

# PIERRE Y. JULIEN

Short Resume  
Jan. 2005

Professor of Civil Engineering  
Engineering Research Center, B-205      Tel: (970) 491-8450  
Colorado State University                      FAX: (970) 491-7008  
Fort Collins, Colorado 80523                  e-mail: pierre@enr.colostate.edu

## EDUCATION

Degree	Field	Institution	Year
Ph.D.	Civil Engineering (hydraulics)	Laval University	1983
M.Sc.	Civil Engineering (hydraulics)	Laval University	1980
B.Sc.A	Civil Engineering	Laval University	1977

## PROFESSIONAL EXPERIENCE

Leader of the Hydraulics and Wind Engineering Programs. Tenured Full Professor since 1995, Tenured Associate Professor (1989-94), Assistant Professor (1985-89) and Faculty Affiliate (1983-85), Department of Civil Engineering, Colorado State University, Fort Collins.

## SUMMARY of RESEARCH ACTIVITIES

His research interests center around erosion and sedimentation, river mechanics and computer modeling. He authored more than 300 scientific publications including two textbooks, 50 refereed papers in scientific journals, 100 professional presentations and 75 technical reports. Under his guidance, 27 students completed Ph.D. degrees in Civil Engineering. He is active member of more than 10 professional organizations. He carried out sponsored research activities for at least 20 different agencies.

## SELECTED PROFESSIONAL ACTIVITIES

- ' Fate and transport of metals at an EPA Superfund site (2002-)
- ' Editor of the ASCE Journal of Hydraulic Engineering (2002-)
- ' Textbook *River Mechanics*, Cambridge University Press (2002)
- ' Morphology of the Rio Grande, U.S. Bureau of Reclamation (1997-)
- ' Upland erosion reviews, Nuclear Regulatory Commission (1998-99)
- ' Lower Mississippi River Sedimentation, Louisiana Hydro. (1998-00)
- ' Training expert on soil erosion control, CID/ World Bank (1996)
- ' Textbook *Erosion and Sedimentation*, Cambridge Univ.Press (1995,98)

## AWARDS

- 2004 Hans Albert Einstein Award of the ASCE
- 2002 Endowed Borland Professorship in Hydraulics
- 2002 Civil Engineering Research Award

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## EDUCATION

Degree	Field	Institution	Year
B.Sc.A.	Civil Engineering	Laval University	1977
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Ph.D.	Civil Engineering (hydraulics)	Laval University	1983

## PROFESSIONAL REGISTRATION

- ' Registered Professional Engineer, P.Eng. # 32325, Ordre des Ingénieurs, Québec, Canada.

## PROFESSIONAL EXPERIENCE

- ' Tenured Full Professor, Dept. of Civil Engineering, CSU, 1995-present.
- ' Leader of the Hydraulics and Wind Engineering Programs, 2004-
- Coordinator of the Hydraulics Program, Dept. of Civil Engineering, CSU, 1996-00.
- Coordinator of the Hydraulics and Wind Engineering Division, Dept. of Civil Engineering, CSU, 1997-00.
- Tenured Associate Professor, Dept. of Civil Engineering, CSU, 1989-94.
- Assistant Professor, Department of Civil Engineering, CSU, 1985-89.
- Faculty Affiliate, Department of Civil Engineering, CSU, 1983-85.
- Professeur substitut, Département de Génie Civil, Université Laval, Québec, Canada, 1979-80.
- Graduate Research Assistant, Département de Génie Civil, Université Laval, Québec, Canada, 1974-79.
- Graduate Teaching Assistant, Département de Génie Civil, Université Laval, Québec, Canada, 1974-79.

## **AWARDS and HONORS**

- Post-graduate scholarship from the National Research Council of Canada, CNRC-NSERC, 1977-79.
- NATO Post-doctoral fellowship, administered by Natural Sciences and Engineering Research Council of Canada, CNRC-NSERC, 1983-85.
- Best Paper Award, American Society of Agricultural Engineers, ASAE, 1986.
- J.C. Stevens Award of the American Society of Civil Engineers, ASCE, 1989.
- Halliburton New Faculty Research Award, College of Engineering, CSU, 1989.
- Faculty of the year at Allison Hall, Colorado State University, 1996.
- Abell Faculty Research and Graduate Program Support Award of Excellence for outstanding achievement and professionalism in education, research, and service to graduate students, College of Engineering, CSU, 1999.
- Faculty Research Award at the Civil Engineering Department, CSU, 2002.
- Endowed Borland Professorship in Hydraulics at the Civil Engineering Department at CSU, since 2002.
- Hans Albert Einstein Award of the ASCE, 2004.

## **TEACHING EXPERIENCE**

- ‘ Erosion and Sedimentation, CSU.
- ‘ River Mechanics, CSU.
- ‘ Engineering Mechanics - Statics and Dynamics, CSU.
- ‘ Engineering Mechanics - Dynamics, CSU.
- Fluid Mechanics (undergraduate), CSU.
- Fluid Mechanics for Non-Engineers, CSU.
- Environmental River Mechanics, CSU.
- Hydrodynamics, Université Laval, Québec, Canada.
- Flow in Closed-Conduits, Université Laval, Québec, Canada.
- Experimental Fluid Mechanics and Hydraulics, Université Laval, Québec, Canada.

## **WORKSHOPS AND SHORT COURSES ORGANIZED**

- Three-day Short course entitled: “River Engineering and Stream Restoration” by P.Y. Julien and S. Ikeda at the 4<sup>th</sup> International Symposium on Environmental Hydraulics, Hong Kong, December 9-11,

2004.

- Half-day Seminar entitled "Stream Restoration and River Mechanics", part of the First International Conference on Managing Rivers in the 21<sup>st</sup> Century, Universiti Sains Malaysia, Penang, Malaysia, September 20, 2004.
- Short Course: Special Topics in Hydraulics - Keynote Lectures in Hydraulics by D.B. Simons, E.V. Richardson and J. Liou, CSU, May 24-June 11, 1999.
- Short Course on Flood Hazard Mitigation, Cliff Lodge at Snowbird Utah, October 5-7, 1998.
- Short Course on Debris Flow Modeling Using FLO2D, World Trade Center, San Francisco, August 5-6, 1997.
- Training expert and team leader on soil erosion control and streambank protection for CID/ World Bank to a delegation of 10 Turkish Engineers in France, Oct. 10-25, 1996.
- Organizing the Center for Geosciences Workshop on "Two-dimensional Surface Runoff Modeling", January 16-20, Fort Collins, 1995.
- Organizing the Center for Geosciences Hydrology Workshop at the Fort Collins Marriott for the ARO Center for Geosciences, 1988.

## **UNIVERSITY SERVICE**

- ‘ Member of the CSU 1870 Club, 1999, 2003-.
- ‘ Fellow Cooperative Institute for Research in the Atmosphere(CIRA), 1990-
- ‘ Elected Member to the CE Department Tenure Committee, 2001-
- ‘ Elected Member to the CE Department Promotion Committee 2003-
- ‘ Member of the Borland advisory committee, 2002-
- ‘ Graduate Student MS Plan C Program Adviser
- ‘ Coordinator of the Hydraulic program and the Hydraulics and Wind Engineering Division.
- Coordinator of the NSF-CUAHSI National Center for Hydrologic Synthesis Proposal.
- Member of the College Evaluation Committee, 2001-02
- Coordinator of the Hydraulics and Wind Engineering Division, 1997-00.
- Coordinator of the Hydraulics Program, 1996-00.
- Member of the Civil Engineering Advisory Committee, 1996-00.
- Chair of a Faculty Search Committee in Environmental Hydraulics, 1998-1999.
- Chair of the Department Graduate Instruction Committee since 1998, member 1997.
- Member of the Ad-Hoc Committee on Graduate Student Enrollment, 1999.

- Member of the College Professional Development Committee, 1998-99.
- Chair of the Civil Engineering Tenure Committee, 1997, member 1993-96.
- Chair of the Civil Engineering Awards Committee, 1997, member 1993-96.
- CSU-CHILL Radar Advisory Committee, 1988-95.
- Civil Engineering Advisory Committee, 1990-91.
- College Faculty Awards Committee, 1990.
- Chair of the University Faculty Council Committee on Research, 1990.
- Chair of the Departmental Computing Committee, 1987.
- Member of the University Faculty Council Committee on Libraries, 1989-91.
- Member of the Departmental Undergraduate Instruction Committee, 1986-90.
- Departmental Library Liaison, 1986-1991.

## **PROFESSIONAL AFFILIATIONS AND MEMBERSHIPS**

- ‘ Professional engineer registration and member of the Ordre des Ingénieurs, Québec, Canada (P. Eng. License # 32325).
- ‘ Life member of the United States Committee on Irrigation and Drainage (USCID).
- ‘ Life member of the United States Society on Dams (USSD), formerly, the U.S. Committee on Large Dams (USCOLD).
- ‘ Member of the American Society of Civil Engineers (ASCE # 239111).
- ‘ Member of the American Society of Agricultural Engineers (ASAE # 21687).
- ‘ Member of the International Association for Hydraulic Research (IAHR # 5149).
- ‘ Member of the American Water Resources Association (AWRA # 14192).
- ‘ Member of the American Geophysical Union (AGU).
- ‘ Member of the American Society on Engineering Education (ASEE).
- ‘ Fellow of the Cooperative Institute for Research in the Atmosphere (CIRA).
- ‘ Fellow of the Institute of Arctic and Alpine Research (INSTAAR).
- ‘ Member of the International Water Resources Association (IWRA).
- ‘ Member of the Environmental and Water Resources Institute Council of the ASCE (EWRI).
- Past member of the “Association des Diplômés de L’Université Laval” (ADUL #7309).
- Past member of the Canadian Society of Civil Engineering (CSCE) until 1980-90.

- Past member of the American Water Foundation (AWF) until 1987.
- Past member of the Association of Sedimentologists Francais (ASF) until 1997.
- Past member of the American Society for Photogrammetry and Remote Sensing (ASPRS) until 1991.
- Past Advisory Board member of the CSU-CHILL radar at CSU until 1994.
- Past control member of the ASCE Sedimentation Task Committee on the Analysis of Laboratory and Field Data Accuracy and Availability until 1993.
- Past control member of the ASCE Task Comm. on River Width Adjustments until 1998.

## **INTERNATIONAL ACTIVITIES**

- ‘ Member of the International Scientific Advisory Committee of the 1<sup>st</sup> International Conference on Monitoring, Simulation, Prevention and Remediation of Dense and Debris Flows, 2006, Rhodes, Greece, June 7-9, 2006.
- ‘ Member of the International Scientific Committee of the International Conference on Fluvial Hydraulics, Lisbon, Portugal, September 4-6, 2006.
- Member of the International Advisory Committee for the 4th International Symposium on Environmental Hydraulics (ISEH), Hong Kong, December 9-11, 2004.
- Member of the International Advisory Committee, Session Chairman, and Member of the Best Paper Awards Committee of the 14<sup>th</sup> Congress of the Asian Pacific Division of IAHR to be Held in Hong Kong, December 15-18, 2004.
- Member of the International Program Committee (IPC) for the IASTED International Conference on Environmental Modelling and Simulation (EMS 2004), St. Thomas, Virgin Islands, USA, November 22-24, 2004.
- Member of the International Advisory Committee for the International Conference on Hydraulic Engineering: Research and Practice (INCON-HERP-2004), Roorkee India, October 26 - 28, 2004.
- Member of the International Scientific Committee of the 9<sup>th</sup> International Symposium on River Sedimentation, Yichang, China, October 18-21, 2004.
- Founding member of the World Association for Sediment Research WASR, Beijing, China.
- Member of the International Advisory Committee for the First International Conference on Managing Rivers in the 21<sup>st</sup> Century,

- Penang, Malaysia, September 21-25, 2004.
- Seminar presentation entitled "Modeling Transport of Metals in Surface Waters" at the Korean Institute of Construction Technology, Seoul, Korea, June 16, 2004.
- Seminar presentation entitled "Sedimentation Problem of the Lower Nakdong River" at the Korean Water Resources Corporation, Daejeon, Korea, June 14, 2004.
- Member of the International Scientific Committee of the First International Conference on Service Reservoirs, Geneva, Switzerland, May 12-14, 2004.
- Member of the International Organizing Committee of the Third International Conference on Debris Flow Hazards Mitigation, Davos, Switzerland, September 10-12, 2003.
- Invited Lecture at Incheon University, South Korea, May 28, 2003.
- Invited Lecture at Pusan National University, South Korea, May 29, 2003.
- Member of the Scientific Committee of the International River Engineering Conference, Ahwaz, Iran, January 2003.
- Session Chair at the Second International Symposium on Flood Defence, Beijing, China, Sept. 10-13, 2002.
- One-day seminar on "River engineering and stream restoration", NAHRIM, Kuala Lumpur, Malaysia, August 9, 2002.
- One-day Seminar on "Sediment transport and river mechanics" at REDAC, Penang, Malaysia, August 10, 2002.
- Member of the International Advisory Committee, Invited Speaker and member of the "best paper" selection committee at the 13th APD-IAHR Congress, Singapore, August 2002.
- External Examiner for the Ph.D. dissertation of Manoj K. Jain, University of Roorkee, Uttaranchal, India, 2002.
- External Examiner for the Ph.D. dissertation of Kerry Mazurek, University of Alberta, Edmonton, Canada, 2000-01.
- Member of the International Organizing Committee of the Second International Conference on Debris Flow Hazards Mitigation, Taipei, Taiwan, August 18-20, 2000.
- Invited Speaker at the ICHE, Cottbus, Germany, Aug. 31- Sept. 3, 1998.
- Invited Speaker at the Granular Geomorphology Workshop, Lyon, France, Sept. 7-11, 1998.
- Speaker at the IWRA, IX World Water Congress, Montreal, Canada, Sept. 1-6, 1997.
- Invited Speaker and External Examiner for the Ph.D. dissertation of Hamid Shamloo, University of Alberta, Edmonton, Canada, 1996.
- Invited Speaker at the Workshop on "Structures Internes et Comportement des Suspensions Concentrées Géologiques", La Grande

Motte, France, October 4-6, 1995.

- Invited Speaker, ETHZ Seminar, "Geosciences and Hyperconcentrations", Zurich, Switzerland, 1994.
- Invited Speaker and Session Chairman at the Intl. Workshop on Floods and Inundations Related to Large Earth Movements, Trento, Italy, 1994.
- Keynote paper at the International Workshop on Debris Flows, Kagoshima, Japan, 1993.
- Panelist at the Asia and Pacific Ocean Intl. Conference on Volcanic Debris Flow Disaster Prevention, Fukuoka, Japan, 1993.
- Invited Speaker and Session Chairman at the Pierre Beghin - International Workshop on Rapid Gravitational Mass Movements, Grenoble, France, 1993.
- Presentation on Sediment Transport at the Grain Sorting Seminar in Ascona, Switzerland, 1991.
- Presentations on the formation of dunes during floods at Delft Hydraulics and the Rijkswaterstaat, the Netherlands, 1991.
- Presentation on fluvial hydraulics at the IAHR Congress in Ottawa, Canada, 1989.
- Session Chairman at the Fourth International Symposium on River Sedimentation in Beijing, China, 1989.
- Presentation on soil erosion at the ASAE-CSAE Summer Meeting in Québec, Canada, 1989.
- Lecture to civil engineering undergraduate at the Hokkaido University in Sapporo, Japan, 1989.
- Presentation to professional engineers at the Hokkaido Development Bureau in Sapporo, Japan, 1989.
- Seminar on Hydraulic Geometry of Alluvial Channels at the Civil Engineering Department at Kyoto University, Kyoto, Japan, 1989.
- Presentation at the Centennial CSCE Conference in Montréal, Canada, 1987.
- Presentation on soil erosion for the Institution of Engineers Pakistan, in Peshawar, Pakistan, 1985.
- Presentation on Reservoir Sedimentation at Tarbela Dam, Pakistan, 1985.
- Presentation on Computer modeling of soil erosion for the Ministry of Irrigation in Cairo, Egypt, 1985.
- Presentation on soil erosion at the CSCE Hydrotechnical Conference in Saskatoon, Canada, 1985.



## NATIONAL ACTIVITIES

- ' Editor of the ASCE Journal of Hydraulic Engineering.
- ' Member of the EWRI Publications Council.
- ' Member of the EWRI Journals and Periodicals Council.
- ' Member of the EWRI Hydraulics and Waterways Council.
  
- Invited Speaker at the 4th IAHR Symposium on River, Coastal and Estuarine Morphodynamics to be held at The University of Illinois, Urbana, Illinois, USA, October 4 – 7, 2005
- Presentation at the U.S. Bureau of Reclamation, entitled: "BORAMEP Total Load Analysis of the Low Flow Conveyance Channel on the Middle Rio Grande 2001", September 28, 2004, Denver Federal Center, Colorado.
- Presentation at the Hydrologic Engineering Center entitled "Modeling Transport and Fate of Sediments and Metals with CASC2D-SED", July 26, 2004, HEC, Davis, California.
- Presentation at the Lake Fork Meeting entitled "Fate and Transport of Metals in Surface Waters", Colorado Mountain College, July 23, 2004, Leadville, Colorado.
- Presentation at the EPA - Environmental Research Seminar entitled "Fate and Transport of Metals in Surface Waters", US EPA Region 8 and National Center for Environmental Research, Denver, Colorado, May 12, 2004.
- Seminar presentation entitled "Fate and Transport of Metals in Surface Waters" at Engineering Research Development Center, Vicksburg Mississippi, May 7, 2004.
- Session Chairman at the 24<sup>nd</sup> AGU Conference on Hydrology Days, Fort Collins, CO, March 10-12, 2004.
- Member of the Planning Committee of the USCID Conference on TMDL's in Sacramento, October 23-26, 2002.
- Chair of the Journal of Hydraulic Engineering Meeting, Estes Park, Colorado, July 29, 2002.
- Poster and presentation entitled: "Fate and transport of metals and sediment in surface water", EPA-Region VIII, Denver Colorado Sept. 3, 2002, and Fort Collins, Colorado, July 31, 2002.
- Presentation entitled "Advances in Watershed Erosion Modeling at CSU" at Engineering Research Development Center, Vicksburg Mississippi, July 16, 2002.
- Presentation entitled "Advances in Watershed Erosion Modeling at CSU" at the National Center for Computational Hydraulic Engineering, University of Mississippi, Oxford, July 17, 2002.
- Session Chairman at the 22<sup>nd</sup> AGU Conference on Hydrology Days, Fort Collins, CO, April 1-4, 2002.

- Presentation at the 2002 Tailings and Mine Waste '02 Conference entitled "Fate and Transport of metals and sediment in surface waters", Colorado State University, January 29, 2002.
- HSRC Seminar presentation "Fate and Transport of Metals and Sediment in Surface Waters" at the Colorado School of Mines, Golden, Colorado, January 17, 2002.
- Presentation in Hydrometeorology entitled "Sediment transport modeling using CASC2D-SED" at the White Sands Missile Range, New Mexico, December 11, 2001.
- Presentation at the Order of the Engineers Ring Ceremony, December 13, 2001.
- Participation at the ASCE Editor's Workshop at the Houston Convention Center, October 13, 2001.
- Facilitator of the Discussion Session on "Are we properly educating our future restoration specialists", ASCE Wetlands Engineering & River Restoration Conference, Reno Nevada, Aug. 27-13, 2001.
- Seminar on "What's New in Sedimentation and River Mechanics", Waterways Experiment Station, Mobile District and New Orleans District, USACE, May 22-24, 2001.
- Invited at the Order of the Engineer Ceremony, CSU, May 10, 2001.
- Invited Speaker at the 21<sup>st</sup> Annual AGU Hydrology Days, CSU, Presentation entitled "The Study of Rivers" to honor Stan Schumm's contributions to fluvial geomorphology, April 2-5, 2001.
- Session Chairman at the 7<sup>th</sup> Federal Interagency Sedimentation Conference, Reno, Nevada, March 25-30, 2001.
- Invited speaker presentation on the History of the Order of the Engineer, CSU, May 13, 1999.
- Invited speaker and session chair at the Landscape Erosion and Sedimentation Modeling Workshop, Fort Collins, Colorado, March 1-5, 1999.
- Facilitator of the Discussion Session on "how do we educate our future stream restoration specialists", ASCE Wetlands Engineering & River Restoration Conference, Denver, Colorado, 1998.
- Seminar on "Review of two-dimensional surface runoff modeling with CASC2D, GIS and radar data", National Weather Service, Office of Hydrology, Washington D.C., 1997.
- Invited Speaker at the Conference on Management of Landscapes Disturbed by Channel Incision, May 20-22, Oxford, Mississippi, 1997.
- Invited speaker and Session Moderator at the First Intl. Conference on Debris Flow Hazards Mitigation, San Francisco, California, August 7-9, 1997.
- Speaker and Session Moderator at the ASCE/IAHR Congress on Water for a Changing Global Community, San Francisco, California, August 10-15, 1997.

- Speaker on Reservoir Sedimentation Modeling at the Reservoir Sedimentation Conference, Fort Collins, Colorado, Sept. 9-12., 1996.
- Speaker at the Reunion Symposium to honor Stanley Schumm, CSU Fort Collins, Colorado, 1996.
- Speaker on Flash flood Modeling at the Rocky Mountain Hydrologic Research Center, Estes Park, Colorado, Sept. 20, 1996.
- Invited Speaker, Iowa Institute of Hydraulic Research, "Hyperconcentrations of sediments", Iowa City, Iowa, 1994.
- Member USDA-ARS National Sedimentation Laboratory Review Team, Oxford, Mississippi, June 1994.
- Session Chairman at the AGU Hydrology Days Conference in Fort Collins, Colorado, 1990.
- Session Chairman and presentation at the ASCE National Conference on Hydraulic Engineering in San Diego, California, 1990.
- Presentation at the International Symposium on Hydrology and Hydraulics of Arid Lands in San Diego, California, 1990.
- Session Chairman at the ASCE National Conference on Hydraulic Engineering in New Orleans, Louisiana, 1989.
- Presentation at the AGU Meeting in San Francisco, California, 1989.
- Session Chairman at the ASCE National Conference on Hydraulic Engineering at Colorado Springs, Colorado, 1988.
- Keynote presentation at the Megatrends in Hydraulic Engineering Conference, Fort Collins, Colorado, 1986.
- Lecture on Erosion and Sedimentation for the National Park Service, Fort Collins, Colorado, 1986.
- Presentation at the Third International Symposium on River Sedimentation in Jackson, Mississippi, 1986.
- Presentation at the IAHS Symposium on Drainage Basin and Sediment Delivery in Albuquerque, New Mexico, 1986.
- Presentation at the Fourth International Hydrology Symposium, Fort Collins, Colorado, 1985.

### **MANUSCRIPT AND PROPOSAL REVIEWS (past 5 years)**

- Editor of the ASCE Journal of Hydraulic Engineering.
- Reviewer of proposals for NSF(10).
- Reviewer of papers for AGU(2), IAHR, 2001.
- Reviewer of proposals for NSERC and FCAR, 2001.
- Reviewer of proposals for NSF and papers for ASCE, J. Geol., 2000.
- Reviewer of papers for ASCE(7), Debris Conf.(3), AGU(2), JGR, Sed. Geol., 1999.
- Reviewer of proposals for NSF(2), Swiss NSF, and ARO, 1999.
- Reviewer of papers for ASCE(8), AGU(2), IAHR, JASC, and CATENA,

1998.

## **RESEARCH INTERESTS**

- ' Erosion and sedimentation near nuclear and hydroelectric power plants.
- ' Soil erosion, sediment transport in rivers and reservoir sedimentation.
- ' Two-dimensional modeling of flash floods from moving rainstorms using GIS data bases and radar precipitation data.
- ' Computer modeling of soil erosion and sediment yield from rainfall and snowmelt on large watersheds.
- ' Hydraulic geometry of stable alluvial channels and aquatic habitat.
- ' Hyperconcentrated sediment flows, mud flows and debris flows.
- ' Local scour downstream of grade-control structures and headcut migration.

## **PROFESSIONAL STUDIES**

- ' Analysis of the geomorphological changes of the Rio Grande River since the construction of Cochiti Dam, for the U.S. Bureau of Reclamation, Albuquerque, since 1997.
- ' Analysis of Bendway Weirs for the Engineering Research and Development Center, Vicksburg, Mississippi, 2001-.
- ' Development of surface runoff and upland erosion models for the ARO-ARL Center for Geosciences since 1986.
- Analysis of sediment transport at the Arroyo Pasajero for the California Department of Water Resources, Sacramento, 2001-03.
- Analysis of the San Acacia Diversion Dam as related to the passage of the Silvery Minnow, for the U.S. Bureau of Reclamation, Albuquerque, 2001-03.
- Analysis of metal transport in streams from mining wastes for the EPA Hazardous Substance Research Center, 2001-03.
- Analysis of the changes in resistance to flow of the Rhine River during floods, for Delft Hydraulics and the Rijkswaterstaat, The Netherlands, 1999-00.
- Analysis of actinide migration at Rocky Flats, for Kaiser-Hill, 1998-99.
- Member of the Academic Review Team for the Analysis of sediment transport near Old Mississippi River Control, Lower Mississippi River, for Louisiana Hydroelectric and the U.S. Army Corps of Engineers, 1997-99.

- Review of Uranium Mill Tailings at L-Bar, New Mexico, for the U.S. Nuclear Regulatory Commission, 1997-99.
- Analysis of contaminated sediment transport at an EPA superfund site on Whitewood Creek, South Dakota, for ISSI, 1998.
- Expert witness on a flood-related problem in Texas, for the U.S. Department of Justice, 1998.
- Analysis and review of the canal intake and desilting works at the Aligidir Irrigation Project in Eritrea, for NRCE, 1997.
- Report review "Trinity River - Maintenance Flow Study" for the U.S. Fish and Wildlife Service, 1997-1998.
- Analysis of the changes in dune geometry of the Rhine River during floods, for Delft Hydraulics and the Rijkswaterstaat, The Netherlands, 1991-93.
- Pipeline sedimentation study, for Tubecon, Québec, Canada, 1988.
- Sedimentation Analysis of the Riviere-a-Mars, for Université Laval, Canada, 1985.
- Sedimentation Analysis of the Molineros Reservoir, for Hydrotech, Québec, Canada, 1983-1984.
- Analysis of sediment transport in the St-Lawrence and its tributaries, for Hydrotech, Québec, Canada, 1977-1982.
- Several fish habitat studies in "La Mauricie" and on the Ste-Anne-des-Monts River for Hydrotech, Québec, Canada, 1974-1982.
- Hydraulic and sediment studies on the impact of iron mining on the rivers Carheil, aux Pekans and Moisie for Hydrotech, Québec, Canada, 1976.
- Impact of breached copper tailing ponds on mountain streams for Hydrotech, Québec, Canada, 1976.
- Hydraulic and sediment study of the Matamec River. The project involved in collaboration with biologists in the study of suitable fish habitat for Atlantic Salmon, for Centreau, Québec, Canada, 1974-1979.

## **COMPUTER MODELING**

- ‘ Modeling of metal transport in streams from mine wastes, for the EPA Hazardous Substance Research Center and the Center for Geosciences, 2001-.
- ‘ Recent soil erosion studies using the dynamic model CASC2D-SED with GIS applications to watersheds including California Gulch, Colorado and Goodwin Creek, Mississippi, since 1995.
- Development of the model CASC2D for the simulation of two-dimensional surface runoff from spatially-distributed rainfall on

complex watersheds. The hydrologic model is coupled with GIS tools and raingages or S-Band polarized dual-Doppler rainfall rates for the simulation of surface runoff on arid areas, since 1990.

- The model CASC2D has been calibrated on Macks Creek in Idaho, Goodwin Creek in Mississippi and has been used for simulations on Taylor Arroyo, Colorado, Hickahala-Senatobia, Mississippi, and Salzbach in Switzerland. The model CASC2D has been integrated in the Watershed Modeling System WMS of the U.S. Army Corps of Engineers at the Waterways Experiment Station, since 1989.
- The analysis of large concentrations of sands in suspension using the diffusion-dispersion models, since 1985.
- The analysis of the rheology of mud flows and debris flows using the quadratic model resulted in the development of the two-dimensional mud flow routing model FLO-2D by Dr. O'Brien, since 1983.
- Analysis of soil erosion for actinide migration using WEPP, 1998-00.
- Analysis of rain gage and radar data data for moving rainstorms led to the development of Eulerian and Lagrangian correlation techniques, 1986-1992.
- The effects of moving rainstorms on peak surface runoff has been studied using the models CASC and FEM1U developed at CSU, 1988-1989.
- Applications of soil erosion models including LAVSED and RUSLE on watersheds under different climates namely on the Chaudière watershed in Canada and the Conca de Tremp watershed in Spain, 1986-1989.
- Development of the soil erosion model LAVSED for the simulation of sediment transport from snowmelt runoff on large northern streams, 1977-1983.

## **LABORATORY RESEARCH**

- Particle velocity measurements on steep rough slopes, 1996-1998.
- Bedload particle velocity measurements on smooth and rough dry surfaces, 1993-1997.
- Experiments on upper-regime plane bed, 1992-1993.
- Experiments on the geometry of small dunes, 1988-1991.
- Small scale experiments on the lateral migration of alluvial channels, 1988-1991.
- Large-scale experiments on scour below grade-control structures, 1986-1990.
- Experimental measurements of velocity profiles and scour development around bridge piers, 1986-1990.
- Laboratory measurement of the rheological properties of mud flows,

- 1985-1986.
- Laboratory measurements of shear stress from single raindrops impacting sheet flow, 1986-1990.
  - Experiments on lamination and stratification of sand mixtures, 1986-1993.
  - Small-scale laboratory experiments on headcut migration and development of rills on different soils, 1988-1991.
  - Studies on the mechanics of the erosion processes downstream of grade-control structures, 1985-1992.
  - Laboratory measurement of sediment concentration profiles in a Rankine combined vortex, 1984-1986.
  - Experimental research on the stability of laminar sheet flow and the formation of roll waves, 1983-1986.
  - Design and calibration of three small-scale hydraulic models to improve the laboratory facilities at Laval University, 1979-1980.
  - Assistant to Prof. Frenette on physical modeling of salt intrusion in a degenerated estuary at the Hydraulics Laboratory at Laval University, 1976-1977.

**Ph.D. STUDENT ADVISEES (P. Julien as major professor)**

	<u>Name</u>	<u>Dissertation Topic</u>	<u>Degree</u>	<u>Graduation</u>
1.	A. Dawod	Rainfall erosion	Ph.D.	Summer '86
2.	J.S. O'Brien	Rheology of mudflow	Ph.D.	Summer '86
3.	N. Bormann	Drop Structures scour	Ph.D.	July '88
4.	J. Richardson	Moving rainstorms	Ph.D.	June '89
5.	D. Hartley	Raindrop impact	Ph.D.	January '90
6.	O. Stein	Rills and headcut	Ph.D.	July '90
7.	Y. Lan	River meandering	Ph.D.	December '90
8.	G. Choi (co-ad.)	Channel networks	Ph.D.	December '90
9.	K. Marcus	Finite element runoff	Ph.D.	April '91
10.	F. Ogden	Radar hydrology	Ph.D.	January '92
11.	B. Saghafian	2-D runoff modeling	Ph.D.	January '92
12.	W. Doe	Terrain modeling	Ph.D.	June '92
13.	J. Wargadalam	Regime equations	Ph.D.	April '93
14.	D. May	Lagrangian rainstorms	Ph.D.	November '93
15.	Y. Raslan	Bed form mechanics	Ph.D.	January '94
16.	D. Williams(co)	Sediment transport	Ph.D.	Fall '95
17.	D. Molnar (Noss)	Mesoscale runoff	Ph.D.	Spring '97
18.	B. Johnson	CASC2D-SED	Ph.D.	Spring '97
19.	J. Guo	Wake flow functions	Ph.D.	Summer '98

20.	J. Jorgeson	Flash floods	Ph.D.	Summer '99
21.	A. Sharma	Subsurface modeling	Ph.D.	Spring '00
22.	G. Richard	Channel morphology	Ph.D.	Spring '01
23.	R. Rojas	Upland erosion	Ph.D.	Summer '02
24.	S. Akalin	Mississippi River	Ph.D.	Summer '02
25.	B. Bounvilay	Bedload part. velocity	Ph.D.	Fall '02
26.	C. Leon	Rio Grande Modeling	Ph.D.	Spring '03
27.	B. Kane	Specific degradation	Ph.D.	Summer '03

'	J. England	Flashflood Modeling		Advanced
'	M. Weinhold	Cobble-bed streams		In progress
'	M. Velleux	Metal transport		Advanced
'	Un Ji	Sediment transport		In Progress
'	Y.H. Shin			New
'	J.H. Kim			New
'	J. Halgren			New

### M.S. STUDENT ADVISEES

#### Plan A with thesis

	<u>Name</u>	<u>Thesis Topic</u>	<u>Degree</u>	<u>Graduation</u>
1.	T. Cline(co)	Auto-CAD and HEC-1	M.S.	June '88
2.	G. Moglen	Distributed overland flow	M.S.	June '89
3.	C. Santoro(co)	Scour around bridge piers	M.S.	July '89
4.	Y. Raslan	Properties of bed forms	M.S.	Dec. '90
5.	C. Meier	Bedload particle velocity	M.S.	Fall '95
6.	K. Klimek	Particle velocity on rough plates	M.S.	Fall '97
7.	C. Leon	Hydraulic geometry of Rio Grande	M.S.	Sum '98
8.	T. Bauer	Rio Grande hydraulic geometry	M.S.	Sum '99
9.	H. Hussain	Mudflow velocities	M.S.	Sum '99
10.	J. Spah	Large scale runoff modeling	M.S.	Fall '99
11.	L. Tysdal	Actinide migration	M.S.	Fall '99
12.	M. Weinhold	Gravel-bed transport	M.S.	July '01
13.	M. Sixta	Rio Grande migration	M.S.	Spring '04
14.	J. Albert	Double Mass Curves	M.S.	Fall '04
'	F. Jay	Modified Einstein		Advanced
'	S. Novak	Rio Grande		Advanced
'	J. Mercure			New
'	S. Shah			New



'	C. Vensel		New
'	H. Kim		New

### Plan B without thesis

1.	A. Eimer	-	M.S.	May '87
2.	D. Hoelzer	-	M.S.	May '87
3.	C. Azuero	-	M.S.	July '87
4.	B. Saghafian	-	M.S.	July '88
5.	J. Wargadalam	-	M.S.	March '89
6.	Y. Chen	-	M.S.	March '89
7.	M. Tauzer	-	M.S.	Sum '95
8.	S. Akalin	-	M.S.	Spring '97
9.	R. Krehbiel	-	M.S.	Spring '97
10.	T. Dahl(co)	-	M.S.	Spring '98
11.	A. Mendelsberg	Cohesive sediment transport	M.S.	Fall '03
12.	J. Duncan	Bendway weirs	M.S.	Fall '03

'	D. Kang	GIS	Advanced
'	M. Brown		New
'	L. Embertson		New

### M. Eng. Plan C advisees

'	L. Babbitt		M.Eng.	New
'	R. Tanner		M. Eng.	New
'	F. Westfield		M. Eng.	New
'	P. Macy		M. Eng.	New

## PUBLICATIONS

### M.Sc. THESIS AND Ph.D. DISSERTATION

1. Julien, P.Y. *Erosion de bassin et apport solide en suspension dans les cours d'eau nordiques*, M.Sc. Thesis, Département de Génie Civil, Université Laval, Québec, Canada, September 1979, 186 p. (Advisor: Marcel Frenette)
2. Julien, P.Y. *Prédiction d'apport solide pluvial et nival dans les cours d'eau*

*nordiques à partir du ruissellement superficiel*, Ph.D. dissertation, Département de Génie Civil, Université Laval, Québec, Canada, submitted in Nov. 1982, completed in February 1983, 240 p. (Advisor: Marcel Frenette)

## TEXTBOOK

1. Julien, P.Y., ***Erosion and Sedimentation***, Cambridge University Press, QE571.J85, ISBN 0-521-44237-0 Hardback in 1995, and ISBN 0-521-63639-6 Paperback in 1998, 280p.  
Review by R.L. Soulsby, *J. Fluid Mechanics*, Vol. 304, 1995, pp. 373-6.  
Review by D. Walling, *J. Hydrol. Sciences*, 41(4), 1996, pp. 651-2.  
Review by C. Kendall, *The Leading Edge*, May 1996.  
Review by B. Gomez, *Progress in Physical Geography*, 20(2), 1996.  
Review by I.W. Drummond, *OUGS Journal*, 17(1), 1996.  
Review by W. R. White, *World Meteorological Organization*, 45(2), 1996.  
Review by G. Govers, *Het Ingenieursblad*, 66(3), 1997.  
Review by A. Borgia, *J. Pure Appl. Geophys.*, Vol. 149, 1997, pp. 814-5.  
Review by W. Graf, *J. of Hydr. Eng.*, ASCE, May 1999, pp. 554-5.  
Review by J. Nelson, *American Geophysical Union, EOS*, April 13, 1999.  
Review by H.M. Pantin, *J. Sed. Res.*, 68(3), May 1998, pp. 519-20.  
Review by J. Woodside, *The leading Edge*, April 1999, p. 520.  
Review by J. Berlamont, *Het Ingenieursblad*, 5, May, 2000 (in Dutch)  
Review by N.J. Clifford, *progress in Physical Geography*, 24(2), 2000.  
Review by G. Nichols, *Geological Magazine*, 2001.

<http://us.cambridge.org/titles/catalogue.asp?isbn=0521636396>

2. Julien, P.Y., ***River Mechanics***, Cambridge University Press, TC405.J85, ISBN 0-521-56284-8 Hardback in 2002, and ISBN 0-521-52970-0 Paperback in 2002, 280p.

<http://www.cup.org/titles/catalogue.asp?isbn=0521529700>

- Review by Z. Demirbilek, *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE, Sept-Oct. 2003, p.241.  
Review by R. Walton and D.T. Williams, *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE, Sept-Oct. 2003, p.241-2.  
Review by A. M. da Silva, *Journal of Hydraulic Engineering*, ASCE, Nov. 2003, pp. 923-4.  
Review by H.W. Shen, *Journal of Hydraulic Engineering*, ASCE, April 2004, pp. 377-8.

## LECTURE MANUALS

1. Richardson, E.V., D.B. Simons and P.Y. Julien. *Highways in the River Environment*, Training and Design Manual for the U.S. Dept. of Transportation, Federal Highway Administration. Publication No. FHWA-HI-90-016, February 1990.
2. Julien, P.Y. *Erosion and Sedimentation*, Teaching Guide for CE-716 Erosion and Sedimentation, Colorado State University, August 1987 (7 Chapters, 139p.), revised in 1992 (Part I, Chapters 1-6, 147p.; Part II, Chapters 7-12, 177p.).
3. O'Brien, J.S. and P.Y. Julien, *Mud and Debris Flow Modeling using FLO-2D*, Lecture notes for a CSU Short Course presented in San Francisco, CA, August 5-6, 1997.
4. O'Brien, J.S., P.Y. Julien and V.M. Ponce, *Flood Hazard Simulation*, Lecture Notes for a CSU short course presented at the Cliff Lodge, Snowbird Utah, October 5-7, 1998.
5. Guo, J.J., and P.Y. Julien, *Solution Manual for Erosion and Sedimentation*, Department of Civil Engineering, Colorado State University, January 1999, 114 p.
6. Johnson, T., S.R. Abt, C.L. Thornton and P.Y. Julien, *Design of Erosion Protection for Long-term Stabilization*, Manual NUREG-1623, Nuclear Regulatory Commission, Washington, D.C., (in press).
7. Julien, P., Teaching Manual for CE-717 River Mechanics, Colorado State University, January, 1999, 386p. Revised in 2001, 800 p.

## BOOK CHAPTERS

1. Richardson, J.R. and P.Y. Julien, *One-Dimensional Modeling of Moving Rainstorms in Catchment Runoff and Rational Formula*, Edited by B.C. Yen, Water Resources Publications, 1991, pp. 155-167.
2. Williams, D.T., and P.Y. Julien, *Examination of Stage-Discharge Relationships of Compound/Composite channels*, in *Channel Flow Resistance: Centennial of Manning's Formula*, Edited by B.C. Yen, Water Resources Publications, 1991, pp. 341-355.
3. Shen, H.W. and P.Y. Julien, *Erosion and Sediment Transport*, Chap. 12 in

the Handbook of Hydrology, Mc Graw-Hill, 1993, 61p.

4. Julien, P.Y., *Flash flood modeling of Macks Creek*, Chap. 17.2 in Coping with Floods, Edited by G. Rossi et al., NATO ASI Series E: Applied Sciences, Vol. 257, Kluwer Academic Publishers, 1994, pp. 403-410.
  5. Julien, P.Y., *Sand Particle Interaction in Moving Bed Layers*, in Archiv fur Hydrobiologie - Advances in Limnology - Suspended Particulate Matter in Rivers and Estuaries, Vol. 47, 1996, pp. 415-420.
  6. Julien, P.Y. and J.S. O'Brien, *Selected notes on debris flow dynamics*, and *Introduction to Chapter 2*, in Recent Developments on Debris Flows, Lecture Notes in Earth Sciences, Edited by A. Armanini and M. Michiue, Springer Verlag, Vol. 64, 1997, pp. 65-69 and 144-162.
  7. Ogden, F.L. and P.Y. Julien, CASC2D; A Two-dimensional, Physically-based, Hortonian hydrologic model, Chapter 4 in "Mathematical Models of Small Watershed Hydrology and Applications", Edited by V. Singh and D.K. Frevert, Water Resources Publications, 2002, pp. 69-112.
- Julien, P.Y. and R. Eykholt, *Sedimentation and Centrifugation*, Section of the Encyclopedia of Physics, Wiley-VCH Publishers, In Press.
- Julien, P.Y. and C.T. Yang, *Rivers*, Section of the Encyclopedia of Water, J. Lehr Editor, Wiley and Sons.
- Yang, C.T. and P.Y. Julien, *Sedimentation*, Section of the Encyclopedia of Water, J. Lehr Editor, Wiley and Sons.

## **PAPERS IN REFEREED JOURNALS**

1. Frenette, M., M. Caron, P.Y. Julien, and R.J. Gibson. *Interaction between salmon parr population and discharge in the Matamec River*, Canadian Journal of Fisheries and Aquatic Sciences, Vol. 41, No. 6, 1984, pp. 954-964.
2. Julien, P.Y. and D.B. Simons. *Sediment transport capacity of overland flow*, Transactions of the ASAE, Vol. 28 (3), May-June 1985, pp.755-762. (ASAE Best Paper Award in 1986).
3. Thorne, C.R., L.W. Zevenbergen, J.E. Pitlick, S. Rais, J.B. Bradley and P.Y. Julien. *Direct measurements of secondary currents in a meandering sand-bed river*, Nature, Vol. 315, June 1985, pp. 746-7.

4. Julien, P.Y. and M. Frenette. *Modelling of rainfall erosion*, Journal of Hydraulic Engineering, ASCE, Oct. 1985, Vol. 111 (10), pp. 1344-59.
5. Julien, P.Y. and D.M. Hartley. *Formation of roll waves in laminar sheet flow*, Journal of Hydraulic Research, IAHR, Vol. 24, No. 1, 1986, pp. 5-17.
6. Frenette, M. and P.Y. Julien. *LAVSED I - A model for predicting suspended load in northern streams*, Canadian Journal of Civil Engineering, CSCE, Vol. 13, No. 2, April 1986, pp. 150-161.
7. Julien, P.Y. and M. Frenette, *LAVSED II - A model for predicting suspended load in northern streams*, Canadian Journal of Civil Engineering, CSCE, Vol. 13, No. 2, 1986, pp. 162-170.
8. Julien, P.Y. *Concentration of fine sediment particles in a vortex*, Journal of Hydraulic Research, IAHR, Vol. 24, No. 4, 1986, pp. 255-264.
9. Frenette, M. and P.Y. Julien. *Computer modelling of soil erosion and sediment yield from large watersheds*, International Journal of Sediment Research, Vol. 1, 1987, pp. 39-68.
10. Julien, P.Y. and A.M. Dawod. *On predicting upland erosion losses from rainfall depth. 1. Probabilistic approach*, Stochastic Hydrology and Hydraulics Journal, Vol. 1, 1987, pp. 127-134.
11. Dawod, A.M. and P.Y. Julien. *On predicting upland erosion losses from rainfall depth. 2. Field applications in Iraq*, Stochastic Hydrology and Hydraulics Journal, Vol. 1, 1987, pp. 135-140.
12. Julien, P.Y. and M. Frenette. *Macroscale analysis of upland erosion*, Hydrological Sciences Journal, IAHS, Vol. 32, No. 3, 1987, pp. 347-358.
13. O'Brien, J.S. and P.Y. Julien. *Laboratory analysis of mudflow properties*, Journal of Hydraulic Engineering, ASCE, Vol. 114 (8), August 1988, pp. 877- 887.
14. Woo, H.S., P.Y. Julien and E.V. Richardson. *Suspension of large concentrations of sands*, Journal of Hydraulic Engineering, ASCE, Vol. 114 (8), August 1988, pp. 888-898.
15. Cline, T. J., A. Molinas and P. Y. Julien. *An AutoCAD-based watershed information system for the Hydrologic model HEC-1*, Water Resources

Bulletin, AWRA, Vol. 25, No.3, June 1989, pp. 641-652.

16. Julien, P.Y. and G.E. Moglen. *Similarity and length scale for spatially varied overland flow*, Water Resources Research, AGU, Vol. 26, No. 8, 1990, pp. 1819-1832.
17. Santoro, V.C., P.Y. Julien, E.V. Richardson, and S.R. Abt. *Velocity profiles and scour depth measurements around bridge piers*, Proc. Annual Meeting, Transportation Research Board, FHWA, paper # 910874.
18. Julien, P.Y. and Y.Q. Lan. *Rheology of hyperconcentrations*, Journal of Hydraulic Engineering, ASCE, Vol. 115, No.3, March 1991, pp. 346-353.
19. Bormann, N.E. and P.Y. Julien, *Scour downstream of grade-control structures*, Journal of Hydraulic Engineering, ASCE, Vol. 115, No.5, May 1991, pp. 579-594.
20. Julien, P.Y. and M. Gonzalez del Tanago, *Spatially-varied soil erosion under different climates*, Hydrologic Sciences Journal, IAHS, Vol. 36, No. 6, Dec. 1991, pp. 511-524.
21. Hartley, D.M. and P.Y. Julien. *Boundary shear stress induced by raindrop impact*, Journal of Hydraulic Research, IAHR, Vol. 30, No. 3, 1992, pp. 341-359.
22. Stein, O.R. and P.Y. Julien, *Criterion delineating the mode of headcut migration*, Journal of Hydraulic Engineering, ASCE, Vol. 119, No. 1, Jan. 1993, pp. 37-40.
23. O'Brien, J.S., P.Y. Julien and W.T. Fullerton, *Two-dimensional water flood and mudflow simulation*, Journal of Hydraulic Engineering, ASCE, Vol. 119, No. 2, Feb. 1993, pp. 244-261.
24. Ogden, F.L. and P.Y. Julien, *Runoff sensitivity to temporal and spatial rainfall variability at runoff plane and small basin scale*, Water Resources Research, AGU, Vol. 29, No. 8, 1993, pp. 2589-2597.
25. Julien, P.Y., Y.Q. Lan and G. Berthault. *Experiments on stratification of heterogeneous sand mixtures*, Bulletin de la Société Géologique de France, Tome 164, No. 5, 1993, pp. 649-660.
26. Stein, O.R., P.Y. Julien and C.V. Alonso, *Mechanics of rill scour*, Journal

- of Hydraulic Research, IAHR, Vol. 31, No. 6, 1993, pp. 723-738.
27. Richardson, J.R. and P.Y. Julien, *Suitability of simplified overland flow equations*, Water Resources Research, AGU, Vol. 30, No. 3, 1994, pp. 665-671.
  28. Ogden, F.L., and P.Y. Julien, *Two-dimensional runoff sensitivity to radar resolution*, Journal of Hydrology, Vol. 128, Nos 1-2, June 1994, pp. 1-18.
  29. Stein, O.R., and P.Y. Julien, *Sediment concentration below a free overfall*, Journal of Hydraulic Engineering, ASCE, Vol. 120, No. 9, Sept. 1994, pp. 1043-1059.
  30. Julien, P.Y. and J. Wargadalam, *Alluvial channel geometry: theory and applications*, Journal of Hydraulic Engineering, ASCE, Vol. 121, No. 4, April 1995, pp. 312-325.
  31. Julien, P.Y., B. Saghafian and F.L. Ogden, *Raster-based hydrologic modeling of spatially-varied surface runoff*, Water Resources Bulletin, AWRA, Vol. 31, No. 3, 1995 , pp. 523-536.
  32. Saghafian, B., P.Y. Julien and F.L. Ogden, *Similarity in catchment response 1. Stationary rainstorms*, Water Resources Research, AGU, Vol. 31, No. 6, 1995, pp. 1533-1541.
  33. Ogden, F.L., J.R. Richardson, and P.Y. Julien, *Similarity in catchment response 2. Moving rainstorms*, Water Resources Research, AGU., Vol. 31, No. 6, 1995, pp. 1543-1547.
  34. Julien, P.Y. and G.J. Klaassen, *Sand-dune geometry in flooded rivers*, Journal of Hydraulic Engineering, ASCE, Vol. 121, No. 9, 1995, pp. 657-663.
  35. Saghafian, B. and P.Y. Julien, *Time to equilibrium for spatially variable watersheds*, Journal of Hydrology, 172, 1995, pp. 231-245.
  36. Kawai, S. and P.Y. Julien, *Point bar deposits in narrow sharp bends*, Journal of Hydraulic Research", IAHR, Vol. 34, No. 2, 1996, pp. 205-218.
  37. Julien, P.Y., *Transforms for runoff and sediment transport*, Journal of Hydrologic Engineering, ASCE, Vol. 1, No. 3, 1996, pp. 114-122.
  38. Doe III, W, B. Saghafian, and P.Y. Julien, *Land-use impact on watershed*

*response: the integration of two-dimensional hydrologic modelling and Geographic Information Systems*, Hydrological Processes Journal, Vol. 10, 1996, pp. 1503-1511.

39. Molnar, D.K. and P.Y. Julien, *Estimation of upland erosion using GIS*, Journal of Computers & Geosciences, Vol. 24, No. 2, 1998, pp. 183-192.
40. Julien, P.Y., D.K. Molnar, B.E. Johnson and P.G. Combs, *Flood forecasting reaches new potential*, EOS, AGU, Vol. 79, No. 14, April 7, 1998 and electronic file at [http://www.agu.org/eos\\_elec/97271e.html](http://www.agu.org/eos_elec/97271e.html).
41. ASCE Task Committee on Hydraulics, *Bank Mechanics, and Modeling of River Width Adjustment, River width adjustment. I: Processes and mechanisms*, Journal of Hydraulic Engineering, ASCE, Vol. 124, No. 9, 1998, pp. 881-902.
42. ASCE Task Committee on Hydraulics, *Bank Mechanics, and Modeling of River Width Adjustment, River width adjustment. II: Modeling*, Journal of Hydraulic Engineering, ASCE, Vol. 124, No. 9, 1998, pp. 903-917.
43. May, D.R., and P.Y. Julien, *Eulerian and Lagrangian Correlation Structures of Convective Rainstorms*, Water Resources Research, AGU, Vol. 34, No. 10, 1998, pp. 2671-2683.
44. Julien, P.Y. and Y. Raslan, *Upper-regime Plane Bed*, Journal of Hydraulic Engineering, ASCE, Vol. 124, No. 11, November 1998, pp. 1086-1096.
45. Johnson, B.E., P.Y. Julien, D.K. Molnar and C.C. Watson, *The Two-dimensional Upland Erosion Model CASC2D-SED*, Journal of the American Water Resources Association, AWRA, Vol. 36, No. 1, February 2000, pp. 31-42.
46. Molnar, D.K. and P.Y. Julien, *Grid Size Effects on Surface Runoff Modeling*, Journal of Hydrologic Engineering, ASCE, Vol. 5, No. 1, 2000, pp. 8-16.
47. Guo, J. and P.Y. Julien, "Turbulent Velocity Profiles in Sediment-laden Flows", Journal of Hydraulic Research", IAHR, Vol. 39, No. 1, 2001, pp. 11-23.
48. Julien, P.Y. and D. Anthony, "Bedload Motion by Size Fractions in Meander Bends", Journal of Hydraulic Research, IAHR, Vol. 40, No. 2, 2002, pp. 125-133.



49. Saghafian, B., P.Y. Julien, and H. Rajae, "*Runoff Hydrograph Simulation Based on Time Variable Isochrone Technique*", *Journal of Hydrology*, 261, April 2002, pp. 193-203.
  50. Julien, P.Y., G.J. Klaassen, W.T.M. ten Brinke and A.W.E. Wilbers, "*Case Study: Bed Resistance of the Rhine River during the 1998 flood*," *Journal of Hydraulic Engineering*, ASCE, Vol. 128, No., 12, 2002, pp. 1042-1050.
  51. Julien, P.Y. and Rojas, R., "*Upland Erosion Modeling with CASC2D-SED*," *International Journal of Sediment Research*, Vol. 17, No. 4, 2002, pp. 265-274.
  52. Guo, J. and P.Y. Julien, "*Modified log-wake law for turbulent flow in smooth pipes*", *Journal of Hydraulic Research*, IAHR, Vol. 41, No. 5, 2003, pp. 493-501.
  53. Richard, G.A. and Julien, P.Y., 2003, "*Dam Impacts and Restoration on an Alluvial River – Rio Grande, New Mexico*", *International Journal of Sediment Research*, v. 18, n. 2, pp. 89-96.
  54. Lee, J.S. and P.Y. Julien, "*Derivation of Downstream Hydraulic Geometry Equations for Alluvial Rivers*", *Korean Journal of Hydraulic Engineering*, KSCE, Vol.23, No. 6B, 2003, pp. 551-559 (in Korean).
  55. Wu, B., A. Molinas and P.Y. Julien, "*Bed-material Load Computations for Sediment Mixtures*", *Journal of Hydraulic Engineering*, ASCE, Vol.130 No.10, 2004, pp. 1002-1012.
  56. Guo, J. and P.Y. Julien, "*Boundary shear stress in smooth rectangular open channels*", *Journal of Hydraulic Engineering*, ASCE, Vol. 131 No. 1, 2005, pp. 30-37.
- Richard, G.A., and P.Y. Julien, "*Statistical Methods of Modeling Lateral Movement of the Rio Grande*", *Special Issue of Geomorphology*, Vol. , No. , 200 , pp. (accepted).
- Julien, P.Y. and Jorgeson, J. "*Peak Flow Forecasting with CASC2D and Radar Data*", *Special issue of Water International*, *International Water Resources Association*, IWRA, Vol., No., 200, pp. (Expected publication, March 2005).
- Richard, G.A., and P.Y. Julien, "*Case Study: Modeling the Lateral Mobility of the Rio Grande below Cochiti Dam*", *Journal of Hydraulic Engineering*, ASCE, Vol. , No. , 200 , pp. (accepted).
- Guo, J., P.Y. Julien and R.N. Meroney, "*Modified log-wake law for zero-pressure gradient turbulent boundary layers*", *Journal of Hydraulic*

- Research, IAHR, Vol., No., 200, pp. (Accepted).
- Duan, J.G. and P.Y. Julien, "Numerical Simulation of the Inception of Channel Meandering", Special Issue on Quantifying Rates of Geomorphic Processes of Earth Surface Processes and Landforms, Vol. , No., 200, pp. (Expected publication May-June 05).
- Richard, G.A., P.Y. Julien and D. Baird, "*Morphological changes of the Rio Grande downstream of Cochiti Dam*", Regulated Rivers: Research and Management, Vol., No., pp. (in review)
- Guo, J. and P.Y. Julien, "*Modified Log-wake Law in Smooth Rectangular Open Channels*", Journal of Hydraulic Engineering, ASCE, Vol. , No. , 200, pp. (in review).
- Weinhold, M. and P.Y. Julien, "Site-calibrated Gravel Transport by Size Fractions in a Cobble -bed Stream", Journal of Hydraulic Engineering, ASCE, Vol., No., 200 , pp. (In review).
- Lee, J.S. and P.Y. Julien, "Electromagnetic Wave Surface Velocimeter", Journal of Hydraulic Engineering, ASCE, Vol., No., pp. (In review).
- Bounvilay, B. and P.Y. Julien, "Bedload Particle Velocity in Open Channels", Journal of Hydraulic Engineering, ASCE, Vol., No., pp. (In review).
- Rojas, R. and P.Y. Julien, "Washload Erosion Modeling with CASC2D-SED" Journal of Hydraulic Engineering, ASCE, Vol., No., pp. (In review).
- Julien, P.Y., "Dispersive and Turbulent Shear Stresses in Hyperconcentrated Sediment Flows", Journal of Hydraulic Engineering, ASCE, Vol., No., 200 , pp. (in prep.).
- Guo, J. and P.Y. Julien, "Dune Resistance from a Boundary Layer Model", Journal of Hydraulic Engineering, ASCE, Vol., No., 200 , pp. (in prep.).
- Akalin, S. and P.Y. Julien, "*Water Temperature Effect on Sediment Transport by Size Fraction in the Lower Mississippi River*", Journal of Hydraulic Engineering, ASCE, Vol., No., 200 , pp. (in prep.).
- Guo, J. and P.Y. Julien, "*Rouse and the Shields Diagram*", Journal of Hydraulic Engineering, ASCE, Vol., No., 200 , pp. (in prep.).

### **TECHNICAL NOTES and EDITORIALS in REFEREED JOURNALS**

1. Woo, H.S., P.Y. Julien and E.V. Richardson. *Washload and fine sediment load*, Technical Note, Journal of Hydraulic Engineering, ASCE, June 1986, Vol. 112, No. 6, pp. 541-545.
2. Woo, H.S., P.Y. Julien and E.V. Richardson. *Transport of bed sediment in clay suspensions*, Technical Note, Journal of Hydraulic Engineering,

ASCE, 1987, Vol. 113, No. 8, pp. 1061-1066.

3. Simons, D.B. and P.Y. Julien. *Analysis and testing of hydrologic models*, Technical Letter, CIRA Newsletters, Vol. 2, No. 2, Sept. 1987, pp. 8-9.
  4. Simons, D.B. and P.Y. Julien. *Hydrologic modeling at Colorado State University*, Technical Note, Army Environmental Sciences Journal. Vol.6, No.3, 1988, pp. 9-10.
  5. Williams, D.T. and P.Y. Julien. *On the selection of sediment transport equations*, Technical Note, Journal of Hydraulic Engineering, ASCE, Nov. 1989, Vol. 115, No. 11, pp. 1578-1581.
  6. Woo, H.S. and P.Y. Julien, *Turbulent shear stress in heterogeneous sediment-laden flows*, Technical Note, Journal of Hydraulic Engineering, ASCE, Nov. 1990, Vol. 116, No. 11, pp. 1416-1421.
  7. Julien, P.Y., *The On-going Challenge*, Editorial, Journal of Hydraulic Engineering, ASCE, Vol. 128, No. 3, March 2002, pp. 250-251.
  8. Julien, P.Y., *A Strong Editorial Board*, Editorial, Journal of Hydraulic Engineering, ASCE, Vol. 128, No. 6, June 2002, pp. 558-560.
  9. Julien, P.Y., *Sesquicentennial Highlights*, Editorial, Journal of Hydraulic Engineering, ASCE, Vol. 128, No. 12, December 2002, pp.1041-1041.
  10. Julien, P.Y., *News from the Editorial Board*, Editorial, Journal of Hydraulic Engineering, ASCE, Vol. 129, No. 8, August 2003, pp. 561-562.
  11. Julien, P.Y., *Annual Review 2003*, Editorial, Journal of Hydraulic Engineering, ASCE, Vol. 129, No. 12, December 2003, pp. 925-926.
  12. Julien, P.Y., *News from the Editorial Board*, Editorial, Journal of Hydraulic Engineering, ASCE, Vol. 130, No. 9, August 2004, pp. 841-842.
  13. Julien, P.Y., *Annual Review 2004*, Editorial, Journal of Hydraulic Engineering, ASCE, Vol. 130, No. 12, December 2004, pp. 1135-36.
  14. Guo, J. and P.Y. Julien, "An Efficient Algorithm for Computing Einstein Integrals", Technical Note, Journal of Hydraulic Engineering, ASCE, Vol.130, No.12, 2004, pp. 1198-1201.
- Lee, J.S. and P.Y. Julien, "Downstream Hydraulic Geometry of Alluvial Channels", Technical Note, Journal of Hydraulic Engineering, ASCE, Vol., No., pp. (accepted).

Akalin, S., P.Y. Julien and R. Eykholt, "*Coriolis Effect on Flow Direction in the Lower Mississippi River*", Journal of Hydraulic Engineering, ASCE, Vol., No., 200 , pp. (Tech. Note submitted).

## REFEREED JOURNAL DISCUSSIONS, CLOSURES and BOOK REVIEWS

1. Julien, P.Y., D.B. Simons and R.M. Li. Discussion on *Impingement of water jets on uniform streambed*, Journal of Hydraulic Engineering, ASCE, June 1984, Vol. 110, No. 6, pp. 861-863.
2. Julien, P.Y. and C.R. Thorne. Discussion on *Analysis of river meanders*, by H.H. Chang, Journal of Hydraulic Engineering, ASCE, May 1985, Vol. 111, No. 5, pp. 897-898.
3. Julien, P.Y. and C.R. Thorne. Discussion on *Flow and bed topography in alluvial channel bend*, by A.J. Odgaard, Journal of Hydraulic Engineering, ASCE, June 1985, Vol. 111, No. 6, pp. 1031-1035.
4. Julien, P.Y. and J.S. O'Brien. Discussion on *Mountain torrent erosion* by K. Ashida, Sediment Transport in Gravel-Bed Rivers, Pingree Park, Colorado, Wiley, 1987, pp. 537-539.
5. Julien, P.Y. Discussion on *Extremal hypotheses applied to river regime*, by R. Bettess and W.R. White, Sediment Transport in Gravel-Bed Rivers, Pingree Park, Colorado, Wiley, 1987, pp. 778-780.
6. Julien, P.Y. Discussion on *The coarse surface layer as a response to gravel mobility*, by E.D. Andrews and G. Parker, Sediment Transport in Gravel-Bed Rivers, Pingree Park, Colorado, Wiley, 1987, pp. 312-314.
7. Julien, P.Y. Discussion on *Sediment transport in step-pool streams*, by J.G. Whittaker, Sediment Transport in Gravel-Bed Rivers, Pingree Park, Colorado, Wiley, 1987, p. 572.
8. Julien, P.Y. Discussion on *Comparison of MOBED and HEC-6 river flow models*, Canadian Journal of Civil Engineering, CSCE, Vol. 13, No. 3, 1986, p. 396.
9. Julien, P.Y. Discussion on *Sediment transport in shallow flows* by N.M. Aziz and S.N. Prasad, Journal of Hydraulic Engineering, ASCE, Sept. 1987, Vol. 113, No. 9, pp. 1214-1215.
10. Julien, P.Y. and Y.Q. Lan. Discussion on *Simple model of sediment-laden flow* by G. Parker and N.L. Coleman, Journal of Hydraulic Engineering, ASCE, Vol. 114, No. 2, Feb., 1988, pp. 231-232.
11. Julien, P.Y. Discussion on *Sediment transport capacity of sheet and rill flow: Application of unit stream power theory*, by I.D. Moore and G.J. Burch, Water Resources Research, AGU, August 1987, Vol. 23, No. 8, p. 1700.
12. Julien, P.Y. and L.F. Janin. Discussion on *Open-channel flow measurement with a laser-Doppler anemometer* by I. Nezu and W. Rodi, Journal of Hydraulic Engineering, ASCE, Vol. 113, No. 12, December, 1987, pp.

1572-1573.

13. Julien, P.Y. Closure to the Discussion by G.H. Vatistas and S. Lin on *Concentration of very fine sediment particles in a vortex*, Journal of Hydraulic Research, IAHR, Vol. 25, No. 4, 1987, pp. 526-528.
14. Julien, P.Y. Review of the book Fluvial Processes in River Engineering by H.H. Chang, Journal of Hydraulic Research, IAHR, Vol. 26, No. 5, 1988, p. 599.
15. Julien, P.Y. Review of the book Mechanics of Plains Rivers by T. Blench, Canadian Journal of Civil Engineering, CSCE, Vol. 16, No. 6, 1989, pp. 962-963.
16. Julien, P.Y. Discussion on *Dispersive force basis for concentration profiles*, by K.C. Wilson and F.J. Pugh, Journal of Hydraulic Engineering, ASCE, Vol. 116, No. 2, 1990, pp. 297-298.
17. O'Brien, J.S., and Julien, P.Y. Closure to the discussions by J.P.Y. Maa and H. Pazwash on *Laboratory analysis of mudflow properties*, Journal of Hydraulic Engineering, ASCE, Vol. 116, No. 2., 1990, pp. 303-304.
18. Bormann, N.E. and P.Y. Julien, Closure to the discussions of S.Y. Lim, G.K. Cotton, M. Shafai-Bajestan and M.L. Albertson on *Scour downstream of grade-control structures*, Journal of Hydraulic Engineering, ASCE, Vol. 117, No. 5, May 1991, pp. 579-594.
19. Julien, P.Y. Review of the book Elements d'hydraulique torrentielle, by M. Meunier, Journal of Hydraulic Research, IAHR, Vol. 31, 1993. p. 144.
20. Julien, P.Y. Review of the book Basic physics and mechanics of channel erosion, by T. E. Mirtskhoulava, Journal of Hydraulic Research, IAHR, Vol. 31, 1993, p. 144.
21. O'Brien, J.S., P.Y. Julien and W.T. Fullerton, Closure to the discussion by J.R. Schaaf on *Two-dimensional water flood and mudflow simulation*, Journal of Hydraulic Engineering, ASCE, Vol. 120, No. 6, 1994, pp.771-774.
22. Julien, P.Y., Review of the book Hyperconcentrated Flow by Zhaohui Wan and Zhaoyin Wang, Journal of Hydraulic Engineering, ASCE, Vol. 120, No. 10, 1994, pp. 1234.
23. O.R. Stein, P.Y. Julien, and C.V. Alonso. Closure to the discussion by L.I. Machado on *Mechanics of scour downstream of a headcut*, Journal of Hydraulic Research, Vol. 32, No.6, 1994, pp. 951-953.
24. O.R. Stein, P.Y. Julien, and C.V. Alonso. Closure to the discussion by J.P. Martin Vide on *Mechanics of scour downstream of a headcut*, Journal of Hydraulic Research, Vol. 32, No.6, 1994, pp. 954-957.
25. Julien, P.Y., Discussion on *Velocity of air-core vortices at hydraulic intakes* by J.E. Hite and W.C. Mih, Journal of Hydraulic Engineering, ASCE, Vol. 121, No. 5, 1995, pp. 440-441.
26. Julien, P.Y., Discussion on *Education in hydraulics: from the nineties to the zeros*, by J. McNown and H Kobus, Proc. Iowa Hydraulics Colloquium on Issues and Directions in Hydraulics, May 22-24, 1995, pp. 17-18.
27. Julien, P.Y., and J. Wargadalam. Closure to the discussions by W. Hager

- and H. Huang on *Alluvial Channel Geometry: Theory and Applications*, Journal of Hydraulic Engineering, ASCE, Vol. 122, No. 12, 1996, pp. 750-754.
28. Julien, P.Y., Discussion on *Sediment-laden flow in open channels from two-phase flow viewpoint* by Z. Cao, L. Wei, and J. Xie, Journal of Hydraulic Engineering, ASCE, Vol. 123, No. 6, 1997, pp. 578-580.
  29. Julien, P.Y., and G.J. Klaassen. Closure to the discussions by C.R. Neill, Amsler and M. Garcia on *Sand-Dune Geometry of Large Rivers during Floods*, Journal of Hydraulic Engineering, ASCE, Vol. 123, No. 6, 1997, pp. 582-585.
  30. Julien, P.Y. Several discussions in Recent Developments on Debris Flows, Lecture Notes in Earth Sciences, Edited by A. Armanini and M. Michiue, Springer Verlag, Vol. 64, 1997, pp. 25-26, 91-92, 140-143, 185, 206-207.
  31. Julien, P.Y. Closure to the discussions by A. Armanini, Y. Taniguchi, R. Kitamura, M. Michiue, J. Aguirre-Pe, T. Takahashi and T. Davies on *Selected Notes on Debris Flow Dynamics*, in Recent Developments on Debris Flows, Lecture Notes in Earth Sciences, Edited by A. Armanini and M. Michiue, Springer Verlag, Vol. 64, 1997, pp. 155-162.
  32. Julien, P.Y. Review of the book Kinematic Wave Modeling in Water Resources by V.P. Singh, Wiley Interscience, EOS, Vol. 79, No. 16, 1998, p. 199.
  33. Julien, P.Y., and Y. Raslan. Closure to the discussions by Raul Pacheco-Ceballos on *Upper-Regime Plane Bed*, Journal of Hydraulic Engineering, ASCE, Vol. 125, No. 12, 1999, p. 1314.
  34. Johnson, B.E., P.Y. Julien, D.K. Molnar and C.C. Watson, Closure to the discussion by Ray Whittemore and Martin E. Lebo of *The Two-dimensional Upland Erosion Model CASC2D-SED*, Journal of the American Water Resources Association, AWRA, Vol. 36, No. 6, December 2000, pp. 1435-1436.
  35. Julien, P.Y. Review of the Water Resources Publications book Bridge Scour by B. Melville and S. Coleman, Journal of Hydraulic Engineering, ASCE, Vol. 128, No.9, 2002, pp. 875-876.
  36. Julien, P.Y. Review of the CRC Press handbook The Civil Engineering Handbook Edited by W.F. Chen and J.Y. Richard Liew, Journal of Hydraulic Engineering, ASCE, Vol. 130, No. 5, 2004, p. 475.
  37. Julien. P.Y., Review of the book Fluvial Processes by M.S. Yalin and A.M. Ferreira da Silva, Journal of Hydraulic Engineering, ASCE, Vol. 130, No. 7, 2004, p. 726.
  38. Julien, P.Y. Review of the World Scientific book Mechanics of Coastal Sediment Transport by Jorgen Fredsoe and Rolf Deigaard, Journal of Hydraulic Engineering, ASCE, Vol.130, No. 11, 2004, pp. 1132.
  39. Julien, P.Y. Review of the Kluwer Academic Publishers book Sedimentation and Sediment Transport Edited by Albert Gyr and Wolfgang Kinzelbach, Journal of Hydraulic Engineering, ASCE, Vol. 130, No. 12, 2004, pp.

Guo and Julien Closure to the discussion of Flow in smooth pipes, IAHR...

### **KEYNOTE ADDRESSES and INVITED CONFERENCE PAPERS**

1. Simons, D.B. and P.Y. Julien. *Engineering analysis of river meandering*, Keynote paper in River Meandering, Proceedings of the ASCE Conference on Rivers '83, pp. 530-544.
2. Frenette, M. and P.Y. Julien. *Computer modeling of soil erosion and sediment yield from large watersheds*, Invited paper in the Proceedings of the 27th Annual Convention of the Institution of Engineers, Pakistan, Peshawar, 2-6 April, 1985, 21 p. (Presented at Peshawar, Pakistan, and Cairo, Egypt.)
3. Richardson, E.V., H.S. Woo and P.Y. Julien. *Research trends in sedimentation*, Keynote Paper in Megatrends in Hydraulic Engineering, Colorado State University, 1986, pp. 299-330.
4. Richardson, E.V. and P.Y. Julien. *Bed forms, fine sediments, washload and sediment transport*, Invited paper, Third International Symposium on River Sedimentation ISRS-III, Jackson, Mississippi, March 31-April 4, 1986, pp. 854-874.
5. Frenette, M. and P.Y. Julien. *Advances in predicting reservoir sedimentation*, General lecture, Third International Symposium on River Sedimentation, ISRS-III, Jackson, Mississippi, March 31-April 4, 1986, pp. 26-46.
6. Julien, P.Y. and J.S. O'Brien, *Selected notes on debris flow dynamics*, Invited paper at the 1993 International Workshop on Debris Flow, September 6-8, Kagoshima, Japan, 1993, pp. 57-65.
7. Julien, P.Y., *Introduction to dynamics of debris flow*, Invited general report on papers related to debris flow dynamics. Proc. IAHR International Workshop on Debris Flow, September 6-8, Kagoshima, Japan, 1993, 5p.
8. Julien, P.Y. *Notes on debris flow dynamics*, Panelist at the Asia & Pacific Ocean International Conference on Volcanic Sediment Disaster Prevention, NHK Japan Broadcasting Corporation, Fukuoka Bureau, Sept. 9, 1993, Fukuoka, Japan, pp. 44-49.

9. Julien, P.Y. and J.S. O'Brien, *Rheology and modeling of mass movement deposits*, Invited paper at the Pierre Beghin International Workshop on Rapid Gravitational Mass Movements, December 6-10, 1993, Grenoble, France, pp. 167-173.
10. Julien, P.Y., *Similitude and hydrologic scales for surface runoff*, Invited speaker at the Front Range AGU Meeting, February 14-15, 1994, NCAR, Boulder, p.9.
11. Julien, P.Y., *Theoretically-derived regime river width*, Invited speaker at the 1994 ASCE Hydraulics Conference, Buffalo, New York, August 1-5, pp. 949-953.
12. Julien, P.Y., *Dynamic hydrologic modeling of mountain streams*, Invited speaker at the International Workshop on Floods and Inundations Related to Large Earth Movements", IAHR, Trento, Italy, October 4-7, 1994, pp. B5.1-10.
13. Julien, P.Y., *Similitude and hydrologic scales for surface runoff*, Invited speaker at the Front Range AGU Meeting, February 13-14, 1995, Lory Student Center, CSU, Fort Collins.
14. Julien, P.Y., Invited co-chair for Session 9 - Frontiers in Hydraulics: Computational Hydraulics, at the Iowa Hydraulics Colloquium: Issues and Directions in Hydraulics in honor of Professor J.F. Kennedy, May 1995. (see discussion # 26).
15. Julien, P.Y., Y. Raslan, Y.Q. Lan, and G. Berthault. *Experimental mechanics of sand stratification*, Invited speaker at the Workshop on "Structures Internes et Comportement des Suspensions Concentrées Géologiques", La Grande Motte, France, October 4-6, 1995, pp. 28.
16. Julien, P.Y., *Runoff and Sediment Modeling with CASC2D, GIS and Radar Data*, Invited speaker at the 3<sup>rd</sup> International Conference on Hydroscience and Engineering, Cottbus/Berlin, Germany, August 31- September 3, 1998, CD-ROM, parallel 15, 31.08.1998, 16:00-18:15.
17. Julien, P.Y., *Laboratory Experiments and Field Observations on Grain Sorting*, Invited speaker at the Conference on Granular Geomorphology, CECAM, Lyon, France, September 7-10, 1998, (1 p. abstract).
18. Julien, P.Y., *How Do We Educate Our Future Rehabilitation Experts*, Invited paper from the Discussion Session Chairman at the Wetlands Engineering & River Restoration Conference, Engineering Approaches to Ecosystem restoration, Session L, ASCE, Denver, Colorado, March 23-27, 1998, pp.



19. Julien, P.Y and C. Leon, *Mudfloods, mudflows and debris flows - classification, rheology and structural design*, Invited paper at the International Workshop on Mudflows and debris flows, Caracas, Venezuela, November 27- December 1, 2000.
20. Julien, P.Y., *Reservoirs, Stream Restoration and Environmental River Mechanics*, Invited Presentation at the International Workshop on Instream Flow and Self-purification in Urban Stream, Korean Institute for Construction Technology, Seoul, Korea, May 9, 2002.
21. Julien, P.Y., *Recent Advances in Sedimentation and River Mechanics*, Keynote Address at the Korean National Hydraulic Engineering Conference, Incheon University, Seoul, Korea, May 11, 2002.
22. Julien, P.Y., *Watershed Erosion Modeling with CASC2D-SED*, Invited Speaker at the Korean Water Resources Corporation, KOWACO, Tae-Jon, Korea, May 14, 2002.
23. P.Y. Julien, *Computer Modeling of Upland Erosion*, Keynote Address at the 13th APD-IAHR Congress, Singapore, August 6-8, 2002, Vol.I, 475-483.
24. P.Y. Julien, *Recent development in sediment transport*, Invited Half-day seminar, Universiti Sains Malaysia, Nibong Tebal, Malaysia, August 10, 2002.
25. P.Y. Julien and J. Jorgeson, *Peak Flow Forecasting with CASC2D and Radar Data*, Keynote Address at the 2<sup>nd</sup> International Conference on Flood Defence, Beijing, September 2002, pp. 23-33.
26. Richard, G.A., and P.Y. Julien, "*Statistical Methods of Modeling lateral Movement of the Rio Grande*", Invited paper at the Binghamton Geomorphology Symposium, Bloomsburg, PA, October 11-13, 2002.
27. Richard, G.A. and P.Y. Julien, "*Dam Impacts and Restoration on an Alluvial River-Rio Grande, New Mexico*", Invited paper at the U.S.- Chinese Joint Workshop on Sediment Transport and Environmental Studies, Milwaukee, WI, July 21-28, 2002.
28. Julien, P.Y., G. Richard and J. Albert, "*Stream Restoration and Environmental River Mechanics*", Keynote address, Proc. First International Conference on Managing Rivers in the 21st Century, Rivers '04, Universiti Sains Malaysia, Penang, Malaysia, September 21, 2004, pp. 62-78.

## PAPERS IN CONFERENCE PROCEEDINGS

1. Frenette, M. and P.Y. Julien. *Méthode simplifiée de prédiction d'érosion de bassin versant et d'apport solide en suspension dans les cours d'eau nordiques*, Proceedings of the Second Hydrotechnical Conference CSCE-QUEBEC, Sherbrooke, 1980, pp. 408-424.
2. Julien, P.Y. and M. Frenette. *A model for predicting suspended load in northern streams*, Proceedings of the Fourth Annual AGU Front Range Branch Hydrology Days, Colorado State University, April 1984, pp. 119-139.
3. Frenette, M. and P.Y. Julien. *A computer model for mapping soil erosion*, Proceedings of the Annual Conference of the Canadian Society for Civil Engineering, CSCE, Halifax, May 23-25, 1984, pp. 543-564.
4. Julien, P.Y. and M. Frenette. *A model for predicting suspended load in northern streams*, Proceedings of the Annual Conference on the Canadian Society of Civil Engineering, CSCE, Halifax, May 23-25, 1984, pp. 565-585.
5. Frenette, M. and P.Y. Julien. *Within the hydrologic cycle of a watershed. Integration of erosion processes and sediment load in mathematical models for water quality*, Proceedings of the Canadian Hydrology Symposium, Laval University, Quebec, June 10-12, 1984, National Research Council, Canada, No. 15, Vol. 1, pp. 465-487.
6. O'Brien, J.S. and P.Y. Julien. *Physical properties and mechanics of hyperconcentrated sediment flows*, Proceedings of the ASCE Specialty Conference on the Delineation of landslide, Flash Flood and Debris Flow Hazards in Utah, 1985, Utah Water Research Lab. Series UWRL/G-85/03, pp. 260-279.
7. Julien, P.Y. and D.M. Hartley. *Stability of laminar sheet flow*, Proceedings of the Hydrology Days and Rocky Mountain Groundwater Conference, AGU, Fort Collins, April 16-20, 1985, pp. 137-144.
8. Julien, P.Y. and M. Frenette. *Erosion de bassin et apport solide dans les cours d'eau lors de la fonte de neige*, Proceedings of the 7th Annual Hydrotechnical Conference, CSCE, Saskatoon, Saskatchewan, May 27-31, 1985, pp. 21-40.
9. Julien, P.Y. *Theoretical analysis of sediment particles in a Rankine*

*combined vortex*, Proceedings of the 7th Annual Hydrotechnical Conference, CSCE, Saskatoon, Saskatchewan, May 27-31, 1985, pp. 89-106.

10. Julien, P.Y. and M. Frenette. *Joint deterministic and probabilistic method for modelling rainfall erosion*, Fourth International Hydrology Symposium, Fort Collins, Colorado, July 15-17, 1985, pp. 1012-1026.
11. Julien, P.Y. and D.B. Simons. *Sediment transport capacity equations for rainfall erosion*, Fourth International Hydrology Symposium. Fort Collins, Colorado, July 15-17, 1985, pp. 988-1002.
12. Julien, P.Y. and M. Frenette. *Predicting washload from rainfall and snowmelt runoff*, Proceedings of the Third International Symposium on River Sedimentation, ISRS-III, Jackson, Mississippi, March 31-April 4, 1986, pp. 1259-1265.
13. Dawod, A.M. and P.Y. Julien. *Analysis of daily rainfall precipitation in North Iraq*, Proceedings of the Hydrology Days, Fort Collins, AGU, April 15-17, 1986, pp. 189-197.
14. Julien, P.Y. and D.M. Hartley. *Stabilité des écoulements laminaires*, CSCE Annual Conference, Toronto, May 14-18, 1986, Session 1 3.
15. O'Brien, J.S. and P.Y. Julien. *Rheology of non-Newtonian fine sediment mixture*, Proceedings of the ASCE Conference on Advancement in Aerodynamics, Fluid Mechanics and Hydraulics, Minneapolis, June 4-6, 1986, pp. 989-996.
16. Julien, P.Y. and M. Frenette. *Scale effects in predicting soil erosion*, International Symposium on Drainage Basin and Sediment Delivery, IAHS, Albuquerque, NM, Aug. 4-8, 1986, pp. 253-259.
17. Julien, P.Y. *Recent breakthroughs and prospective modelling of soil erosion and sediment transport in Canadian streams*, CSCE Centennial Conference, Montreal, May, 1987, pp. 535-543.
18. Williams, D.T. and P.Y. Julien. *On the selection of sediment transport equations*, Proceedings of the ASCE National Conference on Hydraulic Engineering, Williamsburg, 1987, pp. 925-929.
19. Azuero, C. and P.Y. Julien. *Sensitivity analysis of a stability factor for riprap design*, Proceedings of 8th Annual AGU Front Range Branch Hydrology Days, Colorado State University, Fort Collins, Colorado, April, 1988, pp. 174-184.

20. Cline, T., A. Molinas, and P.Y. Julien. *A Geographic Information System for obtaining and organizing watershed data and for preparing HEC-1 input files*, Proceedings of the 8th Annual AGU Front Range Branch Hydrology Days, Colorado State University, Fort Collins, Colorado, April 1988, pp. 81-90.
21. Julien, P.Y. *Downstream hydraulic geometry of noncohesive alluvial channels*, International Conference on River Regime, Wallingford, England, May 18-20, 1988, pp. 9-16.
22. Julien, P.Y. *Upland erosion estimates based on rainfall depth*, ASCE National Conference on Hydraulic Engineering, August 8-12, 1988, Colorado Springs, Colorado, pp. 364-368.
23. Richardson, J.R. and P.Y. Julien. *One dimensional modeling of moving rainstorms*, International Conference on Channel Flow and Catchment Runoff, Charlottesville, Virginia, May 1989, pp. 27-35.
24. Williams, D.T. and P.Y. Julien. *Examination of stage-discharge relationships of compound/composite channels*, International Conference on Channel Flow and Catchment Runoff, Charlottesville, Virginia, May 1989, pp. 478-488.
25. Julien, P.Y., *Prospective analysis of alluvial channel processes and geometry*, International ASAE-CSAE Summer Meeting, Québec, Canada, June 1989, Paper 892105, 9p.
26. Simons, R.J., R.A. Musette, P.Y. Julien and D.B. Simons. *Modeling resistance to flow in open channels*, International ASAE-CSCE Summer Meeting, Québec, Canada, June 1989, Paper 892106, 23p.
27. Julien, P.Y. *Géométrie hydraulique des cours d'eau à lit alluvial*, Proceedings B-Fluvial Hydraulics, 23rd IAHR Congress, Ottawa, Canada, August 1989, pp. B-9-16.
28. Woo, H.S. and P.Y. Julien, *Mathematical models for turbulent shear stress in sediment-laden flows*, Proceedings of the International Symposium on Sediment Transport Modeling, ASCE, New Orleans, August 1989, pp. 203-208.
29. Julien, P.Y. *Laboratory analysis of hyperconcentrations*, Proceedings of the International Symposium on Sediment Transport Modeling, ASCE, New Orleans, August 1989, pp. 681-686.
30. Julien, P.Y. *Soil losses from upland areas*, Proceedings of the Fourth

International Symposium on River Sedimentation, Beijing, China, 1989, Vol. 1, pp. 82-91.

31. Julien, P.Y. and M. Frenette. *Mapping erosion losses from large watersheds*, Proceedings of the Fourth International Symposium on River Sedimentation, Beijing, China, 1989, Vol. 1, pp. 92-99.
32. Stein, O.R. and P.Y. Julien. *Physical modelling of headcut migration*, Proceedings of 10<sup>th</sup> Annual AGU Front Range Branch Hydrology Days, Fort Collins, Colorado, April 1990, pp. 162-172.
33. Saghafian, B. and P.Y. Julien. *Resistance equations for laminar sheet flow*, Proceedings of 10th Annual AGU Front Range Branch Hydrology Days, Fort Collins, Colorado, April 1990, pp. 173-184.
34. May, D. and P.Y. Julien, *Analysis of raingage network resolution with spatial statistics*, ASCE Specialty Conference on Watershed Management, Durango, Colorado, July 1990, pp. 38-47.
35. Marcus, K.B. and P.Y. Julien, *Two-dimensional modeling of overland flow*, International Symposium on the Hydraulics/Hydrology of Arid Lands, ASCE, San Diego, August 1990, pp. 256-261.
36. Stein, O.R., and P.Y. Julien, *Sediment concentration measurement below small headcuts*, National Conference on Hydraulic Engineering, ASCE, San Diego, August 1990, pp. 293-298.
37. Gonzalez del Tanago, M., P.Y. Julien, and J. Redondo, *Influencia de la escala de trabajo en la estimacion de la erosion mediante el modelo USLE*, Reunion Nacional de Geomorfologia, Teruel, Spain, September 1990, pp. 607-617.
38. Berthault, G., F. Crouzel, and P.Y. Julien, *Signification des dépôts séquentiels: conséquences sur l'interprétation des règles de la sédimentologie*, 3e Congrès Français de Sédimentologie, Brest, France, November. 1991, pp. 33.
39. Stein, O.R., and P.Y. Julien, *Measurement of rill erosion sediment detachment*, ASAE Summer Meeting, Albuquerque, New Mexico, June 1991, Paper # 912086, 8p.
40. Julien, P.Y., *Laboratory experiments on sand grain sorting*, Grain Sorting Seminar, Ascona, October 1991, pp. 309-404.
41. Julien, P.Y. and G. Berthault, *Expériences fondamentales de stratification*,

- 4e Congrès Français de Sédimentologie, Livre des Résumés, ASF, Lille, France, November 17-19, 1993, pp. 191-192.
42. Julien, P.Y., *Theoretically-derived regime river width*, National Conference on Hydraulic Engineering, ASCE, Buffalo, N.Y., August 1-5, 1994, Volume 2, pp. 949-953.
  43. Julien, P.Y., Y.Q. Lan, Y. Raslan, and G. Berthault, *Experimental mechanics of sand stratification*, Publication ASF No. 22, 5e Congrès Français de Sédimentologie, Aix-les-Bains, April 24-26, 1995, p. 84.
  44. Julien, P.Y., *Teaching sedimentation in the 21st century*, Sixth Federal Interagency Sedimentation Conference, Sedimentation Technologies for Management of Natural Resources in the 21st Century, Las Vegas, March 10-14, 1996, Vol. 2, pp. VI-16-21.
  45. Noss, D.K. and P.Y. Julien. *Calculating upland erosion using GIS-GRASS*, Proceedings of the Hydrology Days, AGU, Fort Collins, April 15-18, 1996, pp. 371-382.
  46. Williams, D.T. and P.Y. Julien, *Selection of sediment transport relations*, Proceedings of the North American Water and Environment Congress and Destructive Water, ASCE, Anaheim, California, June 22-28, 1996, paper available on CD-ROM, 6p.
  47. Frenette M. and P.Y. Julien, *Physical processes governing reservoir sedimentation*, Proceedings of the International Conference on Reservoir Sedimentation, Volume 1, Colorado State University, Fort Collins, Colorado, September 11-16, 1996, pp. 121-142.
  48. Julien, P.Y., Y.Q. Lan and Y. Raslan, *Experimental mechanics of sand stratification*, Proceedings of the Third International Conference on Powders and Grains, Durham, North Carolina, May 18-22, 1997, pp. 487-490. (refereed conference)
  49. Stein, O.R., P.Y. Julien and C.V. Alonso, *Headward advancement of incised channels*, Conference on Management of Landscapes Disturbed by Channel Incision: Stabilization, Rehabilitation, and Restoration, May 20-22, 1997, Oxford, Mississippi, pp. 497-502.
  50. Molnar, D.K., P.Y. Julien and B.E. Johnson, *Advances in surface runoff modeling on Goodwin Creek*, Conference on Management of Landscapes Disturbed by Channel Incision: Stabilization, Rehabilitation, and Restoration, May 20-22, 1997, Oxford Mississippi, pp. 621-626.

51. Johnson, B.E., P.Y. Julien and D.K. Molnar, *Advances in soil erosion modeling on Goodwin Creek*, Conference on Management of Landscapes Disturbed by Channel Incision: Stabilization, Rehabilitation, and Restoration, May 20-22, 1997, Oxford Mississippi, pp. 1100-1105.
52. Doe III, W.W., P.Y. Julien and F.L. Ogden, *Maneuversheds and watersheds: modeling the hydrologic effects of mechanized training on military lands*, AWRA/UCOWR Symposium on Water Resources Education, training, and practice: Opportunities for the Next Century, Keystone, Colorado, June 29 to July 3, 1997, pp. 767-776.
53. Julien, P.Y. and J.S. O'Brien, *On the importance of mud and debris flow rheology in structural design*, First International Conference on Debris-Flow Hazards Mitigation: Mechanics, Prediction, and Assessment, ASCE, San Francisco, August 7-9, 1997, pp. 350-359.
54. O'Brien, J.S. and P.Y. Julien, *On the importance of mudflow routing*, First International Conference on Debris-Flow Hazards Mitigation: Mechanics, Prediction, and Assessment, ASCE, San Francisco, August 7-9, 1997, pp. 677-686.
55. Julien, P.Y., S. Kawai and D. J. Anthony, *Grain sorting in meander bends*, XXVII IAHR Congress, San Francisco, August 10-15, 1997, pp. 1426-1432.
56. Julien, P.Y., *Rainfall events and surface runoff modeling*, The Ninth World Water Congress, No. 9, Vol. 1, IWRA, September 1-6, 1997, Montréal, Canada, Extended Abstract pp. 133 and 8p. paper.
57. Johnson, B.E., P.Y. Julien and C.C. Watson, *Development of a storm-event based two-dimensional model (CASC2D-SED)*, First Federal Interagency Hydrologic Modeling Conference, Las Vegas, April 19-23, 1998, Section 3, pp. 39-46.
58. Doe III, W.W., P.Y. Julien, F.L. Ogden and B.E. Johnson, *Spatially distributed modeling of the hydrologic effects of mechanized maneuvers on military training lands*, First Federal Interagency Hydrologic Modeling Conference, Las Vegas, April 19-23, 1998, Section 8, pp. 27-34.
59. Kodoatie, R.J., D.B. Simons, P.Y. Julien and M.L. Albertson, *Prediction of sediment transport rate in irrigation canals using modified Laursen technology*, Challenges Facing Irrigation and Drainage in the New Millennium, Proc., 2000 USCID International Conference, Vol. II, June 2000, pp. 237-258.

60. Albertson, M.L., C.C. Baggs, L.J. Harrison, P.Y. Julien, J. Liou, R.A. Mussetter, E.V. Richardson, D.B. Simons, and W.A. Thomas, *Resistance coefficients use and misuse in assessing average velocities in open alluvial channels*, ASCE Specialty Conference, Seattle Washington, August 8-11, 1999.
61. Johnson, B.E. and P.Y. Julien, *The two-dimensional upland erosion model CASC2D-SED*, in *The Hydrology-Geomorphology Interface: Rainfall, Floods, Sedimentation, Land Use*, IAHS Publication no. 261 December 2000, pp. 107-127.
62. Julien, P.Y., *Rivers bring geomorphologists and engineers together*, in *Applying Geomorphology to Environmental Management*, Edited by D.J. Anthony et al., Water Resources Publications, 2001, pp. 383-395.
63. Saghafian, B., H.M. Rajaie and P.Y. Julien, *A spatial travel-time method for watershed routing*, 4<sup>th</sup> International Conference on Integrating GIS and Environmental Modeling (GIS/EM4) Problems, Prospects and Research Needs, Banff, Alberta, Canada, September 2-8, 2000, pp.
64. Rojas, R. and P.Y. Julien, *Modeling sediment transport with CASC2D-SED*, Proceedings of the 22<sup>nd</sup> Hydrology Days, Fort Collins, Colorado, April 1-4, 2002, pp. 233-244.
65. Julien, P.Y., B.P. Bledsoe, and C.C. Watson, *Fate and transport of metals and sediment in surface waters, Tailings and Mine Waste, '02*, Balkema Publishers, Proceedings of the 9<sup>th</sup> International conference on tailings and mine waste, Fort Collins, Colorado, January 27-30, 2002, pp. 17-20.
66. Julien, P.Y. and G. Richard, *Reservoirs, Stream Restoration and Environmental River Mechanics*, Invited Paper at the International seminar on instream flow and self-purification in urban stream, Korean Institute for Construction Technology, Seoul, Korea, May 9, 2002, pp. 3-26.
67. Julien, P.Y. *Recent Advances in Sedimentation and River Mechanics*, Proceedings of the National Conference of the Korean Water Resources Association, May 11, 2002, Incheon, Korea, pp. 3-16.
68. Julien, P.Y. and R. Rojas, *Watershed Erosion Modeling with CASC2D-SED*, Proceedings of the National Conference of the Korean Water Resources Association, May 11, 2002, Incheon, Korea, pp. 27-40.
69. Richard G. and P.Y. Julien, *Dam Impacts and Restoration on an Alluvial River - Rio Grande, New Mexico*, - US-Chinese Joint Workshop on



Sediment Transport and Environmental Studies, July 21-28, 2002, Milwaukee, Wisconsin, pp. .

70. Rojas, R. and P.Y. Julien, *Grid resolution effects on upland erosion predictions*, Federal Interagency Hydrologic Conference, Las Vegas, Nevada, Session 10A, July 28-August 1, 2002.
71. Julien, P.Y., *Computer Modeling of Upland Erosion*, Paper at the 13th APD-IAHR Congress, Singapore, August 6-8, 2002, pp 475-483.
72. Guo, J. and P.Y. Julien, *Boundary Shear Stress in Smooth Rectangular Open-channels*, Proceedings of the 13th APD-IAHR Congress, Singapore, August 6-8, 2002, pp.76-86.
73. Guo, J. and P.Y. Julien, *Modified Log-wake Law in Smooth Rectangular Open -channel Flows*, Proceedings of the 13th APD-IAHR Congress, Singapore, August 6-8, 2002, pp. 87-99.
74. Julien, P.Y., *Peak Flow Forecasting with CASC2D and Radar Data*, Second International Conference on Flood Defence, Beijing, September 2002, pp. 23-33.
75. Julien, P.Y. and R.N. Meroney, *History of Hydraulics, Hydrology and Fluid Mechanics at Colorado State University*, Proc. of the AGU Hydrology Days, Fort Collins, March 31-April 2, 2003, 12p.
76. Downer, C.W., J.Jorgeson, F.L. Ogden, P. Julien, W.D. Martin, E. Eadris, R.K. Harmon, E. Meselhe and J. Nelson, *The case for physically-based distributed hydrologic modeling approaches for the US Army Corps of Engineers Civil Works Projects*. US. Army Corps of Engineers Hydraulics and Hydrologic Conference Watershed System 2003, Portland, Oregon, May13-15, 2003, 10p.
77. Julien, P.Y., R. Rojas, M. Velleux, B. Bledsoe and C. Watson, *Fate and Transport of Metals and Sediment in Surface Water*, Poster presented at the EPA Hazardous Substance Research Center Meeting, Colorado School of Mines, Golden, Colorado, May 19-20, 2003.
78. Julien, P.Y. and R.N. Meroney, *History of Hydraulics and Fluid Mechanics at Colorado State University*, Proc. 2<sup>nd</sup> Annual Joint Symposium between CSU Faculty and Korean Alumni, Seoul National University, Seoul, South Korea, May 25-28, 2003, pp. 131-145.
79. Julien, P.Y. and R. Rojas, *Fate and Transport of Metals and Sediment in Surface Waters*, Joint Conference of the 9<sup>th</sup> Billings Land Reclamation

Symposium and the 20<sup>th</sup> Society of Mining and Reclamation, Billings Montana, June 3-6, 2003, p.1058.

80. Julien, P.Y. and R.N. Meroney, *History of Hydraulics and Fluid Mechanics at Colorado State University*, Proc. EWRI World Water and Environmental Resources Congress, Philadelphia, June 23-26, 2003, 8 p.
81. Guo J., P.Y. Julien and R. N. Meroney, *Modified Log-Wake law for Zero Pressure Gradient Boundary Layers*, Proc. International Conference on Port and Maritime R & D and Technology, September 2003, Singapore, Vol. I, pp. 125-141.
82. Velleux, M., R. Rojas-Sanchez and P. Julien, *Watershed Transport of Mine Wastes*, Proc. Hydrology Days, Fort Collins, March 10-12, 2004, 1p. Abstract.
83. Guo, J., C. Ming, M. Qian and P. Julien, *Application of the Modified Log-wake Law to Non-uniform Open-channel Flows*, International Symposium of River Sedimentation, 9<sup>th</sup> ISRS, October 18-21, Yichang, China, 2004.

England, J., P.Y. Julien, M.L. Velleux and J.A. Smith, *Distributed Modeling of Extreme Floods on Large Watersheds*, World Water and Environmental Resources Congress, ASCE/EWRI, Anchorage Alaska, May 15-19,2005.

Sixta, M., P.Y. Julien and D. Baird, *Meander Migration on the Galisteo Reach Middle Rio Grande*, World Water and Environmental Resources Congress, ASCE/EWRI, Anchorage Alaska, May 15-19,2005.

Albert, J. and P.Y. Julien, *Mass and Double Mass Curves of the Middle Rio Grande, New Mexico*, World Water and Environmental Resources Congress, ASCE/EWRI, Anchorage Alaska, May 15-19,2005.

## **TECHNICAL REPORTS**

1. Frenette, M., P.Y. Julien, et al. *Les caractéristiques physiques de la rivière Matamek et de son bassin de drainage*, CENTREAU Report, CRE-75-02, February 1975, 74 p.
2. Frenette, M., P.Y. Julien, et al. *Analyse hydro-physique de la rivière Matamek et analyse des possibilités de créer des frayères artificielles*, CENTREAU Report, CRE-76-01, March 1976, 44 p.
3. Frenette, M., P.Y. Julien, et al. *Caractéristiques d'écoulement en relation avec la productivité et la survie des salmonidés dans la rivière Matamek*,

CENTREAU Report, CRE-78-01, January 1979, 43 p.

4. Verrette, J.Ls. and P.Y. Julien. *Laboratoire de Génie Civil I*, Lecture Notes. BCE-80-03, Department of Civil Engineering, Laval University, January 1980.
5. Frenette, M. and P.Y. Julien. *Rapport synthèse sur les caractéristiques hydro-physiques du bassin de la rivière Matamek*, Preliminary Report, CENTREAU, CRE-80-06, March 1980, 286 p.
6. Frenette, M. and P.Y. Julien. *Etude hydro-dynamique du site d'installation d'une barrière-à-saumons sur la rivière Mitis*, Hydrotech Report, March 1981.
7. Julien, P.Y. *Preliminary report on the sedimentation of the Molineros Reservoir in Bolivia*, Internal Report for Hydrotech, April 1983, 147 p.
8. Julien, P.Y. *Analyse sédimentologique de la rivière-à-Mars*, Internal report for CENTREAU, Sept. 1983, 27 p.
9. Thorne, E.R., S. Rais, L.W. Zevenbergen, J.B. Bradley and P.Y. Julien. *Measurement of bend flow hydraulics on the Fall River at low stage*, Water Resources Field Support Laboratory Report 83-9P, Colorado State University, 1983, 48 p.
10. Julien, P.Y. and D.B. Simons. *Analysis of hydraulic geometry relationships in alluvial channels*, Report CER83-84PYJ-DBS45, Colorado State University, April 1984, 47 p.
11. Julien, P.Y. and D.B. Simons. *Analysis of sediment transport equations for rainfall erosion*, Report CER83-84PYJ-DBS52, Colorado State University, June 1984, 46 p.
12. Julien, P.Y. *Planform geometry of meandering alluvial channels*, Report CER84-85PYJ5, Colorado State University, May 1985, 49p.
13. Julien, P.Y. and D.M. Hartley. *Formation of roll waves in laminar sheet flow*, Report CER84-85PYJ-DMH18, Colorado State University, January 1985, 38 p.
14. Julien, P.Y. *Motion of sediment particles in a Rankine combined vortex*, Report CER84-85PYJ6, Colorado State University, May 1985, 37 p.
15. Frenette, M. and P.Y. Julien. *Case studies in reservoir sedimentation*, Lecture notes for the Joint IEP-CSCE Workshop on Sedimentation in

Rivers at Tarbela Centre, Pakistan, April 6, 1985, 27 p.

16. Julien, P.Y., Editor. *Essays on river mechanics*, Report CER85-86PYJ28, Colorado State University, May 1986, 181 p.
17. Julien, P.Y., Editor. *Essays on river mechanics*, Report CER86-87PYJ-HY1, Colorado State University, May 1987, 99 p.
18. Lan, Y.Q. and P.Y. Julien. *Research review on hyperconcentrated flows*, Report CER86-87PYJ-HY2, Colorado State University, June 1987, 47 p.
19. Julien, P.Y. *Analyse des coefficients de frottement dans les conduites*, Unpublished report for Tubecon, January 1988, 22 p.
20. Julien, P.Y., Editor. *Essays on river mechanics*, Report CER87-88PYJ-HY1, Colorado State University, April 1988, 162 p.
21. Julien, P.Y., C.J. Moen and G.U. Sunada, *A one-dimensional finite element model for overland flow simulation - FEM1U User's Manual*, Report CER87-88GEO6, Colorado State University, April 1988, 60p.
22. Julien, P.Y., G.E. Moglen and G.U. Sunada. *A finite element model for spatially varied overland flow simulation - CASC User's Manual*, Report CER87-88GEO7, Colorado State University, October 1988, 52p.
23. Julien, P.Y. and V.C. Santoro, *Literature review on local scour at bridge piers*, unpublished Report, January 1989, 65p.
24. Julien, P.Y. and Y.Q. Lan, *Laboratory analysis of hyperconcentrations*, Report CER88-89PYJ-YL11, Colorado State University, February 1989, 129p.
25. Julien, P.Y. and Y.C. Chen, *A short report about the experiment of lamination in a small flume*, unpublished Report, March 1989, 32p.
26. Molinas, A., G.W. Choi, and P.Y. Julien, *KINSC User's Manual, kinematic wave models for flood routing in a stream channel*, Report CER88-89AM-GWC-PYJ12, Colorado State University, March 1989, 47p.
27. Julien, P.Y. and Y.C. Chen, *Experimental study of horizontal lamination in a recirculating flume*, Report CER88-89PYJ-YC14, Colorado State University, May 1989, 63 p.
28. Julien, P.Y. and G.E. Moglen, *The influence of spatial variability of hydrologic parameters on simulated overland flow hydrographs*, Report

CER89-90PYJ-GEM1, Colorado State University, July 1989, 97p.

29. Julien P.Y. and Y.Q. Lan, *Experimental formation of alluvial deposits in a wide rectangular flume*, Report CER89-90PYJ-YQL2, Colorado State University, July 1989, 29p.
30. Julien, P.Y. and Y.C. Chen, *Experimental study of the deposition and drying of Bijou Creek sand in a recirculating flume*, Report CER88-89PYJ-YCC15, Colorado State University, July 1989, 35p.
31. Saghafian, B., and P.Y. Julien. *Resistance to sheet flow*, Center for Geosciences, Report CER88-89BS-PYJ13, Colorado State University, January 1989, 84p.
32. Julien, P.Y. and Y.Q. Lan, *Sedimentation of sand mixtures in a vertical cylinder*, Report CER89-90PYJ-YQL13, Colorado State University, March 1990, 48p.
33. Julien, P.Y., Editor, *Essays on river mechanics*, Report CER89-90PYJ-14, Colorado State University, May 1990, 88p.
34. Julien, P.Y. and Y.Q. Lan, *Laboratory experiments on sedimentation, lamination and desiccation of sediment mixtures*, Report CER89-90PYJ-15, Colorado State University, May 1990, 165p.
35. Julien, P.Y., and B. Saghafian, *A two-dimensional watershed rainfall-runoff model*, Report CER90-91PYJ-BS-12, March 1991, 66p.
36. Julien, P.Y., Editor, *Essays on river mechanics*, Report CER90-91PYJ-13, Colorado State University, May 1991, 136p.
37. Julien, P.Y., *Study of bedform geometry in large rivers*, Report Q 1386, Delft Hydraulics, June 1992, 78p.
38. Vonder Haar, T.H., J.L. Behunek and Principal Investigators including P.Y. Julien, *Final Research Report: Phase I The Center for Geosciences*, Final report, 9/1/86 - 6/15/92 on Geosciences Center research ARO Grant DAAL03-86-K-0175, CIRA, Colorado State University, November 1992, 195p.
39. Julien, P.Y. Editor, *Essays on river mechanics*, Report CER92-93PYJ-5, Colorado State University, April 1993, 98p.
40. Julien, P.Y. and Y. Raslan, *Laboratory notes on stratification of sands*, Report CER93-94PYJ-1, Colorado State University, November 1993, 77p.

41. Julien, P.Y., *CE 300 Elementary fluid mechanics laboratory manual*, Unpublished Laboratory Instruction Manual, Spring 1994, 54p.
42. Julien, P.Y., *Selected papers 1984-1994*, Report CER94-95-PYJ-1, September 1994, 452p.
43. Julien, P.Y. Editor, *Essays on river mechanics*, Report CER94-95PYJ-3, Colorado State University, April 1995, 145p.
44. Julien, P.Y., C.I. Meier and B. Blackard, *Laboratory measurements of bedload particle velocities*, Report CER95-96PYJ-CIM-BB1, Colorado State University, November 1995, 334p.
45. Julien, P.Y. Editor, *Essays on river mechanics*, Report CER95-96PYJ-2, Colorado State University, April 1996, 87p.
46. Vonder Haar, T.H. and Principal Investigators including P.Y. Julien, *DoD Center for Geosciences - Phase II Annual Report (1994-1995)* under DoD Grant # DAAH04-94-G-0420. CIRA, Colorado State University, March 1996, 126 p.
47. Julien, P.Y. Editor, *Essays on river mechanics*, Report CER96-97PYJ-1, Colorado State University, April 1997, 224p.
48. Julien, P.Y., Review of *Aligidir Phase II Pre-design of Structures*, unpublished report prepared for Natural Resources Consulting Engineers, Inc., August 1997, 3p.
49. Julien, P.Y. and J. Guo, *Transport velocities of individual particles over smooth open-channel bed*, Report CER97-98PYJ-GJ1, Colorado State University, October 1997, 48p.
50. Julien, P.Y., *Sediment transport analysis of the Bureau of Reclamation siphon on Whitewood Creek, South Dakota*, unpublished report prepared for ISSI, Inc., April 1998, 17p.
51. Julien, P.Y. Editor, *Essays on river mechanics*, Report CER97-98PYJ-1, Colorado State University, April 1998, 70p.
52. Vonder Haar, T.H. and Principal Investigators including P.Y. Julien, *DoD Center for Geosciences - Phase II Annual Report (1996-1997)*, under DoD Grant # DAAH04-94-G-0420. CIRA, Colorado State University, April 1998, 122p.
53. Julien, P.Y., *Sediment Transport Analysis of the Bureau of Reclamation*

*Siphon on Whitewood Creek, South Dakota, Appendix B in Screening Level Risk Assessment for Whitewood Creek Siphon, South Dakota, report prepared by ISSI for U.S. Environmental Protection Agency, June 1998, 17 p.*

54. Julien, P.Y., *Revised sediment yield at L-Bar*, unpublished letter report for the Nuclear Regulatory Commission, October 1998, 8p.
55. Guo, J.J., and P.Y. Julien, *Solution Manual for Erosion and Sedimentation*, Unpublished manuscript, January 1999, 114 p.
56. Leon, C., G. Richard, T. Bauer and P.Y. Julien, *Middle Rio Grande, Cochiti to Bernalillo Bridge hydraulic geometry, discharge and sediment data base and report - Volume I cross-section geometry data and plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 1999, 242 p.
57. Leon, C., G. Richard, T. Bauer and P.Y. Julien, *Middle Rio Grande, Cochiti to Bernalillo Bridge hydraulic geometry, discharge and sediment data base and report - Volume II daily mean discharge plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 1999, 39 p.
58. Leon, C., G. Richard, T. Bauer and P.Y. Julien, *Middle Rio Grande, Cochiti to Bernalillo Bridge hydraulic geometry, discharge and sediment data base and report - Volume IIIA bed material data*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 1999, 120 p.
59. Leon, C., G. Richard, T. Bauer and P.Y. Julien, *Middle Rio Grande, Cochiti to Bernalillo Bridge hydraulic geometry, discharge and sediment data base and report - Volume IIIB suspended sediment concentration data and plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 1999, 206 p.
60. Leon, C., G. Richard, T. Bauer and P.Y. Julien, *Middle Rio Grande, Cochiti to Bernalillo Bridge hydraulic geometry, discharge and sediment data base and report - Volume IIIC suspended sediment discharge data and plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 1999, 193 p.
61. Leon, C., G. Richard, T. Bauer and P.Y. Julien, *Middle Rio Grande, Cochiti to Bernalillo Bridge hydraulic geometry, discharge and sediment data base and report - Volume IIID suspended sediment particle size data and plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 1999, 124 p.

62. Julien, P.Y. Editor, *Essays on river mechanics*, Report CER98-99PYJ-1, Colorado State University, April 1999, 117p.
63. Bauer, T., C. Leon, G. Richard and P.Y. Julien, *Middle Rio Grande, Bernalillo Bridge to San Acacia, hydraulic geometry, discharge and sediment data base and report - Volume I cross-section geometry data and plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 2000, 212 p.
64. Bauer, T., C. Leon, G. Richard and P.Y. Julien, *Middle Rio Grande, Bernalillo Bridge to San Acacia, hydraulic geometry, discharge and sediment data base and report - Volume II - daily mean discharge plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 2000, 75 p.
65. Bauer, T., C. Leon, G. Richard and P.Y. Julien, *Middle Rio Grande, Bernalillo Bridge to San Acacia, hydraulic geometry, discharge and sediment data base and report - Volume IIIA - bed material data*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 2000, 84 p.
66. Bauer, T., C. Leon, G. Richard and P.Y. Julien, *Middle Rio Grande, Bernalillo Bridge to San Acacia, hydraulic geometry, discharge and sediment data base and report - Volume IIIB - suspended sediment concentration data and plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 2000, 319 p.
67. Bauer, T., C. Leon, G. Richard and P.Y. Julien, *Middle Rio Grande, Bernalillo Bridge to San Acacia, hydraulic geometry, discharge and sediment data base and report - Volume IIIC - suspended sediment discharge data and plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 2000, 217 p.
68. Bauer, T., C. Leon, G. Richard and P.Y. Julien, *Middle Rio Grande, Bernalillo Bridge to San Acacia, hydraulic geometry, discharge and sediment data base and report - Volume IIID - suspended sediment particle size data and plots*, prepared for the U.S. Bureau of Reclamation, Albuquerque, NM., January 2000, 43 p.
69. Warren, S.D., H. Mitasova, M.R. Jourdan, W.M. Brown, B.E. Johnson, D.M. Johnson, P.Y. Julien, L. Mitas, D.K. Molnar and C.C. Watson, *Digital terrain modeling and distributed soil erosion simulation/measurement for minimizing environmental impacts of military training (CS-752)*, Report CEMML TPS 00-2, submitted to SERDP, Arlington, Virginia, February, 2000, 65 p.
70. Richard, G., C. Leon and P.Y. Julien, *Bernardo Reach geomorphic analysis -*



*Middle Rio Grande, New Mexico*, Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, June 2000, 67p.

71. Leon, C., and P.Y. Julien, *Rio Puerco Reach channel width analysis - Middle Rio Grande, New Mexico*, Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, August 2000, 13 p.
72. Julien, P.Y., *Bed resistance to flow of the Bovenrijn-Waal Rivers during the 1998 flood*. Delft Hydraulics Report Q2691 prepared for DG-Rijkswaterstaat RIZA, August 2000, 70 p.
73. Leon, C. and P.Y. Julien, *Bernalillo bridge Reach - Highway 44 bridge to Cross section CO-33 geomorphic analysis*, Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, December 2000, 81p.
74. Julien, P.Y., *Elements of a Comprehensive Study Plan for the San Acacia Diversion*, Unpublished Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, August 2001, 7p.
75. Leon, C. and P.Y. Julien, *Bernalillo Bridge Reach - Highway 44 Bridge to Corrales Flood Channel Outfall - Hydraulic Modeling Analysis 1962-1992*, Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, December 2001, 94p.
76. Leon, C. and P.Y. Julien, *Sediment Transport Modeling - Temporary Channel*, Unpublished Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, April 2002, 9p.
77. Julien, P.Y., *Water Resources Cases in the United States*, Unpublished report for the Kyonggi Provincial Government, Korea, December 2002, 135p including 2 Appendices.
78. Julien, P.Y. and J. Duncan, *Optimal Design Criteria of Bendway Weirs from Numerical Simulations and Physical Model Studies*, Unpublished report prepared for ERDC-Waterways Experiment Station, Vicksburg Mississippi, April 2003, 40p.
79. Julien, P.Y. and A. Mendelsberg, *Sediment in Arroyo Pasajero and San Luis Canal*, Report prepared for the US Bureau of Reclamation and the California Department of Water Resources, July, 2003, 39p.
80. Sixta, M. J. Albert, C. Leon and P.Y. Julien, *Bernalillo Bridge Reach - Highway 44 Bridge to Corrales Flood Channel Outfall - Hydraulic Modeling Analysis 1962-1992*, Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, June 2003, 94p.

81. Albert, J., M. Sixta, C. Leon and P.Y. Julien, *Corrales reach - Corrales Flood Channel to Montano Bridge - Hydraulic Modeling Analysis, 1962-2001*, Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, August 2003, 97p. + Appendices.
82. Sixta, M. J. Albert, C. Leon and P.Y. Julien, *San Felipe Reach - Arroyo Tonque to Angostura Diversion Dam - Hydraulic Modeling Analysis 1962-1998*, Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, June 2003, 85p. + Appendices.
83. Jay, F., J. Albert and P.Y. Julien, *Low Flow Conveyance Channel, BORAMEP Total Load Analysis 2001*, Middle Rio Grande New Mexico, Report prepared for the U.S. Bureau of Reclamation, Albuquerque, New Mexico, September 2004, 61p.

## **PRESS RELEASES**

1. Engineering Review, *Computer model predicts life-threatening floods*, Colorado State University, Vol. 3, No. 2, 1990, pp. 12-13. ( by S. Skog)
2. Triangle Review, *Flood simulations help predict storms' intensity*, Fort Collins, Aug. 8, 1991. ( by S. Skog)
3. CSU Office of Public and Media Relations, *Computerized flash-flood warnings on the horizon*, Fort Collins, July 31, 1992.
4. *Fundamental experiments on stratification*, Video tape on laboratory experiments, Prepared in Fort Collins and Rome, July 1992.
5. *Volcanic debris flow disasters*, Two-hour television program, Broadcasted throughout Japan by NHK Fukuoka, October 1993.
6. *Rapid technology transfer - CASC2D*, Selected by DoD-ARO for a booklet which highlights basic research accomplishments, December 1995.
7. *Mud/debris flow dynamics*, Video tape prepared for the Short Course on Mud and Debris Flow Modeling using FLO-2D, San Francisco, CA, August 5-6, 1997.

8. *Les Années Lumière*, Interviewed as part of a two-hour radio program on water, Broadcasted throughout Canada by the Canadian Broadcasting Corporation, Montreal Canada, September 7, 1997.
9. *Two-dimensional runoff and erosion modeling*, Video tape prepared for the Course CE-717 River Mechanics, Fort Collins, CO, January, 1998.
10. *CSU Grant to Boost Security Research*, article in the Fort Collins Coloradoan, January 1, 2002, pp. B1-2.