  
2001-2002: Chair, Union Committee to review Section Structure  
2000-2001: Chair, Nomination Committee for Hydrology Section Officers  
2002-2004: Member, Horton Medal Committee  
2004-2008: Chair, Public Affairs Committee (COPA)

***American Meteorological Society (AMS)***

1988-1991: Member, Committee on Hydrology  
1992-1995: Member, AMS Council  
1997-1998: AMS Nominations Committee  
1998-2002: Member, Planning Commission  
1998-2002: Member, Committee to review *Bulletin of the American Meteorological Society (BAMS)*  
2008-present: Member, Awards Nominations Committee

***Department of Agriculture (USDA)***

2007: Member, FACA committee to review the CCSP SAP on Impacts of Climate Change on US Ecosystem Impacts

***Department of Energy (U.S. DOE)***

2006-2010: Chairman, Climate Change Science Program Product Development Advisory Committee

***Los Alamos National Laboratory (LANL)***

2006-2011: Member, LANL Earth and Environmental Science (EES) Division Review Committee

***National Academy of Engineering (NAE)***

2004-2006: Liaison to the National Research Council (NRC) (for applied atmospheric sciences, space engineering, military [non-navel] engineering, acoustics, emerging technologies, and interdisciplinary areas)

2006-2009: Member, Special Fields and Interdisciplinary Engineering Peer Committee

***The National Academies- National Research Council (NRC)***

1990-1991: Member, Committee for the Restoration of Aquatic Ecosystems, Water Science and Technology Board (WSTB)  
1991-1998: Member and Ex-Officio, Climate Research Committee (CRC), Board on Atmospheric Sciences and Climate (BASC)  
1993-1994: Member, NRC Panel: Study on the Long-Term Retention of Selected Scientific and Technical Records of the Federal Government, Commission on Physical Sciences, Mathematics, and Applications  
1992-1998: Member, NRC Committee on Geophysical and Environmental Data (CGED), Board on Earth Science and Resources (BESR)  
1993-1999: Chair, GEWEX Panel, NRC Board on Atmospheric Sciences and Climate (BASC)  
1996-1998: Ex-Officio Member, NRC Committee on Global Change Research (CGCR), Board on Sustainable Development  
2000-2001: Member, NRC Committee to review NASA's Earth Science Enterprise (ESE) Research Strategy  
2003-2005: Member, NRC Committee to Review the U.S. Army Corps of Engineers Upper Mississippi River- Illinois Waterway Restructured Feasibility Study.  
2004-2006: Chair, Committee to Assess the National Weather Service Advanced Hydrologic Prediction Service Initiative (AHPS).  
2005: Member, NRC Committee to Review GEWEX-Americas Prediction Project (GAPP)  
2007-2012: Member, Beckman Center Advisory Board  
2007-2009: Member, Space Studies Board  
2007: Member, Water Science and Technology Board  
2007: Chair, Panel to review the CCSP Draft Synthesis and Assessment Product 5.3  
2007: Member, Panel on Strategies and Methods for Climate-Related Decision Support

***National Atmospheric and Space Administration (NASA)***

- 1990-1991: Member, Working Group of Electronically Scanned Thinned Array Radiometer (ESTAR) Science Team
- 1994-1997: Chair, Panel on Physical Climate and Hydrology
- 1994-1997: Member, Science Executive Committee (SEC), InterWorking Group (IWG) of Earth Observing System (EOS)
- 1994-1997: Member, User Working Group, Oak Ridge National Laboratory (ORNL) Data Acquisition and Archival Center (DAAC)
- May 1999: Member, Visiting Review Committee, Earth Sciences Directorate, Goddard Space Flight Center, Greenbelt, MD
- 1999-2005: Member, Earth Sciences Data and Information Systems and Services Advisory Subcommittee (ESDISSAS)
- 2003: Member, GeoDESIC (Geophysical Data Exploration for Seasonal to Interannual Climate) Advisory Board, NASA REASoN CAN Proposal

***National Oceanic and Atmospheric Administration (NOAA)***

- 1993-2003: Member, Data Management Advisory Panel NRC
- 1996: Co-leader, National Weather Service (NWS) Disaster Survey Team for the Northeast Flood of January 1996
- 1997-1998: Member, Search Committee for Director of the National Weather Service
- 1998-2002: Member, Science Advisory Board (SAB)
- 1998-2002: Chair, Science Advisory Board Subcommittee for Data Systems
- 2000-2005: Member, Committee on Climate and Global Change (CGC)
- 2000-2001: Member, Panel on Strategies for Climate Monitoring
- 2002-2005: Member, Council on Long-Term Climate Monitoring (CLTCM)
- 2002-present: Emeritus Member, NOAA Science Advisory Board

***National Water Research Institute (NWRI)***

- 2004-present Member, Research Advisory Board (RAB)

***Pacific Northwest Hydrologic Observatory (PNWHO)***

- 2005-Present: Member, Science Advisory Board

***American Water Resources Association (AWRA)***

- 1986-1987: Chair, Statistics and Modeling Committee
- 8/93: Technical Co-Chair, 29<sup>th</sup> Annual AWRA Conference, "Ground Water Resources Planning" Tucson, Arizona

***University Corporation for Atmospheric Research (UCAR)***

- 1999: Member, Advisory Panel, UCAR National Centers for Environmental Prediction (NCEP)
- 2001-2006: Member, Board of Institutional Trustees
- 2002-2007: Chair, UCAR Personnel Committee

***University Council on Water Resources (UCOWR)***

- 1987-1990: University of Arizona Delegate

***Universities Space Research Association (USRA)***

- 10/98-9/99: Member, Advisory Committee for the 1999 Graduate Summer Student Program in Earth System Science, Goddard Visiting Scientist Program
- 1996-2002: Member, Science Council for Earth Sciences

***Other Review Boards and Committees***

- 1994: National Forum on Environment and Natural Resources (RND), Washington, D.C., Mar. 28-30
- 1992-1995: Member, Advisory Committee, Terrestrial Ecosystems Regional Research and Analysis (TERRA) Laboratory
- 1993: Member, Jet Propulsion Laboratory Earth Probe, Pasadena, California
- 1994: Committee for Review of the Research and Development Strategy for the U.S. Global Change Research Program (USGCRP), Sponsored by the NRC Board on Global Change
- 1994: Member, Interagency Working Group of Regional Assessment of Freshwater Ecosystems and Global Change in North America

1995-present: Member, Committee on the Encyclopedia of Life Support Systems (EOLSS)  
 1997-present: Chair, Scripps Experimental Climate Prediction Center (ECPC) Advisory Committee  
 2002-2003: Member, Stormwater Advisory Committee of City of Tucson  
 2002-Present: Member, External Advisory Committee of Cooperative Remote-sensing Science and Technology Center (CREST)  
 2003-Present: Member, Executive Committee of NSF-STC Sustainability of semi-Arid Hydrology and Riparian Areas (SAHRA)  
 2005-present Member, Advisory Board on watershed preservation issues, USC Center for Sustainable Cities Program  
  
 2006 Member, Project Advisory Board (PAB), NSF EPSCoR Idaho  
 2008-present Member, Advisory Board, Consortium of Universities for the Advancement of Hydrologic Science, Inc. (CUAHSI)

***External Examining and Assessment***

1992: Member, *Review Panel*, Lawrence Berkeley Laboratory Earth Sciences Program  
 1994: Member, *Review Panel*, Office of Research and Development, Global Change Research Program, “Biosphere Interactions Modeling of the U.S. Environmental Protection Agency at ERL-C”, Corvallis, Oregon  
 1997-present Chair, *Advisory Panel*, Experimental Climate Prediction Center (ECPC), Scripps Institute, San Diego, CA  
 1999: Member, *Review Panel*, Pacific Northwest National Laboratory (PNNL) Global Change Program  
 Los Alamos Review  
 2005 Member, *Advisory Panel*, GPM-GV Global Precipitation Measurement-Ground Validation, NASA GSFC, Greenbelt, MD  
 2005 Chair, *Review Panel*, International Research Institute (IRI), Columbia University  
 2005 Member, *science review panel*, CICS, U of Maryland, College Park Campus  
 2006 Member, *Review Panel*, Pacific Northwest National Laboratory (PNNL) Global Change Program  
 Los Alamos Review  
 2007 Member, evaluation committee Frontier Research Center for Global Change (FRCGC), Japan Agency for Marine-Earth Science and Technology (JAMSTEC)  
 2007 Member, Review Panel, NSF Vermont EPSCoR, Burlington, VA  
 2007 Member, Review Panel of Yucca Mt. Infiltration Model  
 2008 Member, evaluation committee Institute of Observational Research for Global Change (IORGC), Japan Agency for Marine-Earth Science and Technology (JAMSTEC)  
 2009 Member, Review Panel, National Severe Storm Laboratory (NSSL), University of Oklahoma, Norman, OK  
 2009 Member, Review Panel, Desert Research Institute, Division of Hydrologic Services, NV

***External Reviewer University Programs***

1994: University of Oklahoma, Hydrology Program, Norman, OK, Sept. 19-21  
 1998 University of Nevada, Las Vegas (UNLV), Water Resources Management (WRM) Graduate Program  
 2003 Georgia Tech, School of Earth and Atmospheric Sciences  
 2004 University of Washington, Dept of Civil and Environmental Engineering  
 2005 University of Texas at Austin, Dept. of Geological Sciences  
 2009 St. Cloud University, MN, Dept. of Earth and Atmospheric Sciences  
 2010 University of Colorado at Boulder, Cooperative Institute in Environmental Science (CIRES)

***University of California, Irvine (Current and Other Important Committees)***

2003-present Member, Urban Water Research Center Review Board  
 2005-2008 Academic Senate Graduate Council  
 2005-2006 Chair, faculty of the Henry Samueli School of Engineering; Divisional Senate Assembly representative  
 2005-present Member, CalIT(2) Division Council  
 2005 Chair, Search Committee - Director for the Urban Water Research Center

2005-2006 Chair, Search Committee Vice Chancellor for Research and Graduate Studies  
 2005-present Member, Faculty and Lecturer/TA Teaching Quality committees, CEE Dept.  
 2005-present Member, Graduate Affairs committee, CEE Dept.  
 2003-present Member, local organizing committees for conferences and meetings as well as other college/department committees.  
 2007 Member, Search Committee HSSoE Dean  
 2007-present Member, Vice Chancellor for Research Advisory Committee  
 2007-present Member, Academic Senate Subcommittee on International Education (SCIE)  
 2007-present Member, Distinctions Committee

***University of Arizona Committees***

1986-1988: Chair, University Committee on Research Computing  
 1986-1987: Committee for Computational Sciences  
 1987-1988: Chair, University Review Committee for Systems and Industrial Engineering Department  
 1987-1988: Water Resources Policy Planning Committee  
 1988-2004: Committee on Remote Sensing  
 1988-1993: Coordinating Committee on Global Change  
 1989-1999: Vice-President for Research Advisory Committee  
 1990-1991: Advisory Committee on International Programs  
 1991-1993: Chair, Computer Committee of College of Engineering and Mines  
 1992-1993: Chair, Coordinating Committee on Global Change  
 1992-1993: Member, Dean's Review Committee, College of Engineering and Mines  
 1993-Present: Member, International Alumni Advisory Board  
 1994: Chair, Search Committee for Head of Civil Engineering and Engineering Mechanics Dept.  
 1994: Member, Search Committee for Head of Geosciences Dept.  
 1994: Member, Sunset Review Committee for SERC  
 1997: Chair, Search Committee for Head of Dept. of Civil Engineering  
 1997-1998: Acting Chair, Remote Sensing Committee  
 1997-1998: Member, Search Committee for Dean of College of Engineering and Mines  
 1998: Member, Search Committee for Vice-President for Advancement  
 1998-2001: Member, Strategic Planning and Budget Advisory Committee (SPBAC)  
 1998-1999: Chair, NCA Self-Study Working Team 4  
 1999: Chair, SERC Review  
 1999: Member, Udall Center for Public Policy Faculty Advisory Committee  
 1999-2002: Member, Governing Board for Center for Middle Eastern Studies  
 2000-2001: Member, Prop 301 Steering Committee on Water  
 2000-2001: Chair, Surface Water Position Search Committee  
 2000-2001: Member, Atmospheric Sciences Position Search Committee  
 2001-2002: Member, Kisiel Lecture Committee  
 2001: Member, Academic Program Review Committee for Dept. of Geosciences  
 2002: Member, Technology and Research Initiative Fund (TRIF) Water Advisory Committee

**PUBLISHED PAPERS**

Author and co-author of 160+ journal publications and 6 books to date (ISI citation h-index 39)  
 Complete publications list posted on HSSoE website

**INVITED PRESENTATIONS (Since arrival at UCI in July 2003)**

***Educational, governmental institutions (or similar organizations)***

Sorooshian, S., "World Laboratory Postdoctoral Scholarships in the Hydrological Sciences and Water Resources Engineering: Progress Report," World Laboratory Centre, Tucson, AZ, 2003

Sorooshian, S., "A summary of GEWEX Phase-II status," GAPP-PI Meeting, Seattle, WA, July 21-24, 2003

Sorooshian, S., "The Future of Hydrologic Services: An Academic's perspective", NWS Corporate Board Meeting Washington, D.C. August 26, 2003

Sorooshian S., "Role of Advanced Observational and Information Technologies for Addressing Global Change Water Issues", RICE-FotoFest '04: Global Forum on Water, Houston, TX., April 1-4, 2004

Sorooshian, S., "A Brief Review of Research and Educational Goals," UCI CEE Affiliate Meeting, April 7, 2004

Sorooshian, S., "Issues and opportunities in Hydrologic sciences and water resources Engineering" UCI Engr 1: Career Opportunities for Scientists and Engineers," University of California, Irvine, Irvine, CA, April 12, 2004

Sorooshian, S., "GEWEX Future Research Direction," NOAA-GAPP PIs meeting, Boulder, CO., August 30-31, 2004

Sorooshian, S., "Global Warming and the Prospect of a Continuing Drought in the West", Southern California Water Committee 20th Annual Meeting, Los Angeles, CA October 28, 2004

(Keynote Speaker) Sorooshian, S., "Water Distribution and Availability", William Nordberg Memorial Lecture, Goddard, Scientific Colloquium, Washington, D.C., November 19, 2004

Sorooshian, S., "Is there Another 500-year Drought in the Future for the West?" Kern County Water Authority, Bakersfield, CA, February 11, 2005

Sorooshian, S., Panel Discussion "Water: How to go about Beating the Drought!", Information Management Network's 3rd Annual California Municipal Finance Conference, San Francisco, CA, February 17-18, 2005

Sorooshian, S., "Is there Another 500-year Drought in the Future for the West?" Kern County Water Authority, Bakersfield, CA, February 11, 2005

Sorooshian, S., "Recent Developments in Meeting Hydrologic Requirements for Meteorologic Information", UCLA Atmospheric and Oceanic Dept. Seminar, Los Angeles, CA, February 16, 2005

Sorooshian, S., Panel Discussion "Water: How to go about Beating the Drought!", Information Management Network's 3rd Annual California Municipal Finance Conference, San Francisco, CA, February 17-18, 2005

Sorooshian, S., CEMAGREF, "Precipitation estimation from Satellite observations- The PERSIANN system", Paris, France, April 21, 2005

(Speaker and panel member) Sorooshian, S., "International Hydroclimatology Research Programs: Learning from Historical Information and Improving Future Predictions at the Continental Scales," National Research Council workshop, Iran, May 14-19, 2005

Sorooshian, S., US House seminar "Southwest Water", Washington, D.C., May 24, 2005

Sorooshian, S., "Rainfall estimation from satellite data for hydrological applications," Rainfall-runoff Modeling Seminar, Oregon State University, Corvallis, OR, June 8, 2005

Director and Speaker, Sorooshian, S., "Review of Parameterization and Parameter Estimation for Hydrologic models," International Summer School on Atmospheric and Oceanic Sciences, L'Aquila, Italy, August 29- September 2, 2005

Sorooshian S., "Parameterization of Land-surface models Using Remote Sensing and Multi-Criteria Optimization Methods", Dickinson Symposium, Georgia Tech, Atlanta, GA, October 17-18, 2005

(Keynote Speaker) Sorooshian, S, "Role of Advanced Observational and Information Technologies for Addressing Hydrometeorologic Issues," Bureau of Meteorology Research Centre Workshop, Melbourne, Australia, October 3-4, 2005

Sorooshian S., "Parameterization of Land-surface models Using Remote Sensing and Multi-Criteria Optimization Methods", Dickinson Symposium, Georgia Tech, Atlanta, GA, October 17-18, 2005

Sorooshian S., "Role of TRMM and GPM in GEWEX and WCRP", Precipitation Measurement Mission (PMM) 2005 Science Team Meeting, Monterey, CA, Dec. 12-15, 2005

Sorooshian, S. "Evolution of hydrometeorologic Forecasting: How much progress have we made? ", Frontiers of Geosciences colloquium, LANL, Las Alamos, NM, April 10, 2006

(Keynote Speaker) Sorooshian, S, 2nd WWRP Symposium on QPF and Hydrology, Boulder, CO, June 7, 2006

(Keynote Speaker) Sorooshian, S., "The Full Water Cycle: Climate Change and Water Dynamics", Conference on Climate Change and Water in the Prairies, University of Saskatchewan, Saskatoon, SK, June 21-23, 2006

Sorooshian, S. , "Coupling of Hydrometeorology, Water Cycle Dynamics and Climate Change: How much Progress have we made?" Seminar, Arizona State University, Tempe, AZ, August 23, 2006

Sorooshian, S., "Recent developments in hydrometeorologic information for hydrologic and water resources applications", Seminar, University of Southern California (USC), Los Angeles, CA, Sept. 20, 2006

Sorooshian, S., "The Influence of Climate Change on Southern California's Water Supply", UCI CEE Affiliates meeting, Irvine, CA June 14, 2007

Sorooshian, S., "Communicating the current state of understanding of Climate and Water Resources issues: from professionals to the general public", Seminar Indiana University at Bloomington, Indiana October 25-26, 2007

Sorooshian, S. "Progress towards improved river flow and flood forecasting", Seminar, University of California, Irvine, October 31, 2007.

Sorooshian, "Hydro-climate information & decision-making in water resources (with a few experiences), NRC Climate-Related Decision Support meeting, March 4-5, 2008, Washington, D.C.

Sorooshian, S. , "Evaluation of Hydrologic modeling: Meeting the requirements from flood forecasting to hydroclimate predictions", Texas A&M University, Texas, March 19, 2008

(Keynote Speaker) Sorooshian S., "How Predictable Is The Climate System: Droughts, Floods and Extreme Events?", 3rd International Professional Geology Joint Conference of the Arizona Hydrological Society, and American Institute of Professional Geologists. Northern Arizona University, Flagstaff, AZ September 22, 2008

Sorooshian, S., "How Predictable Is The Climate System: Droughts, Floods and Extreme Events?", Sharif University of Technology, Tehran, Iran, March 8, 2009

(Invited Keynote speaker) Sorooshian, S., "Application of remote sensing and hydroclimate models in study of present and prediction of future drought studies." International Conference of Water Crisis, University of Zabol, Iran, March 10-12, 2009

Sorooshian, S., "Application of system theory in climate and hydrologic modeling", Seminar, Ohio State University, Columbus, OH April 17, 2009

Sorooshian, S. "Predictability of Drought & Hydrologic Response of Arid & Semi-Arid Regions to Climate Variability", Conference on Confronting National Drought, School of Agriculture Center for Drought Studies, Shiraz University, Iran, May 13, 2009

Sorooshian, S., "Hydrometeorologic Forecasting: Model Calibration and Parameter Estimation Requirements", Department of Civil Engineering, University of Science and Technology, Isfahan, Iran, May 16, 2009

Sorooshian, S., "Effects of Global Warming on Water Resources " Sustainable Energy Technology Club, University of California, Irvine, June 2, 2009

Sorooshian, S., "Predictability of Hydrologic extremes and Response of Arid and Semi-Arid Regions to Climate Variability", SAHRA Annual Meeting, Tucson, AZ, September 23-25, 2009

***Invited presentations at professional meetings*** (Since arrival at UCI in July 2003)

Sorooshian, S., "A summary of GEWEX Phase-II status," GAPP-PI Meeting, Seattle, WA, July 21-24, 2003

Sorooshian, S., "Global Water Resources Issues: The Role of Desalination in a Sustainable Water Supply," Straw Bale Forum, Hat Ranch, Williams, AZ, July 31-August 3, 2003

Sorooshian, S., "The Future of Hydrologic Services: An Academic's perspective", NWS Corporate Board Meeting Washington, D.C. August 26, 2003

Sorooshian, S., "GEWEX Report to GHP," 9th session of the GEWEX Hydrometeorology Panel (GHP), GKSS, Geesthacht, Germany, Sept.22-26, 2003

WCRP Officers, Chairs, and Directors Meeting, WMO, Geneva, Switzerland, January 21-23, 2004

Sorooshian, S., "Report to GEWEX SSG XVI," Marrakech, Morocco, Jan. 26-30 2004

Sorooshian, S., "GEWEX Report to JSC," XXV-WCRP, Moscow, Russia, Mar. 1-6 2004

Sorooshian S., Workshop on the Hydrological Ensemble Prediction Experiment (HEPEX), Reading, UK, March 8, 2004

Sorooshian, S., "The Global Energy and Water Cycle Experiment (GEWEX) contributions to climate research", presentation, CLIVAR Annual Conference, Baltimore, MD, June 21-25, 2004.

Sorooshian, S., "The future of GEWEX and Water Cycle Activities beyond 2012," GEWEX Executive Meeting, Washington, DC, July 20-22, 2004.

Sorooshian, S., "Hydrologic Cycle and It's Connection to Climate: New Tools, Recent Understandings," Straw Bale Forum, Hat Ranch, Williams, AZ, July 29-31, 2004

Sorooshian, S. "Error Analysis of High Resolution Satellite Precipitation Estimates," 8th International Conference on Precipitation, Vancouver, CA, , August 8-11, 2004.

Sorooshian, S. "Overview of the Status of the Water Situation Worldwide and the Latest Climate Events of Droughts and Floods," 32nd Session of the International Seminars on Planetary Emergencies of the ICSC-World Laboratory, Erice, Italy, August 18-24, 2004

Sorooshian, S., "Drought in the West," California Urban Water Conference, San Diego, CA, August 25-27, 2004.

(Session organizer and speaker) Sorooshian, S., "The Role of International Water Cycle Research Programs in Developing Integrated Water Resources Management Strategies," American Institute of Hydrology International Conference, October 17-21, 2004, Las Vegas, NV

Sorooshian, S., "Global Precipitation Observation from Satellite Image Using Artificial Neural Networks," American Meteorological Society meeting, San Diego, January 9-13, 2005

Sorooshian, S., GEWEX Report to JSC, XXVI-WCRP, Guayaquil, Ecuador, March 14-18, 2005

Sorooshian, GEWEX Hydrology Panel meeting, Melbourne, Australia, September 26-30, 2005

Sorooshian, S., Pontifical Academy of Sciences Working Group, "Water Distribution and availability: An Overview of the Hydrologic Cycle, Its Connection to Climate and Impact on Water Resources Management Strategies," Vatican City, Italy, November 12-15, 2005

(Keynote Speaker) Sorooshian, S., "The Interplay Between Water Resources Management and Hydroclimate Variability in the Semi-Arid Southwest U.S.," Horton Lecture, American Meteorological Society (AMS), Atlanta, GA, January 29-February 2, 2006

Sorooshian, S. CLIVAR-SSG meeting, Buenos Aires, AR, April 19-23, 2006

(Keynote Speaker) Sorooshian, S., "Will QPF make a marked improvement in flood forecasting?," WWRP QPF/Hydro Symposium, Boulder CO, June 5-9, 2006

(Keynote Speaker) Sorooshian, S., "Climate Change and Water in the Prairies", Conference, University of Saskatchewan, Saskatoon, SK, June 21-23, 2006

Sorooshian, S. "Our Changing Planet: Water, Earth, Wind and Fire," California Zoroastrian Center conference, Los Angeles, CA, July 9, 2006.

Sorooshian, S., "Status of the Water Resources Worldwide and Recent Developments in Hydrometeorologic Forecasting", Western Pacific Geophysics Meeting (WPGM), Beijing, China, July 24-27, 2006

Sorooshian, S., "GEWEX", NOAA CPPA PI meeting, Tucson, AZ, August 14-16, 2006

Sorooshian, S. Special Lecture, JSPS (Japan Society for the Promotion of Science) Fellows program, "Overview of the Status of the Water Situation: Droughts and Floods", Niigata University Institute of Science and Technology, Japan, September 3-15, 2006

Sorooshian, S., "Past Successes and Future Challenges in Addressing the Global Energy and Water Cycle Questions," Earth System Science Partnership (ESSP) Open Science Conference, Beijing, China, November 9-12, 2006.

Sorooshian, S. "Flood aggregation modeling," GM Global conference, Norwood, MA, November 17, 2006

Sorooshian, S. "Progress towards hydrometeorological forecasting," Eugene Rasmusson Symposium, American Meteorological Society 87th Annual Meeting, January 14-18, 2007

(Keynote Speaker) Sorooshian, S., "Integration of Hydrometeorological and Climate information in Water Resources Operation and Management: How much progress has been made?" International Conference on Water Resources Management in the Islamic Countries, RCUWM, Tehran - Iran, 19 - 20 February 2007

Sorooshian, S., "Hydrometeorologic Forecasting: How much Progress to date and what strategy to follow into the future?", International Symposium, Hydrology delivering Earth System Science to Society (HESSS), Tsukuba, Ibaraki, Japan, Feb. 28 -March 2, 2007.

Sorooshian, S., "Hydrometeorological Prediction requirements", Workshop on Satellite Observations of the Global Water Cycle (SOGWC), Irvine, CA, March 7-9, 2007

Sorooshian, S. "Drought in the Southwest", 14<sup>th</sup> Annual Conference, Urban Water Institute, Del Mar California, August 24, 2007

Sorooshian S., "*Role of advanced Observational and Information Technologies for Addressing Global water issues*", Seminar Northrop Grumman September 12, 2007, Los Angeles, California, September 12, 2007

Sorooshian, S. OC Water District, Orange, CA January 11, 2008

Sorooshian, S. "Climate change and the global water cycle: Latest news from earth and space," Rotary Club, Westlake, CA, January 10, 2008

Sorooshian S., "Critical Downstream Issues--Water and Waste", Yuma Pacific (YPSW) meeting, Irvine, CA, January 23-25, 2008

Sorooshian, S., "How predictable is the Climate system: Droughts, Floods, and Extreme events", Inside Edge, Irvine, CA, February 20, 2008

Sorooshian, S. "Evaluation of Hydrologic modeling: Meeting the requirements from flood forecasting to hydroclimate predictions," Seminar Texas A&M University, College Station, TX March 19, 2008

Sorooshian, S. "GEWEX perspective on extremes: emphasis on hydrologic extremes", Joint Scientific Committee meeting, Arcachon, France, March 30-April 5, 2008

Sorooshian, S. "Climate change and the global water cycle: recent regional experiences", Webinar, Association of State and Territorial Health officials, April 29, 2008

Sorooshian, S. "Evolution of Hydrologic modeling: Meeting the requirements from flood forecasting to hydroclimate predictions," 1<sup>st</sup> International Conference: From Deserts to Monsoons, Crete, Greece, June 1-6, 2008

Sorooshian, S. "Water and Delivery of "Useful Hydro-Climate information for the Mid-East region", Conference, NASA-World Bank-USAID, Porto Marina, Egypt, June 19-22, 2008

Sorooshian S., "Consideration of climate in water resources planning: requirements, expectations, and current reality" U.S. CLIVAR annual meeting, Irvine, CA 92617 July 14, 2008

Sorooshian, S., "Managing Growth in Western Cities: Water Resources and the Regional View-water resources for the Sun Corridor and what the region can expect as a result of global warming." Straw Bale Forum, Williams Ranch, AZ July 16-20, 2008

(Keynote speaker) Sorooshian, S. "Assessment and impact of regional water resources variability on energy production and development", IAEA conference, Vienna, Austria, September 30-October 1, 2008

Sorooshian, S., "The Predictability of California's Hydroclimate System: Lessons from Historical Records and Message from Climate Models", California Council on Science and Technology Board meeting, Irvine, CA, October 8, 2008

Sorooshian, S., "Critical Downstream Issues—Water and Waste", California Industrial Hygiene Council

conference, San Diego, CA, December 8-10, 2008

Sorooshian S., "The Legacy of Anthony Hollingsworth in Hydrometeorology: remote sensing, data assimilation, and ensemble predictions", Hollingsworth Symposium, AMS Annual Meeting, Phoenix, Arizona, January 15, 2009

Sorooshian S., "Climate Variability and Hydrologic Extremes: Lessons from the past, understanding of the present and prediction of the future - A personal viewpoint", Walter Orr Roberts Lecture, AMS Annual Meeting, Phoenix, Arizona, January 15, 2009

Sorooshian, S., "Surface Water and Watershed Hydrology", UCCE Groundwater Hydrology Program Short-Course, Anaheim, CA February 24, 2009

Sorooshian, S., "Urban Storm water and Water Resources Management and Operational Issues: Climate Change and Variability Influence", UCCE Groundwater Hydrology Program Short-Course, Anaheim, CA February 24, 2009

Sorooshian, S., "Regional Climate Modeling: Predictability of Droughts?", Iranian Met Weather Service (IRIMO), Iran March 9, 2009

Sorooshian, S. "Hydrometeorologic Forecasting: Model calibration and Parameter Estimation requirements", Water Resources in developing countries: Planning and management in a climate change scenario workshop, The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy, April 17-May 8, 2009

Sorooshian, S. "Integration of Hydrometeorological and Climate information in Water Resources system operation and planning", Water Resources in developing countries: Planning and management in a climate change scenario workshop, The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy, April 17-May 8, 2009

(Invited Keynote Speaker) Sorooshian, S. Eighth International Congress of Civil Engineering (8icce) Shiraz, Iran, May 11-13, 2009

Sorooshian, S. Iranian Meteorological Service (IRIMO) Round Table, Tehran, Iran, May 21, 2009

Sorooshian, S. "Assessment and Impact of regional climate change and variability on water resources system operation and development", IASCE, Irvine, CA, June 3, 2009

Sorooshian, S. "Potential Climate scenarios and impact on eco-hydrology / water resources: Examples from Arizona and the Southwest", Straw Bale Forum, Hat Ranch, Williams, AZ July 30, 2009

Sorooshian, S. "Challenges in Precipitation Estimation for Hydrometeorological Applications", Parallel Science Conferences-Sixth International Scientific Conference on the Global Energy and Water Cycle and Second iLEAPS Science Conference, Melbourne, AU 24-28 August 2009

Sorooshian, S." Hydrologic Response of Arid and Semi-Arid Regions to Climate Variability and extremes", UNESCO workshop, Amman Jordan, November 23-27, 2009

Sorooshian, S. "Climate and Extreme Events: A Hydrologic perspective", AMS Annual Meeting, Atlanta, GA January 18-21, 2010

(Invited Keynote Speaker) Sorooshian, S., "Potential Scenarios of the impact of climate variability on river basins and review of progress in modeling and observation efforts", 8<sup>th</sup> IREC, Ahwaz, Iran January 26-28, 2010

Sorooshian, S., "Stationarity is Dead-So What's Next?" NOAA-DWR 8<sup>th</sup> Annual Climate Prediction Applications Science Workshop, San Diego, CA March 2-4, 2010

Sorooshian, S., "Changing patterns of precipitation and impact on ground water recharge and runoff generation", G-WADI Arid and Semi Arid Development through Water Augmentation (ASADWA) conference, Valparaiso, Chile, 5-10 December 2010

### **CONFERENCES AND SYMPOSIA ACTIVITIES**

Chair of the Water Resources Session of the American Automatic Control Council (AACC), Denver, Colorado, June 1979.

Chair and Organizer of the Model Calibration Session of the IFAC Symposium Water and Related Land Resources Systems, Cleveland, Ohio, May 28-31, 1980.

Chair and Organizer of the Water Resources Session of the Joint Automatic Control Conference (JACC), San Francisco, California, August 12-15, 1980.

Panelist at the "Risk/Benefit Analysis in Water Resources Planning and Management", Engineering Foundation Conference, Asilomar, Pacific Grove, California, September 21-26, 1980.

Chair of the "Parameter Uncertainties" Session of the International Symposium on Rainfall-Runoff Modeling, Mississippi State, Mississippi, May 18-21, 1981.

Chair and Organizer of the "Application of Computer Graphics in Water Resources Modeling I & II" of the JACC, University of Virginia, Charlottesville, Virginia, June 17-19, 1981.

Panelist at the Workshop on "Global Poverty and Resources: Cost of Inaction", Sponsored by the Club of Rome and Rockefeller Foundation, Bellagio, Italy, February 15-19, 1982.

Panelist at the second workshop on "Global Poverty: Cost of Inaction", Sponsored by the ORINOQUIA Institute and the Club of Rome, Caracas, Venezuela, June 6-9, 1982.

Chair and Organizer of the special symposium on "Parameter Estimation of Rainfall-Runoff Models", American Geophysical Union Fall Meeting, San Francisco, California, December 7-15, 1982.

Chair of the session "Accuracy and Worth of Forecasting" of the AWRA Symposium on "A Critical Assessment of Forecasting in Western Water Resources Management", Seattle, Washington, June 11-13, 1984.

Organizer and Co-chair of the Session "Selecting the Right Model in Hydrology" of the IFAC 9<sup>th</sup> World Congress Symposium, Budapest, Hungary, July 2-6, 1984.

Organizer of the special symposium on "Hazardous/Nuclear Waste Management", SWARM/AAAS Meeting, Tucson, Arizona, March 19-23, 1985.

Co-organizer of the Water Resources Workshop, Tucson, Arizona, March 19-22, 1985.

Co-organizer of the NATO-ASI on "Engineering Reliability and Risk in Water Resources", Tucson, Arizona, May 19-June 2, 1985.

Member of the Panel of Distinguished Scholars, 4<sup>th</sup> International Hydrology Symposium on Multivariate Analysis of Hydrologic Processes, Fort Collins, Colorado, July 15-17, 1985.

Chair of the session "Rainfall-Runoff Analysis and Flood Routing", ASCE Water Forum 1986 Conference, Long Beach, California, August 4-6, 1986.

Chair of the session "General Surface Water Poster", American Geophysical Union Fall Meeting, San Francisco, California, December 8-12, 1986.

Chair of the session "General Ground Water Poster", American Geophysical Union Fall Meeting, San Francisco, California, December 7-11, 1987.

Chair of the session "River System Modeling and Forecasting, III: Development and Applications," 3<sup>rd</sup> Water Resources Operations and Management Workshop: Computerized Decision Support Systems for Water Managers, Fort Collins, Colorado, June 27-30, 1988.

Keynote speaker at the 2<sup>nd</sup> Annual Japan Society of Hydrologic and Water Resources Meeting, "The State of Hydrologic and Water Resources Research in the United States," Kyoto, Japan, August 4-5, 1989.

Co-chair of the session "Watershed Runoff Processes," National Conference, ASCE Hydraulics Division, San Diego, California, July 30-August 3, 1990.

Co-chair and Co-organizer of the U.S./Japan National Science Foundation Workshop on "Collaborative Research Topics on Emerging Hydrologic Hazard and Water Resources Engineering Issues," Kofu, Japan, August 27-30, 1990.

Chair of the session "Hillslope Hydrology" Western Pacific Geophysics Meeting, Hong Kong, August 17-21, 1992.

Director, NATO Workshop on "Global Environmental Change and Land Surface Processes in Hydrology: The Trials and Tribulations of Modeling and Measuring," Tucson, Arizona, May 17-22, 1993.

Technical Co-chair, 29<sup>th</sup> Annual AWRA Conference, "Ground Water Resources Planning", Tucson, Arizona, August 29-September 2, 1993.

Chair, GEWEX Session, American Meteorological Society (AMS) Meeting, Nashville, Tennessee, January 1994.

Co-chair, GEWEX Session at the Western Pacific Geophysics Meeting, Hong Kong, July 25-29, 1994.

"Climate Change: Perspectives on Impacts on Global Water Resources", Environmental Management Programs, Los Alamos National Laboratory, Los Alamos, New Mexico, April 1999.

Member, U.S. Delegation to the National Academies' Board on Sustainable Development, 1999.

Global Change Program Review Workshop, Pacific Northwest National Laboratory, Washington, D.C., June 10-11, 1999.

"Status Report on GEWEX", Joint Scientific Committee, Tokyo, Japan, March 13-17, 2000.

Chair, Session on "Hydrology and Applied Mathematics: Parameter Estimation and Uncertainty Assessment in Hydrologic Modeling," 27<sup>th</sup> General Assembly of the European Geophysical Society, Nice, France, April 21-26, 2002.

Co-Chair Session with Christine A. Shoemaker, AGU Fall Meeting, San Francisco, December 2003

WCRP Officers, Chairs, and Directors Meeting, WMO, Geneva, Switzerland, January 21-23, 2004

Co-host, CEOP Model Output Development and Analysis Workshop, Irvine, CA, March 8-9, 2004

Co-Host, Third CEOP Implementation Planning Meeting, University of California, Irvine, Irvine, CA  
March 8-12 2004

Co-Organizer, 8<sup>th</sup> International Conference on Precipitation, Vancouver, CA, August 8-11, 2004.

Organizer, session, American Institute of Hydrology International Conference, Las Vegas, NV, October  
17-21, 2004

General Chair, GEWEX-SSG meeting, Kunming, China, January 31-February 4, 2005

Co-Organizer and Keynote Speaker, International G-WADI Modeling Workshop & Regional Meeting,  
Roorkee, India, February 28-March 5, 2005

Co-Organizer, WCRP-UNESCO Modeling Workshop, Cairo, Egypt, April 18-21, 2005

(Invited panel member) Sorooshian, S., National Academy of Sciences workshop and site visit, Iran,  
May 14-19, 2005

Co-Organizer, pan-WCRP Monsoon Meeting, Irvine, CA, June 15-17, 2005

General Chair, 5th International Scientific Conference on the Global Energy and Water Cycle  
(GEWEX), Irvine CA, June 20-24, 2005

S. Sorooshian, Director, Erika Coppola and Kuo-lin Hsu, Co-Directors, International Summer School on  
Atmospheric and Oceanic Sciences, L'Aquila, Italy, August 29- September 2, 2005

Co-Chair, with Jasper A. Vrugt, 2 Hydrology Sessions AGU Fall Meeting, San Francisco, December 2005

Session Co-Convener, with Dr. Rick Lawford, IGPO, and Dr. Rucong Yu, Chinese Meteorological  
Agency, "The Earth's Energy and Water Cycle," Western Pacific Geophysics Meeting (WGPM), Beijing,  
China, July 24-27, 2006

Session Convener, "Artificial Intelligence Methods in Water Resources Systems", Western Pacific  
Geophysics Meeting, Beijing (WPGM), China, July 24-27, 2006

(Invited) Member of the Committee (IPC), IASTED International Conference on Environmentally Sound  
Technology in Water Resources Management (ESTW 2006), Gaborone, Botswana, September 11-13,  
2006.

General Chair, GEWEX-SSG meeting, Honolulu, Hawaii, January 22-26, 2007

Session Co-Convener "Prediction Challenges", Workshop on Satellite Observations of the Global Water  
Cycle, UCI, Caltech/JPL, UC IGPP, Irvine, CA, March 7-9, 2007

(Invited) Member of the Conference Committee, 2nd International Conference of GIS/RS in Hydrology,  
Water Resources and Environment (ICGRHWE'06) and the 2nd International Symposium on Flood  
Forecasting and Management with GIS and Remote Sensing (FM2S'06), Guangzhou and Three Gorges,  
China, September 17-23, 2007

(Invited) Convener, Session "Environmental Hydraulics and Sustainability Issues", International  
Symposium on Environmental Hydraulics and Sustainability (ISEH V), Tempe, AZ, December 4-7, 2007

Session Convener, Iranian-U.S. workshop, Beckman Center, Irvine, CA USA August 18-20, 2008

Local Organizer, GEWEX SSG meeting, Irvine, CA January 19-23, 2009

General Chair, Conference and Workshop, Trieste, Italy April 27-May 8, 2009

General Chair, Parallel Science Conferences-Sixth International Scientific Conference on the Global Energy and Water Cycle and Second iLEAPS Science Conference, Melbourne, AU 24-28 August 2009

Session Co-chair "Regional Forecasting and Predictions for Hydrological Applications in Arid Zones", Parallel Science Conferences-Sixth International Scientific Conference on the Global Energy and Water Cycle and Second iLEAPS Science Conference, Melbourne, AU 24-28 August 2009

Member, Panel "Supporting Local Action: real-time Information" for KISS California as Seen from Space-Delivering Actionable Science" symposium, Keck Institute for Space Studies, Pasadena, CA September 14, 2009

Member, scientific committee, UNESCO G-WADI Regional Workshop, Amman, Jordan, November 23-26, 2009

Member, Panel, 8<sup>th</sup> "Stationarity is Dead-So What's Next?", Annual Climate Prediction Applications Science Workshop, NOAA-DWR, San Diego, CA March 2-4, 2010

Member, Panel, "Implication of hydrologic extremes and variability on water resources", Beyond Copenhagen Conference, Chapman University, Orange, CA April 21-23, 2010

Member, Scientific Advisory Committee of CAHMDA IV (Forth International Workshop on Catchment-scale Hydrological Modeling and Data Assimilation), Lhasa, China, 21-23 July 2010.

### **RESEARCH SUPPORT**

Principal investigator and co-principal investigator on over \$50 million by various agencies, such as NSF, NOAA, NASA, DOE, DOD, etc.

### **CONSULTING ACTIVITIES**

I have served as a consultant for several government, private consulting companies and water and energy utility industries.

### **TEACHING EXPERIENCE**

#### Undergraduate Courses (Institutions)

- Patterns of Problem Solving and Decision-Making (UCLA)
- Introduction to Civil Engineering (CWRU)
- Systems Simulation (CWRU)
- Introduction to Hydrology (CWRU)
- Senior Project (CWRU)
- Principles of Hydrology (UA)
- Surface Hydrology (UA)
- Surface Water Hydrology (UCI)

#### Graduate Courses (Institutions)

- Introduction to Optimization (CWRU)
- Water Quality Modeling (CWRU)
- Legal, Economic, and Social Aspects of Resources Management (CWRU)
- Analysis of Decision Processes with Applications (CWRU)
- Special topic course on "Linear and Nonlinear Parameter Estimation" (CWRU)
- Water Quality Modeling (UA)
- Water Quality Management (UA)
- Analysis of Hydrologic Systems (UA)
- Theory of Linear Systems (UA)
- Special Seminar on Modeling and Estimation Theory (UA)

- Special Topics in Civil Engineering (UCI)
- Surface Water Hydrology (UCI)
- Analysis of Hydrologic Systems (UCI)
- Ph.D. Dissertation Research (UCI)

**ADVISEES**

Total Number of Graduate Students Advised: 70

Total Number of Postdoctoral Scholars & Researchers Sponsored: 15

*Visiting Scholars Sponsored*

Dr. Hiroshi Ishidaira, University of Yamanashi, Japan; Dr. Tim Bellerby, University of Hull, UK; Dr. Felix Frances, Universidad Politecnica de Valencia, Spain, Dr. Byung-Kook Lee, General Director, Environmental Strategy Research Group, Korea Environment Institute; Dr. S. A. Masoodian, Prof. University of Isfahan, Dept. of Humanities

*Post-Doctoral Scholars and Researchers Sponsored*

Bastidas, Luis; Cheng, Jiantao; Chu, Wei; Gao, Xiaogang; Gupta, Hoshin; Hartman, Holly; Hong, Yang; Hsu, Kuo-lin; Imam, Bisher; Li, Jialun; Mahani, Shayesteh E.; Moradkhani, Hamid; Morin, Efrat; Park, Gi-hyeon; Wagener, Thorsten; Xu, Jianjun

*Visiting Students Sponsored*

Yen-Ming (Eddy) Chiang, University of Tawian