

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 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
2003-2007	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

4th Prince Sultan Bin Abdulaziz International Prize for Water, Resources Management & Protection Branch category award “for his work in developing the PERSIANN model to estimate global precipitation for satellite data” (2010)

Associate Fellow, TWAS, the academy of sciences for developing countries (2010)

Honorary professorship, Beijing Normal University (2010)

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)

2009 Outstanding Professor, Henry Samueli School of Engineering (selected by Anthology and the Senior Class of 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.

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.

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, 4th 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)
 2010-Present World Climate Research Programme Drought Interest Group (WCRP-DIG)

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-naval] 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
 2007-2011: 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, 29th 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
2010	Chair, Review Panel, LANL Earth Space Capability Review, Los Alamos, NM

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)
2010	University of New Mexico, Water Resources Program

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/departments 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
2010-present	Member, HSSoE Council on International Relations

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, Kiesel 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+papers. Citation h-index 39)
 See Publications list

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

Sorooshian, S. Invited Speaker, Uof WA symposium for Steve Burges Retirement, Seattle, Washington, March 24-26, 2010

Sorooshian, S. “Climate Change, Water Resource and System Resiliency”, Department of Civil & Environmental Engineering (CEE) Affiliates Fall Meeting, University of California, Irvine, November 5, 2010

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", 14th 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," 1st 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. Workshop, Jet Propulsion Laboratory, Pasadena, CA Sept. 28-29, 2010

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", 8th IREC, Ahwaz, Iran January 26-28, 2010

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

Sorooshian, S., G-WADI 2nd Summer School on Land Surface Observing, Modeling and Data Assimilation, Beijing Normal University, Beijing, China, July 13-16, 2010

Sorooshian, S. "Utilizing satellite precipitation data for hydrologic applications", Seminar, National Institute of Meteorological Research (NIMR), Seoul, Republic of Korea, July 19, 2010

Sorooshian, S. "Role of satellite Observational and Information Technologies for Addressing hydrologic and water Resources issues", Seminar, KICT, Seoul, Republic of Korea, July 19, 2010

(Invited Keynote Speaker) Sorooshian, S. "How predictable is the climate system: Meeting the hydrologic requirements for extreme event prediction?", KEI International Water Symposium on Climate Change and Water Security, Seoul, Republic of Korea, July 20, 2010

Sorooshian, S., G-WADI workshop, Cairo, Egypt, September 27-28, 2010

Sorooshian, S., "Evolution of Hydrologic modeling: Meeting the requirements from flood forecasting to hydroclimate predictions," Deltares Inc., Delft, Netherlands, October 6, 2010

Sorooshian, S. (Keynote address), PSIWP session UN/Argentina Conference on the Use of Space Technology for Water Management Buenos Aires, March 14-17, 2011

Sorooshian, S "Role of Advanced Observational and Information Technologies for Addressing Global Water Issues" UN/Argentina Conference on the Use of Space Technology for Water Management Buenos Aires, March 14-17, 2011

Sorooshian, S. "Potential implication of climate change and variability on the relationship between Mountain Glaciers and river flow", Pontifical Academy of Sciences workshop, Vatican City, Italy, April 2-4, 2011

Sorooshian, S., "Satellite-based remote sensing estimation of precipitation for early warning systems: Strengths and Limitations", IUGG Symposium-Grand Challenges in Natural Hazards Research, Melbourne, AU, June 28-July 7, 2011.

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 9th 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, 4th 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," 3rd Water Resources Operations and Management Workshop: Computerized Decision Support Systems for Water Managers, Fort Collins, Colorado, June 27-30, 1988.

Keynote speaker at the 2nd 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, 29th 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,” 27th 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, 8th 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, 8th “Stationarity is Dead-So What’s Next?, Annual Climate Prediction Applications Science Workshop, NOAA-DWR, San Diego, CA March 2-4, 2010

Member, Panel on Implication of hydrologic extremes and variability on water resources”, “Some Thoughts on Climate change, water resource and system resiliency.”, 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.

Member, International Organising Committee (IOC) of the 5th International Conference on Flood Management (ICFM5) to be held in Tsukuba, Japan, on 27-29, September 2011.

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, University of Isfahan, Dept. of Humanities; Dr. Peyman Daneshkar Arasteh, Imam Khomeini International University (IKIU) , Dr. Yangbo Chen, Sun Yat-sen University, China

POST-DOCTORAL SCHOLARS AND RESEARCHERS SPONSORED

Aghakouckak, Amir; 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 Taiwan
Francisco Lo Conti, University of Palermo, Sicily, Italy

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

University of California, Irvine

Hamid Moradkhani (UCI CEE)	Improved Uncertainty Assessment of Hydrologic Models using Data Assimilation and Stochastic Filtering	December 2004
Huiling Yuan (UCI CEE)	Probabilistic Quantitative Precipitation Forecasts by a Short-Range Ensemble Weather Forecasting System and Precipitation Calibration	December 2005
Newsha Khodatalab Ajami (UCI CEE)	Towards Improved Assessment of Sources of Uncertainty in Hydrologic Modeling	March 2006
Kristie Franz (UCI CEE)	Characterization of the Comparative Skill of Conceptual and Physically-based Snow Models for Streamflow Prediction	August 2006
Gi-Hyeon Park (UCI CEE)	Cross Comparisons of Land Surface Process Descriptions in Land Surface Models using Multiple Sources of Data	August 2006

Farid Ishak Boushaki (UCI CEE)	Merging Ground and Remote Sensing Precipitation Data for Improving Hydrologic Modeling Performance	September 2007
Hun-Kyun Bae (UCI CEE)	Modeling pproaches to predict the level of water quality using physical, chemical, and hydrological data focused on biological contaminations	September 2007
Ali Behrangi (UCI CEE)	Improvement in global high resolution precipitation estimation using multi-satellite multi-spectral information	December 2009
Wei Chu (UCI CEE)	Evolutionary optimization methods for high-dimensional complex systems: theory, algorithm, and application to rainfall-runoff models	December 2009
Behnaz Khakbaz (UCI CEE)	Toward improving National Weather Service distributed hydrologic via addressing subsurface water exchanges and calibration strategies	March 2010

Current Ph.D. Students

Rebeka Sultana
Ph.D. Candidate
(UCI CEE)

Tsou Chun Jaw
Ph.D.Candidate
(UCI CEE)

Qing Xia
Ph.D. Candidate
(UCI CEE)

Ali Zahraei,
Ph.D. Candidate
(UCI CEE)

Jingjing Li
Ph.D. Candidate
(UCI CEE)

Nasrin Nasrollahi
Ph.D. Candidate
(UCI CEE)

Hamed Ashouri Talouki
Ph.D. Candidate
(UCI CEE)

Scott Sellars
Ph.D. Student
(UCI CEE)

Nyugen Phu
Ph.D. Student
(UCI CEE)

Hao Liu
Ph.D. Student
(UCI CEE)

M.S. STUDENTS

Completion Date

Marc Ferrer Capdevila
(CEE M.S)

December 2007

Prashant Kuranjekar
(CEE M.S)

December 2007

University of Arizona, Tucson

PH.D. STUDENTS

Student
(Major)

Dissertation Topic

Completion Date

Vijai K. Gupta
(SIE)

The identification of conceptual watershed models

January 1984

Lov K. Kher
(SIE)

Demand modeling for systems planning using realization theory

May 1985

Adolfo Chávez Rodríguez Modeling Mountain-Front Recharge to Regional Aquifers

1987

Robert Ritzi, Jr.
(HWR)

Aquifer evaluation using natural stresses--earth and atmospheric tidal forces evaluated in the Hanford, Washington basalts

May 1989

Shams Vazirinejad
(SIE)

Development of demand forecasting models with noisy data

May 1990

David Goodrich
(HWR-Co-director
with D. Woolhiser)

Geometric simplification of a distributed rainfall-runoff model over a range of basin scales

May 1990

Qingyun Duan
(HWR)

A global optimization strategy for efficient and effective calibration of hydrologic models

August 1991

Jene D. Michaud
(HWR)

Distributed rainfall-runoff modeling of thunderstorm-generated floods: a case study in a semi-arid mid-sized, watershed in Arizona

May 1992

Karen S. Humes
(HWR)

The estimation and scaling of land-surface fluxes of latent and sensible heat with remotely sensed data over grassland sites

December 1991

Xiaogang Gao (HWR)	Modeling of rainfall-distribution, runoff processes, and examination of model sensitivity in the context of land-atmosphere interactions	August 1993
James Clarke Washburne (HWR)	A Distributed Surface Temperature and Energy Balance Model of a Semi-Arid Watershed	May 1994
Patrice Yapo (SIE)	A multiobjective global optimization algorithm with application to calibration of hydrologic models	August 1996
Kuo-lin Hsu (HWR)	Rainfall estimation from satellite infrared imagery using artificial neural networks	December 1996
Liming Xu	Estimating rainfall from satellite infrared imagery: cloud-patch analysis	December 1997
Wenje Hwu (HWR)	Large-scale characteristics of the 1993 U.S. Midwestern Great flood and its simulation by the MM5 mesoscale model	May 1998
Luis Bastidas	Parameter estimation for hydrometeorological models using multi-criteria methods	December 1998
Kamran Haider Syed (HWR)	The Impacts of Digital Elevation Model Data Type and Resolution On Hydrologic Modeling	April 1999
Shayesteh Esmaili-Mahani (HWR)	Improving high-resolution IR satellite-based precipitation: a procedure for cloud-top relief displacement adjustment	May 2000
Douglas Boyle (HWR)	Multicriteria calibration of hydrologic models	June 2001
Holly Hartmann (HWR)	Stakeholder-driven research in a hydroclimatic context	December 2001
Han Yi	Assimilation of satellite-derived precipitation into the regional atmospheric model system (RAMS) and its impacts on the weather and hydrology in the southwest United States	2002
Jiming Jin (HWR)	A physically based snow model coupled to a general circulation model for hydroclimatological studies	May 2002
Feyzan Misirli Baysal	Improving Efficiency and Effectiveness of Bayesian Recursive Parameter Estimation for Hydrologic Models	July 2003
Terri Hogue (HWR)	A multi-criteria evaluation of land-surface models and application to semi-arid regions	May 2003
Yuqiong Liu (HWR)	Parameter Estimation for Locally Coupled Land Surface-Atmosphere Models	Summer 2003
Eylon Shamir (HWR)	The Use of Stream Flow Indices in Hydrologic Modeling	December 2003

Hong Yang (HWR)	Precipitation Estimation from Remotely Sensed information Using Artificial Neural Network - Cloud Classification System	May 2003
Tom Pagano (HWR)	The role of climate variability in operational water supply forecasting for the Western United States	December 2004
Edwin Wells	Verification of River Stage Forecasts	May 2005

M.S. STUDENTS

<u>Student</u> (Major)	<u>Thesis Topic</u>	(UCI CEE)
Farid Arfi (SIE)	Response surface methodology as a parameter sensitivity tool for rainfall-runoff models	August 1980
Yoshinobu Hara (SIE)	Application of Dirichlet process for decision-making problems	August 1981
Vijai K. Gupta (SIE)	Calibration of conceptual rainfall-runoff models: problems caused by model structure	December 1981
James Fulton (SIE)	Discussion, modification, and extension of some maximum likelihood techniques for model calibration with application to rainfall-runoff models	August 1982
Alex Margevicius (SIE)	Identifiability issues in ground-water parameter estimation	August 1983
Mark J. Walker (WRA)	The effect of alternating automatic calibration techniques on parameter estimation of HEC-1	December 1984
Christopher Smith (HWR)	Evaluating three-fitting criteria for the calibration of the U.S. Geological Survey Precipitation Runoff Modeling System (PRMS)	April 1986
Lauren Hay (HWR)	The automatic calibration of the SRP's long-term forecasting rainfall-runoff model	December 1986
James Famiglietti (HWR)	Threshold structures in conceptual rainfall-runoff models: potential problems with calibration	December 1986
Jene Hendrickson (HWR)	Developments of a flash-flood forecasting model	December 1986
Qingyun Duan (WRA)	Development of maximum likelihood estimator for uneven time step data	June 1987
Alan Cuddy (HWR)	The effects of Columbia River stage fluctuations on ground-water levels near Richland, Washington	December 1988
Gregory Nelson (WRA)	Mathematical model for evaluation of management schemes to control water losses due to phreatophyte uptake	December 1989

Jean-Marc Faures (WRA-Co-Director with D. Woolhiser)	Sensitivity of runoff to small scale spatial variability of observed rainfall in a distributed model	May 1990
Joseph Miketta (HWR)	Application of the Sacramento model to small catchments in Pennsylvania	December 1990
Arthur Armour (HWR)	Adaptive random search evaluated as a method for calibration of the SMA-NWSRFS model	December 1990
Walter T. Weinig (HWR)	Calibration of the soil moisture accounting model using the adaptive random search algorithm	May 1991
Patrice O. Yapo (SIE)	A Markov chain flow model with application to flood forecasting	May 1992
Daquan Tian (HWR)	Rainfall, spatial, and seasonal variability analysis in semi-arid watersheds	August 1993
Edwin Welles (HWR)	Comparison of rainfall sampling schemes using a calibrated stochastic rainfall generator	December 1994
Rajesh Kaveti (HWR)	Linking an interstorm model to a storm model	May 1996
Michael Winchell (HWR)	Effects of radar-estimated precipitation uncertainty on rainfall- runoff modeling	August 1997
Marc Schulte (HWR) (Co-director R. MacNish	Dilution gauging as a method to quantify groundwater baseflow fluctuations in Arizona's San Pedro River basin	December 1998
Terri Hogue (HWR)	Analysis of the National Weather Service soil moisture accounting models for flood prediction in the northeast floods of January 1996	December 1998
Ali Farid-Hosseini (HWR)	Evaluation of summer rainfall estimation by satellite data using the ANN model for the GCM subgrid distribution	December 1998
Kamran Syed (HWR) (Co-director David Goodrich)	The impacts of digital elevation data type and resolution on hydrologic modeling	May 1999
Kathryn Goodwin (HWR)	Analysis of the utility of remote-sensing data for urban hydrologic modeling	August 1999
Michael Thiemann (HWR)	Uncertainty estimation of hydrologic models using Bayesian inference methods	August 1999
Tom Pagano (HWR)	The role and usability of climate forecasts for flood control and water supply agencies: a case study of the 1997-98 El Nino	December 1999
Seton Claggett (HWR)	Evaluation of the utility of satellite rainfall estimates for water resource applications using subbasin area averages and pixel-to-	May 2001

pixel comparisons

Savyasachi Srinivas (SIE)	Uncertainty estimates for a neural network model and its application in hydrological simulation	August 2001
Kristie Franz (HWR)	Evaluation of National Weather Service Ensemble Stream-flow Prediction (ESP) water-supply forecasts	December 2001
Jose Guevara Miranda (HWR)	Precipitation estimation over Mexico applying PERSIANN system and gauge data	May 2002
Newsha Khodatalab (HWR)	Distributed Hydrologic Modeling for Flow Forecasting Using High-Resolution Data	November 2002
Farid Ishak Boushaki (HWR)	Statistical Relationship between Frought Indices and NDVI at Regional Scale	October 2002
Srinivasa Raghava Krishnamur (SIE)	A New Heuristic for Nonlinear Multi-Objective Optimization	December 2002
Soni Yatheendradas (HWR)	Calibration of Distributed Land SurfaceModel for a Semi-Arid Basin Using Remotely Sensed Data	July 2003

SIE = Systems and Industrial Engineering; HWR = Hydrology; WRA = Water Resources Administration

Updated 1 March 2011