

Curriculum Vitae Prof. Mario Aristide LENZI

Personal Information

Family name/First name: LENZI Mario Aristide

Education

1977: MSc in Water Resources Engineering at the University Nacional del Litoral, Santa Fé, Argentina.

1975: BSc in Water Resources Engineering at the University Nacional del Litoral, Santa Fé, Argentina.

Current position(s)

Mario Aristide LENZI is FULL PROFESSOR and Head of the Water Resources, Soil and Watershed Protection Research Group at the Department Land, Environment, Agriculture and Forest (L.E.A.F.), University of Padova since 01/10/2005, where he teaches "Fluvial morphology, stream and river restoration", "Hydraulic hazards and land protection", "Hydrology, watershed management and torrent control". His research interests include: monitoring and modeling hydro-morphological processes at different spatial and time scales; sediment and large wood transport, dynamics, monitoring and modeling; linking river-stream riparian vegetation and morphology; river and stream restoration; wood and fluvial ecosystems; debris flow and large wood hazard assessment; assessment sediment yield and sediment budget in river basins and mountain catchments; filtering retention check-dams; flow resistance and local scouring processes at grade-control structures.

Previous position(s)

From 01/11/1992 to 30/09/2015, Associated Professor University of PADOVA, Department TeSAF, Faculty of Agriculture; teaching activities, Courses: "Environmental, River Restoration and Land Protection", and "Hydraulic".

Fellowships

1998: Visiting Research Hydraulic Laboratory Wallingford, Oxford, UK, July 1998.

2002: Visiting Research Colorado State University, Fort Collins, USA, July 2002.

2010: Visiting Research, Universidad Austral de Chile, Valdivia, Chile, February-March -2010.

Supervision of graduate students and postdoctoral fellows

1995-2017: PhD Thesis Supervisor (22), 4 of which in Co-tutela within the Joint Doctorate Agreement with: a) Politecnica University, Madrid, Spain; b) Universidad Austral de Chile, Valdivia, Chile; c) European Union International Joint Doctorate Agreement FONASO: "Forest and Nature for Society"; Post-Doc fellows Supervisor (12).

1992-2017: MSc. Thesis (81); BSc Thesis (78); Erasmus Mundus Thesis MSc and BSc Supervisor (8); Stage research and teaching Host (25).

Teaching activities

1993: Visiting Professor: University of Cuyo, Mendoza, Argentina, December 1993.

1994: Lecturer at the Post-Graduate Course "Nutrient Balance", organized by the Department of Hydroengineering, Civil Engineering and Survey, University of Lubjana, in the framework of the Project TEMPUS JET, Slovenia; June, 1994.

1997: Lecturer at the European Summer School in Natural Hazards, Sessions: "Sediment Transport Assessment" and "Torrential Hazard, Erosion and Floods", Switzerland, August 1997.

2000: Lecture/Professor Socrates-Erasmus TS Teaching Mobility Program, Politecnica University of Madrid, Spain, May 2000.

2001: Visiting Professor, Universidad de Tucumàn, Tucumàn, Argentina, July 2001.

2002: Visiting Professor, Universidad Austral de Chile, Valdivia, Chile, August-2002.

2003-2006: Lecturer at the MSc course "Hydro-geological hazard assessment and mitigation" organized by the School of Agriculture, UNIPD, May 2003, April 04, May 05, March 06.

2006-2007: Lecturer at the MSc course "Watershed Management" organized by the School of Agriculture, University of Palermo, Italy, March 2006; April 2007.

2007: Lecture/Professor/Coordinator of the MSc Course “Morfologías y Procesos en Ríos de Montaña” organized by the Civil Engineering School, Univ. of Patagonia, Argentina, 07/2007.

Organization of scientific meeting

2017- Scientific and Organizer Committee Board Member: “International Workshop Natural Risks in Mountain Areas and their Effects in River Morphology”, CONYCYT Chile, University Austral, Valdivia, Chile; TeSAF Department, UNIPD; June 6, 2017; TeSAF Department, Agripolis, ITALY.

2015- CHAIRMAN and Organizer of the 3rd International Conferences WOOD in WORLD RIVERS 2015 (WWR3 2015); UNIPD, ITALY; July 6-10, 2015. WWR3-2015 key figures: 5 key notes speakers, 74 papers selected, 115 participants, 2 technical tours, Proceeding of Extended Abstracts edited (2015, 253 pages), Special Issue on GEOMORPHOLOGY edited by PICCO L, BERTOLDI W., COMITI F. (2017): 15 papers.

Institutional responsibilities

1995-2001 - Board Vice-President of the MSc “Environmental and Forest Science”, School of Agriculture, UNIPD

2002-05 - PhD Coordinator "Idronomia Ambientale", University of Padova

2003-08 - President Board BSc "Tutela e Riassetto del Territorio", UNIPD

2006-08 – Director of Interdepartmental-InterFaculty Service Center “Campus di AGRIPOLIS”, and Director of “Pietro Arduino” Library, UNIPD, LEGNARO (PD).

2009-11 – Director Research Area “Water Resources and Soil Conservation”, TeSAF Dep., UNIPD

2010-2016- Director PhD School "TERRITORIO, AMBIENTE, RISORSE e SALUTE", UNIPD.

Commissions of thrust

1992-94: EXPERT MEMBER, International Hydrological Program, UNESCO-ORCYT.

1992-2000: Expert member of the Scientific Commission European Group for Alpine Catchments Management, FAO

1995: EXPERT MEMBER, Review Panel, Commission of European Communities, DG XII

1999-2001: EXPERT MEMBER UNESCO IHP-V 2.3/2.4 ECOHYDROLOGY, Pilot Core Activity “Quantification of Biological-Ecological Processes for Planning and Management of River Restoration”.

2009-12 - Member of Scientific Commission of the University of Padova- Agricultural and Veterinarian Sciences Peer Review Evaluation Panel.

2001-04 - Editorial Board Member Journal “Ingeniería del Agua”, Valencia, Spain, ISSN: 1134-2196.

2008-12 - Scientific Board Member-WIT Transactions on Engineering Sciences; ISSN: 1743-3533; WIT Press, Southampton, UK; Scopus Journal

From 2014 - Scientific Council Member- Journal "Quadernos de Investigación Geográfica"; ISSN: 0211-6820; Universidad de La Rioja, Spain.

Memberships of scientific societies

From 1998 - Member "Gruppo Italiano di Idraulica, (G.I.I.)"; Secretary of G.I.I., 1998-2000

From 2000 - Member American Geophysical Union, AGU, USA

From 2002 - Member European Geophysical Society, EGU, EU

From 2004 - European Member International Association for Hydro-Environment Engineering and Research, IAHR; European Division.

From 2008 - Member "Associazione Italiana di Ingegneria Agraria (A.I.I.A.)"; President 1° Section: “Water and soil use” (2013-2017); Vice-President 1° Section: “Water and soil use” (2009-2013).

Major collaborations

EUROPEAN AND INTERNATIONAL RESEARCH PROJECTS: a) Italian and University of Padova Research Unit Coordinator of the EU-FP7 Alpine Space Program, Project "SedAlp, Sediment management in alpine basins, integrating sediment continuum, risk mitigation and hydropower", with 13 partners coming from Austria, Germany, France, Slovenia and Italy; Responsible of the Work Package WP7-Sediment Management (including large wood), of the SedAlp Project; 2012-2016; b) Italian and University of Padova Research Unit Coordinator of the EU Research Project FP7 EPIC-FORCE: Evidence-based policy for integrated control of forested river catchments in extreme rainfall and snowmelt, 2006-2009; Partners: Universities of Newcastle (UK), University of Padova (Italy), Politecnica University of Madrid (Spain), University of Cuenca (Ecuador), University Austral, Valdivia (Chile), University of San José (Costa Rica);

University of Patagonia, Ushuaia (Argentina); c) Scientific Coordinator of the University of Padova for the International Program for Western Europe "Flow hydraulics along step-pool channels", supported by the Colorado State University and National Science Foundation of USA, 2001-2002; d) Scientific Coordinator of the University of Padova for the UE Projects EROSLOPE II "Dynamic of sediments and water in Alpine catchments: processes and prediction", 1996-1999; DAMOCLES: Debris-fall hazard assessment in mountain catchments for local end users, 2000-2003; e) Italian Delegate for the FP5-COST ACTION FP0601-FORMAN-Forest management and the water cycle, Working Group 3- 2008-2011; f) Associate Investigator at the Marie Curie Actions-People, IRSES-SERELAREFA- Semillas Red Latina Recuperación Ecosistemas Fluviales y Acuáticos, 2010-2012; g) Associate Investigator and Professor of the University of Padova in the framework of the International Networking financed by the World Bank: Project for initiation research collaborations of excellence "SUSTAINABLE HYDRO-ELECTRICITY (SHE) WITH EMPHASIS ON SEDIMENT MANAGEMENT AND DESIGN FLOODS", coordinated by the University of Concepción, CHILE, in collaboration with the Universities of Newcastle, Southampton, Exeter, UK; University of Idaho, USA; the Polish Academy of Sciences, POLAND; the CSIC Madrid, SPAIN; 2009-2011.

ITALIAN RESEARCH PROJECTS: a) National Scientific Coordinator of the PRIN2010-11, prot. 20104ALME4-"National network for monitoring, modeling and sustainable management of erosion processes in agricultural lands and hilly-mountainous areas"; b) Principal Investigator of the University of Padova Competitive Research Project "WoodAlps: Linking large wood and morphological dynamics of gravel bed rivers of Eastern Italian Alps", 2014-15; c) Scientific Coordinator of the Research Unit L.E.A.F. Department (UNIPD) in the framework of the Strategic-Excellent Research Project financed by the University of Padova "GEORISKS: Geological, hydrological and morphological processes: monitoring, modeling and impacts in the north-eastern Italy", 2009-2012, coordinated by the Geosciences Department of the UNIPD; d) Principal Investigator of the L.E.A.F. Department on the University of Padova-CARIPARO Excellent Research Project "Linking geomorphological processes and vegetation dynamics in gravel bed rivers, 2009-2012; e) Principal Investigator UNIPD team within the Italian National Research project PRIN-2004-PRIAMO "Stream restoration works, from the flume to the field" ; f) Principal Investigator of the University of Padova Research Project "Hydraulic control and restoration of mountain streams according to morphological and environmental criteria", 2001-02; g) Principal Investigator for the National Research project MIUR "Sistema Lagunare Veneziano", research line "Self-depuration capacity of fluvial systems", 1996-2003.

ON-GOING INTERNATIONAL COLLABORATIONS: NAME, AFFILIATION, COUNTRY

European

James Bathurst, University of Newcastle UK; Angela Gurnell, King's College, London UK; Johannes Hubl, BOKU University, Vienna Austria; Helmut Habersack BOKU University, Vienna Austria; Matjaz Mikos, University of Ljubljana Slovenia; Hervé Piegay, CNRS Lyon France; Federic Liebault, IRSTEA, France; Allan Recking, IRSTEA, France; Dieter Rickenmann, WSL-Mountain Hydrology and Torrents, Switzerland; José Maria García-Ruiz, Instituto Pirenaico de Ecología, Zaragoza, Spain; Arturo Elosegi, Bilbao, Spain; Virginia Ruiz-Villanueva, University of Bern, Switzerland; Andreas Rimbock, Munich, Germany; Ian Rutherford, Australia.

Extra-European

Andrès Iroumè, Universidad Austral, Valdivia, Chile; Luca Mao, Pontificia Universidad Católica, Santiago, Chile; Felipe Cisneros, Universidad de Cuenca, Ecuador; Gabriel Kaless, Universidad Nacional de la Patagonia, Chubut, Argentina; Murray Hicks, NIWA, New Zealand; Jonathan Laronne, Ben-Gurion University Israel; Andrew Wilcox, University of Montana, USA; Ellen E. Wohl, Colorado State University, USA; Gordon Grant, Oregon State University, USA.

Publications (10)

Prof. Lenzi authored or co-authored more than 160 publications of which 88 publications in International Journals with an h-index = 26 and a number of Total Citations = 1.534 (sources: Scopus, April 2016; excluding self-citations); Research Gate RG Score = 33.

1. M.A. LENZI, DI LUZIO M. (1997). Surface runoff, soil erosion and water quality modeling in the Alpone watershed using AGNPS integrated with a Geographic Information System. *EUROPEAN JOURNAL OF AGRONOMY*, vol. 6, p. 1-14, ISSN: 1161-0301. CITATIONS: 35.
2. LENZI M. A., MARCHI L. (2000). Suspended sediment load during floods in a small stream of the Dolomites (Northeastern Italy). *CATENA*, vol. 39, 267-282, ISSN: 0341-8162; CITATIONS: 134.
3. LENZI M. A. (2001). Step-pool evolution in the Rio Cordon, northeastern Italy. *EARTH SURFACE PROCESSES AND LANDFORMS*, vol. 26, p. 991-1008, ISSN: 0197-9337, doi: 10.1002/ESP.239. CITATIONS: 82.
4. LENZI M. A. (2002). Stream bed stabilization using boulder check dams that mimic step-pool morphology features in Northern Italy. *GEOMORPHOLOGY*, vol. 45, 243-260, ISSN: 0169-555 X. CITATIONS: 45.
5. LENZI M.A., COMITI F. (2003). Local scouring and morphological adjustments in steep channels with check-dam sequences. *GEOMORPHOLOGY*, vol. 55, p. 97-109, ISSN: 0169-555X. CITATIONS: 52
6. COMITI F, ANDREOLI A, LENZI M. A., MAO L (2006). Spatial density and characteristics of woody debris in five mountain rivers of the Dolomites (Italian Alps). *GEOMORPHOLOGY*, vol. 78 , 44-63, ISSN: 0169-555X, doi: 10.1016/j.geomorph.2006.01 .021. CITATIONS: 67.
7. ANDREOLI A, COMITI F, LENZI M. A. (2007). Characteristics, distribution and geomorphic role of large woody debris in a mountain stream of the Chilean Andes. *EARTH SURFACE PROCESSES AND LANDFORMS*, vol. 32 (11), 1675-1692, ISSN: 0197 -9337. CITATIONS: 53.
8. COMITI F, MAO L., LENZI MA, SILIGARDI M (2009). Artificial steps to stabilize mountain rivers: a post-project ecological assessment. *RIVER RESEARCH AND APPLICATIONS*, vol. 25, p. 639-659, ISSN: 1535-1459, doi: 10.1002/rra.1234. CITATIONS: 21.
9. COMITI F, DA CANAL M, SURIAN N, MAO L, PICCO L, M. A. LENZI (2011). Channel adjustments and vegetation cover dynamics in a large gravel bed river over the last 200 years. *GEOMORPHOLOG Y*, vol. 125, 147-159, ISSN: 0169-555X, doi: 10.1016/j.geo morph.2010.09.011. CITATIONS: 48.
10. RIGON E, COMITI F, M. A. LENZI (2012). Large wood storage in streams of the Eastern Italian Alps and the relevance of hillslope processes. *WATER RESOURCES RESEARCH*, vol. 48, 1- 18, ISSN: 0043-1397, doi: 10.1029/2010WR009854. CITATIONS: 22.

Research monographs and translations thereof

1. CONESA-GARCIA C., LENZI M. A. (2013). Check dams, morphological adjustments and erosion control in torrential streams. pp . 1-339, Nova Science Publishers, Inc., New York, ISBN: 9781626188563
2. LENZI M, D'AGOSTINO V., SONDA D (2000). *RICOSTRUZIONE MORFOLOGICA E RECUPERO AMBIENTALE DEI TORRENTI: criteri metodologici ed esecutivi*. p. 1-208, Cosenza: Editoriale BIOS s.a.s., ISBN: 8877403020.
3. LENZI M, D'AGOSTINO V., SONDA D (2007). *RECONSTRUCCION MORFOLOGICA Y RECUPERACION AMBIENTAL DE LOS TORRENTES: criterios metodològicos y ejecutivos*. p. 1-208, Cosenza: Editoriale BIOS, ISBN: 8877403020, Ediciòn en espanol; Traducido por P.S. Padilla & M. F. Defant.
4. LENZI M. A. (2000). Dynamics of water and sediments in mountain basins. Special Issue, p. 1-266, Cosenza: Editoriale BIOS, ISBN: 9788877403087.

Invited presentations to peer-reviewed internationally established conferences and/or international advanced schools

2017- Invited Key Note Speaker: “Large wood storage, mobility and the relevance of hillslope processes in forested river catchments”, to the 14th International Symposium on the Interactions between Sediments and

Water, Taormina, 17-22 June, 2017, organized by the International Association of Sediments and Water Interactions (IASWS) in the framework of the International Commission of Continental Erosion (ICCE) of the IAHS.

2015- Invited Key Note Speaker: “SedAlp contributions to modern sediment management”, to the International SedAlp Final Conference: Towards an improvement sediment management in the Alpine Space; June 9-10, 2015; Free University of Bolzano, Italy.

2006-15- Invited Key Note Speaker and Scientific Committee’s member of the following International Conferences: a) 3rd International Conference Wood in World Rivers-WWR3-2015, July 6-10, 2015, UNIPD, Italy;

b) 5th International Conference on Debris-Flow Hazard, Mitigation: Mechanics, Prediction and Assessment; June 14-17, 2011, University of Padova, Italy;

c) 3rd International Conference Monitoring, Simulation, Prevention and Remediation of Dense and Debris Flow, Milano, Italy, May 24-26, 2010;

d) 2nd International Conference Monitoring, Simulation, Prevention and Remediation of Dense and Debris Flow, The New Forest, Southampton, UK, June 18-20, 2008;

e) First International Conference Monitoring, Simulation, Prevention and Remediation of Dense and Debris Flow, Rhodes, Greece, June 7-9, 2006.

Prizes, Awards, Academy membership

2010 Water International Best Paper Award for the Paper "Forest and floods in Latin America: science , management, policy and the EPIC FORCE project"; International Water Resources Association; XIV World Water Congress, Porto di Galinhas, Brasil, September 2011.

2011-Best Poster Award, given by Organizing Committee “International Workshop Advances in River Science”, Swansea (Galles – Gran Bretagna), 18-21 April, 2011.

Member “Accademia Italiana di Scienze Forestali” – from 01-02-2004.