

# Alessio Radice, Ph.D.

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## Personal data

Born in Seregno (MB), on January 14<sup>th</sup>, 1976  
Resident in Lentate sul Seveso (MB)  
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## Education

2005: Ph.D., Hydraulic Engineering, Politecnico di Milano  
2000: M.Sc., Civil Engineering, Politecnico di Milano  
1994: Liceo Scientifico 'M. Curie', Meda (MB)

## Academic position

2014 - present Associate Professor of Hydraulics at the Politecnico di Milano, Department of Civil and Environmental Engineering  
2013 - 2014: Assistant Professor of Hydraulics at the Politecnico di Milano, Department of Civil and Environmental Engineering (after Department reorganization)  
2004 - 2012: Assistant Professor of Hydraulics at the Politecnico di Milano, Department of Hydraulic, Environmental, Infrastructural and Surveying Engineering

## Academic duties

2019 - present: Coordinator of study program at the Politecnico di Milano (M.Sc. in Civil Engineering for Risk Mitigation)  
2018 - present: member of the Board of Professors of the Ph.D. program in Environmental and Infrastructure Engineering of the Politecnico di Milano  
2017 - present: member of the Teaching Committee of the Department of Civil and Environmental Engineering of the Politecnico di Milano  
2014 - present: scientific responsible for the Mountain Hydraulics Lab ("Laboratorio di Idraulica Montana", LIM) at the Lecco campus of the Politecnico di Milano  
2013 - present: delegate for quality certification ("referente Assicurazione Qualità") of study programs for the School of Civil, Environmental and Territorial Engineering of the Politecnico di Milano (M.Sc. in Civil Engineering for Risk Mitigation)  
2013 - 2015: member of the Scientific Committee of the Department of Civil and Environmental Engineering of the Politecnico di Milano  
2004 - present: tenure of courses at the Politecnico di Milano (most recently: *Fluid Mechanics* for Mechanical Engineers, *River Hydraulics* and *Hydrogeological Risk* for Civil Engineers)

## External responsibilities

2018 - present: Member of Editorial Board, Hydrology (MDPI, ISSN: 2306-5338)  
2017 - present: Chair of the Committee on Experimental Methods and Instrumentation, International Association for Hydro-Environment Engineering and Research (IAHR); formerly vice chair (2015 - 2017)

## Awards and recognitions

2018: Invited Keynote speaker, ISHMMT 2018, 2<sup>nd</sup> Int. Symposium on Hydraulic Modeling and Measuring Technology, Nanjing, China

2012: Outstanding Reviewer for the Journal of Hydraulic Engineering (ASCE)

2000: "G. Nosedà" award for the best graduate student in Hydraulic Engineering at the Politecnico di Milano

## Membership of evaluation panels

2014: invited member of Ph.D. Committee, EPFL, Lausanne, Switzerland

2008: member of the panel for recruitment of an Assistant Professor of Hydraulics at Seconda Università di Napoli

## Conference service

2019: XXXVIII Congress of IAHR, Panama City, Panama. Member of the International Scientific Committee

2019: Conference Chairman, HydroSenSoft 2019, 2<sup>nd</sup> Int. Symposium and Exhibition on Hydro-Environment Sensors and Software, Madrid, Spain

2018: IWEMSE 2018, International Workshop on Environmental Management, Science and Engineering, Xiamen, China. Member of the Technical Program Committee

2018: 5<sup>th</sup> IAHR-EU Congress, Trento, Italy. Master in a class on Experimental methods and experimental techniques used in fluid mechanics and river hydraulics; convener and chairman of session on New trends in data collection and analysis for environmental and industrial applications

2018: ISHMMT 2018, 2<sup>nd</sup> Int. Symposium on Hydraulic Modeling and Measuring Technology, Nanjing, China. Vice-chairman of the International Scientific Committee; chairman of keynote session; chairman of session on New technology of river engineering simulation

2017: HydroSenSoft 2017, Int. Symposium and Exhibition on Hydro-Environment Sensors and Software, Madrid, Spain. Member of the International Scientific Committee; chairman of keynote session; chairman of session on Pressure and imaging techniques

2015: EGU General Assembly, Vienna, Austria. Chairman of poster session on Granular mechanics in the geomorphological context

2014: River Flow 2014, Lausanne, Switzerland. Chairman of session on Dyke and dam erosion

2009: XXXIII Congress of IAHR, Vancouver, Canada. Chairman of session on Laboratory experiments, instrumentation, and hydraulic modeling

## Engineering competencies

Member of the Association of Engineers, Province of Monza e Brianza since 2007.

Hydrologic and hydraulic studies:

- contributed to the "studio di fattibilità della sistemazione idraulica dei fiumi Adda, Brembo e Serio"
- contributed to the "valutazione della vulnerabilità idraulica del ponte sul fiume Po a Borgoforte"
- contributed to the "protezione di una pila di ponte sul fiume Po a Sermide"
- contributed to the "valutazione della pericolosità alluvionale del fiume Lambro a Milano e progettazione di interventi"

## Seminars for professionals

2019: Lecture: "Fondamenti teorici" within the course "Invarianza idraulica e idrologica", organized by the Ordini degli Ingegneri delle Province di Como e Varese

2018: Lecture: "Fondamenti teorici" within the course "Invarianza idraulica e idrologica", organized by the Ordine degli Ingegneri della Provincia di Varese

2017: Lecture: "Nozioni di Idraulica" within the course "Fondamenti di Idraulica e Costruzioni Idrauliche per la difesa del suolo", organized by the Consulta Regionale degli Ordini degli Ingegneri della Lombardia

## Teaching

Teaching activity at the Politecnico di Milano since 2004.

### *Courses taught in Italian*

Meccanica dei Fluidi (Fluid Mechanics) for Mechanical Engineers

Idraulica II (Advances in Hydraulics) for Civil and Environmental Engineers

Idraulica Fluviale per la Protezione del Territorio (Fluvial Hydraulics for Land Protection) for Civil Engineers

### *Courses taught in English*

River Hydraulics for Civil Engineers

Flood Risk for Civil Engineers

Hydrogeological Risks in Mountain Area for Civil Engineers

Numerical Methods for Partial Differential Equations for Civil Engineers

Experimental Thermal Fluid Dynamics for the Doctorate School

### *List of courses taught (B.Sc. and M.Sc.)*

<i>Academic Year</i>	<i>Course</i>	<i>Language</i>	<i>Level</i>	<i>Study program</i>
2004-05	Idraulica Fluviale per la Protezione del Territorio	Italian	M.Sc.	Ingegneria Civile
2005-06	Idraulica Fluviale per la Protezione del Territorio	Italian	M.Sc.	Ingegneria Civile
2005-06	Idraulica II	Italian	M.Sc.	Ingegneria Civile
2006-07	Meccanica dei Fluidi I	Italian	B.Sc.	Ingegneria Meccanica
2007-08	Meccanica dei Fluidi I	Italian	B.Sc.	Ingegneria Meccanica
2008-09	River Hydraulics	English	M.Sc.	Civil Engineering
2009-10	River Hydraulics	English	M.Sc.	Civil Engineering
2010-11	Shallow Water Equations Laboratory <i>within</i> Numerical Methods for PDE	English	M.Sc.	Civil Engineering for Risk Mitigation
2010-11	River Hydraulics for Flood Risk Evaluation <i>within</i> Flood Risk	English	M.Sc.	Civil Engineering for Risk Mitigation
2011-12	Shallow Water Equations Laboratory <i>within</i> Numerical Methods for PDE	English	M.Sc.	Civil Engineering for Risk Mitigation
2011-12	River Hydraulics for Flood Risk Evaluation <i>within</i> Flood Risk	English	M.Sc.	Civil Engineering for Risk Mitigation
2012-13	Meccanica dei Fluidi	Italian	B.Sc.	Ingegneria della Produzione Industriale
2012-13	River Hydraulics for Flood Risk Evaluation <i>within</i> Flood Risk	English	M.Sc.	Civil Engineering for Risk Mitigation
2013-14	Meccanica dei Fluidi	Italian	B.Sc.	Ingegneria della Produzione Industriale
2013-14	River Hydraulics for Flood Risk Evaluation <i>within</i> Flood Risk	English	M.Sc.	Civil Engineering for Risk Mitigation

2014-15	Meccanica dei Fluidi II <i>within</i> Meccanica dei Fluidi	Italian	B.Sc.	Ingegneria della Produzione Industriale
2014-15	Hydrogeological Risks in Mountain Area <i>within</i> integrated course with same name	English	M.Sc.	Civil Engineering for Risk Mitigation
2014-15	River Hydraulics for Flood Risk Evaluation <i>within</i> Flood Risk	English	M.Sc.	Civil Engineering for Risk Mitigation
2015-16	Meccanica dei Fluidi	Italian	B.Sc.	Ingegneria Meccanica
2015-16	River Hydraulics for Flood Risk Evaluation <i>within</i> Flood Risk	English	M.Sc.	Civil Engineering for Risk Mitigation
2016-17	Meccanica dei Fluidi	Italian	B.Sc.	Ingegneria Meccanica
2016-17	Hydrogeological Risks in Mountain Area <i>within</i> integrated course with same name	English	M.Sc.	Civil Engineering for Risk Mitigation
2016-17	River Hydraulics for Flood Risk Evaluation <i>within</i> Flood Risk	English	M.Sc.	Civil Engineering for Risk Mitigation
2017-18	Meccanica dei Fluidi	Italian	B.Sc.	Ingegneria Meccanica
2017-18	Hydrogeological Risks in Mountain Area <i>within</i> integrated course with same name	English	M.Sc.	Civil Engineering for Risk Mitigation
2018-19	Meccanica dei Fluidi	Italian	B.Sc.	Ingegneria Meccanica
2018-19	Hydrogeological Risks in Mountain Area <i>within</i> integrated course with same name	English	M.Sc.	Civil Engineering for Risk Mitigation

## Research topics

Bed-load sediment transport at grain scale, turbulence-sediment interaction  
Local bridge scour processes and countermeasures  
River bed-forms  
Altimetric evolution of river beds, with implications for flood risk  
Sediment yield from mountain basins  
Two-dimensional inundation modelling for flood damage and risk assessment

## Research projects and grants

2018 - 2020: Fondazione Cariplo: Sustainable Management of sediment transport in response to climate change conditions (SMART-SED), Leader of workgroup  
2017 - 2019: Fondazione Cariplo: Flood-IMPAT+ An integrated meso & micro scale procedure to assess territorial flood risk, Participant  
2013 - 2016: FP7-PEOPLE-2012-ITN: Hydrodynamic Transport in Ecologically Critical Heterogeneous interfaces (HYTECH), Participant  
2009: Grant for research start-up by Regione Lombardia: Risk by Sediment Sources in Mountain Environments (RISSME), Principal Investigator  
2008: "Dote ricercatori" within "Linee di sviluppo per valorizzare il capitale umano" by Regione Lombardia: Fenomeni di trasporto solido in ambiti montani, Principal Investigator  
2008 - 2010: Prin 2007: Models and measurements of flow-sediment interactions at spatial and temporal scales of physical interest (MOMICS), Participant  
2006 - 2007: Prin 2005: Bed erosion at river bridges, Participant

2004 - 2006: Firb 2001: Coherent structures in local scour processes, Participant  
2003 - 2004: Prin 2002: Hydrodynamic interactions among flow, riverbed and structures at fluvial bridges, Participant  
2013 - 2014: Grants for best young researchers of the Department of Civil and Environmental Engineering of the Politecnico di Milano  
2009 - 2011: Grants for best young researchers of the Department of Hydraulic, Environmental, Infrastructural and Surveying Engineering of the Politecnico di Milano

## Research collaborations

### *National*

Università degli Studi di Napoli "Federico II", Naples, Italy  
Università degli Studi di Napoli "Parthenope", Naples, Italy  
Università degli Studi di Parma, Parma, Italy  
Scuola Universitaria Superiore di Pavia, Pavia, Italy  
Università degli Studi di Trento, Trento, Italy  
Università degli Studi di Trieste, Trieste, Italy

### *International*

Indian Institute of Technology at Kharagpur, Kharagpur, India  
Indian Statistical Institute, Kolkata, India  
King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia  
Riga Technical University, Riga, Latvia  
University of Guilan, Rasht, Iran  
University of Aberdeen, Aberdeen, UK  
University of Canterbury, Christchurch, New Zealand  
Vanderbilt University, Nashville, US

## Student supervision

2 Ph.D. theses (1 as supervisor and 1 as co-supervisor)  
29 M.Sc. theses (20 as supervisor and 9 as co-supervisor)  
12 B.Sc. theses (4 as supervisor and 8 as co-supervisor)

## Reviewer service

### *Journal papers (more than 70)*

Sedimentology ++ Journal of Hydraulic Research ++ ASCE Journal of Hydraulic Engineering ++ Journal of Hydrology ++ Advances in Water Resources ++ Water Resources Research ++ International Journal of Safety and Security Engineering ++ Journal of Geophysical Research - Earth Surface ++ Granular Matter ++ Advances in Civil Engineering ++ Catena ++ Geotechnique Letters ++ International Journal of the Physical Sciences ++ Proceedings of ICE - Water Management ++ Stochastic Environmental Research and Risk Assessment ++ Journal of Mountain Science ++ Acta Geophysica ++ Journal of Flood Risk Management ++ KSCE Journal of Civil Engineering ++ Computers and Models with Applications ++ Earth Surface Processes and Landforms ++ Hydrological Sciences Journal ++ Measurement Science and Technology ++ Environmental Fluid Mechanics ++ International Journal of Sediment Research ++ Water ++ Hydrology ++ Entropy ++ ISH Journal of Hydraulic Engineering ++ Journal of Hydro-Environment Research ++ Review of Scientific Instruments ++ Journal of Fluid Mechanics ++ JFM Rapids ++ Journal of Visualized Experiments

### *Research projects*

European Research Council, call FP7-Ideas  
CONICYT, Chile, call for regular proposals 2016

## Publications

### *Papers in international journals*

1. Hosseini Sadabadi S.A., **Radice A.**, Ballio F. (2019). On reasons of the scatter of literature data for bed-load particle hops. *Water Resources Research*, 10.1029/2018WR023350.
2. Ballio F., **Radice A.**, Fathel S.L., Furbish D.J. (2019). Experimental censorship of bed load particle motions, and bias correction of the associated frequency distributions. *Journal of Geophysical Research: Earth Surface*, 10.1029/2018JF004710.
3. Zanchi B., Zucchi M., **Radice A.** (2019). On the relationship between experimental and numerical modelling of gravel-bed channel aggradation. *Hydrology*, 6, 9, 10.3390/hydrology6010009.
4. Scorzini A.R., **Radice A.**, Molinari D. (2018). A new tool to estimate inundation depths by spatial interpolation (RAPIDE): design, application and impact on quantitative assessment of flood damages. *Water*, 10, 1805, 10.3390/w10121805.
5. **Radice A.**, Zanchi B. (2018). Multicamera, multimethod measurements for hydromorphologic laboratory experiments. *Geosciences*, 8, 172, 10.3390/geosciences8050172.
6. Ballio F., Pokrajac D., **Radice A.**, Hosseini Sadabadi S.A. (2018). Lagrangian and Eulerian description of bed-load transport. *Journal of Geophysical Research: Earth Surface*, 123, 384-408, 10.1002/2016JF004087.
7. **Radice A.**, Bettiga A., Figueiredo R., Molinari D. (2017). On urban inundation and damage modelling. *European Water*, 57, 11-17.
8. **Radice A.**, Lauva O. (2017). Live-bed pier scour in a covered flow. *Journal of Hydraulic Engineering*, 143, 06017016.
9. **Radice A.**, Sarkar S., Ballio F. (2017). Image-based Lagrangian particle tracking in bed-load experiments. *Journal of Visualized Experiments*, 125, e55874, doi:10.3791/55874.
10. **Radice A.**, Longoni L., Papini M., Brambilla D., Ivanov V.I. (2016). Generation of a design flood-event scenario for a mountain river with intense sediment transport. *Water*, 8(12), 597.
11. Ballio F., **Radice A.** (2015). Fluctuations and time scales for bed-load sediment motion over a smooth bed. *International Journal of Sediment Research*, 30, 321-327.
12. Campagnol J., **Radice A.**, Ballio F., Nikora V. (2015). Particle motion and diffusion at weak bed load: accounting for unsteadiness effects of entrainment and disentrainment. *Journal of Hydraulic Research*, 53, 633-648.
13. Franzetti S., **Radice A.** (2015). Discussion of "Semi-analytical model for temporal clear-water scour at prototype piers", by J. Guo. *Journal of Hydraulic Research*, 53, 408-411.
14. **Radice A.**, Davari V. (2014). Roughening elements as abutment scour countermeasures. *Journal of Hydraulic Engineering*, 140, 06014014, doi: 10.1061/(ASCE)HY.1943-7900.0000892.
15. Campagnol J., **Radice A.**, Nokes R., Bulankina V., Lescova A., Ballio F. (2013). Lagrangian analysis of bed-load sediment motion: database contribution. *Journal of Hydraulic Research*, 51, 589-596.
16. **Radice A.**, Rosatti G., Ballio F., Franzetti S., Mauri M., Spagnolatti M., Garegnani G. (2013). Management of flood hazard via hydro-morphological river modelling. The case of the Mallero in Italian Alps. *Journal of Flood Risk Management*, 6, 197-209, doi: 10.1111/j.1753-318X.2012.01170.x.
17. **Radice A.**, Nikora V., Campagnol J., Ballio F. (2013). Active interactions between turbulence and bed load: Conceptual picture and experimental evidence. *Water Resources Research*, 49, 90-99, doi: 10.1029/2012WR012255.
18. **Radice A.**, Lauva O. (2012). On flow-altering countermeasures for scour at vertical-wall abutment. *Archives of Hydro-Engineering and Environmental Mechanics*, 59, 137-153.
19. Campagnol J., **Radice A.**, Ballio F. (2012). Scale-based statistical analysis of sediment fluxes. *Acta Geophysica*, 60, 1744-1777, doi: 10.2478/s11600-012-0028-6.
20. **Radice A.**, Tran C.K. (2012). Study of sediment motion in scour hole of a circular pier. *Journal of Hydraulic Research*, 50, 44-51.

21. **Radice A.**, Giorgetti E., Brambilla D., Longoni L., Papini M. (2012). On integrated sediment transport modelling for flash events in mountain environments. *Acta Geophysica*, 60, 191-213, doi: 10.2478/s11600-011-0063-8.
22. Brambilla D., Longoni L., Papini M., Giorgetti E., **Radice A.** (2011). On analysis of sediment sources toward proper characterization of hydro-geological hazard for mountain environments. *International Journal of Safety and Security Engineering*, 1, 423-437.
23. Franzetti S., **Radice A.**, Rabitti M., Rossi G. (2011). Hydraulic design and preliminary performance evaluation of countermeasure against debris accumulation and resulting local pier scour on river Po in Italy. *Journal of Hydraulic Engineering*, 137, 615-620.
24. **Radice A.** (2010). Discussion of "Protecting vertical-wall abutments with riprap mattresses", by A.H. Cardoso and C.M.S. Fael. *Journal of Hydraulic Engineering*, 136, 848-849.
25. **Radice A.**, Ballio F., Nikora V. (2010). Statistics and characteristic scales for bed load in a channel flow with sidewall effects. *Acta Geophysica*, 58, 1072-1093, doi: 10.2478/s11600-010-0020-y.
26. Ballio F., **Radice A.**, Dey S. (2010). Temporal scales for live-bed scour at abutments. *Journal of Hydraulic Engineering*, 136, 395-402.
27. **Radice A.**, Ballio F., Tran C.K. (2010). Gravity- and turbulence-dominated sediment motion in the clear-water scour process at a vertical-wall abutment in pressurized flow. *Archives of Hydro-Engineering and Environmental Mechanics*, 57, 43-59.
28. **Radice A.**, Ballio F., Nikora V. (2009). On statistical properties of bed load sediment concentration. *Water Resources Research*, 45, W06501, doi:10.1029/2008WR007192.
29. **Radice A.**, Ballio F., Porta G. (2009). Local scour at a trapezoidal abutment: sediment motion pattern. *Journal of Hydraulic Research*, 47, 250-262, doi: 10.3826/jhr.2009.3356.
30. **Radice A.** (2009). Use of the Lorenz curve to quantify statistical nonuniformity of sediment transport rate. *Journal of Hydraulic Engineering*, 135, 320-326.
31. **Radice A.**, Porta G., Franzetti S. (2009). Analysis of the time-averaged properties of sediment motion in a local scour process. *Water Resources Research*, 45, W03401, doi: 10.1029/2007WR006754.
32. Ballio F., Teruzzi A., **Radice A.** (2009). Constriction effects in clear-water scour at abutments. *Journal of Hydraulic Engineering*, 135, 140-145.
33. **Radice A.**, Ballio F. (2008). Double-average characteristics of sediment motion in one-dimensional bed load. *Acta Geophysica*, 56, 654-668, doi: 10.2478/s11600-008-0015-0.
34. **Radice A.**, Malavasi S., Ballio F. (2008). Sediment kinematics in abutment scour. *Journal of Hydraulic Engineering*, 134, 146-156.
35. Ballio F., **Radice A.** (2007). Grain kinematics in weak linear transport. *Archives of Hydro-Engineering and Environmental Mechanics*, 54, 223-242.
36. **Radice A.**, Malavasi S., Ballio F. (2006). Solid transport measurements through image processing. *Experiments in Fluids*, 41, 721-734, doi: 10.1007/s00348-006-0195-9.
37. Ballio F., **Radice A.** (2003). A non-touch sensor for local scour measurements. *Journal of Hydraulic Research*, 41, 105-108.

*Papers in Italian journals*

38. Longoni L., Ivanov V.I., Brambilla D., **Radice A.**, Papini M. (2016). Analysis of the temporal and spatial scales of soil erosion and transport in a mountain basin. *Italian Journal of Engineering Geology and Environment*, 16(2), 17-30.
39. Mandelli M., Longoni L., Papini M., Roncoroni F., **Radice A.** (2009). Modellazione del trasporto di sedimenti sul bacino del Tartano (Valtellina). *GEAM*, Anno XLVI, n. 2, 53-63.

*Papers in conference proceedings*



40. Crotti G., Serio G., **Radice A.**, Franzetti S. (2019). Treatment of echo-sounder data for real-time bridge scour monitoring: an application on the Po river, Italy. HydroSenSoft 2019, II International Symposium and Exhibition on Hydro-Environment Sensors and Software, Madrid, Spain.
41. Molinari D., **Radice A.**, Agosti A., Crippa J., Scorzini A.R., Dazzi S., Bertuzzi F., Vacondio R. (2018). Modellazione dell'evento alluvionale che ha interessato la città di Lodi nel novembre 2002. XXXVI Convegno di Idraulica e Costruzioni Idrauliche, Ancona.
42. **Radice A.**, Unigarro Villota S. (2018). Propagation of aggrading sediment fronts in a laboratory flume. River Flow 2018, IX International Conference on Fluvial Hydraulics, Lyon, France.
43. Ballio F., Fathel S.L., Furbish D.J., **Radice A.** (2018). On experimental censorship of particle hops in bed-load transport. River Flow 2018, IX International Conference on Fluvial Hydraulics, Lyon, France.
44. **Radice A.**, Albergante A., Ballio F., Franzetti S., Monofy A. (2018). Bridge pier scour in live-bed: from a case-study prototype to an investigation of the process mechanisms. Invited keynote paper, ISHMMT 2018, 2<sup>nd</sup> Int. Symposium on Hydraulic Modeling and Measuring Technology, Nanjing, China.
45. **Radice A.**, Bettiga A., Figueiredo R., Molinari D. (2017). On urban inundation and damage modelling. EWRA 2017, X World Congress on Water Resources and Environment, Athens, Greece.
46. **Radice A.**, Aleixo R., Hosseini Sadabadi S.A., Sarkar S. (2017). On image grabbing and processing for measurement of geophysical flows. HydroSenSoft 2017, International Symposium and Exhibition on Hydro-Environment Sensors and Software, Madrid, Spain.
47. Longoni L., Ivanov V., Brambilla D., Papini M., Brebbia C., Teanini E., **Radice A.** (2017). Application of multiple surveying techniques at a to-be-gauged river section. HydroSenSoft 2017, International Symposium and Exhibition on Hydro-Environment Sensors and Software, Madrid, Spain.
48. Lauva O., **Radice A.** (2016). An experimental study of live-bed scour at circular pier in covered flow. ICSE 2016, VIII International Conference on Scour and Erosion, Oxford, UK.
49. Hosseini Sadabadi S.A., **Radice A.**, Ballio F. (2016). Post-processing of particle tracking data for phenomenological depiction of weak bed-load sediment transport. River Flow 2016, VIII International Conference on Fluvial Hydraulics, St. Louis, US.
50. Hosseini Sadabadi S.A., **Radice A.**, Ballio F. (2016). An analysis of entrainment and deposition rate fluctuations in weak bed load transport. P.M. Rowiński and A. Marion (eds.), Hydrodynamic and mass transport at freshwater aquatic interfaces, GeoPlanet: Earth and Planetary Sciences, ISBN: 978-3-319-27749-3, Springer, 333-342.
51. Ballio F., Brambilla D., Longoni L., Melillo V., Papini M., **Radice A.** (2014). Can potentialities of hydro-geologic modelling be useful to environmental technologists? I2SM 2014, IV International Symposium on Sediment Management, Ferrara, Italy.
52. **Radice A.**, Elsayed S.M. (2014). Hydro-morphologic modelling for different calamitous scenarios in a mountain stream. River Flow 2014, VII International Conference on Fluvial Hydraulics, Lausanne, Switzerland.
53. Ballio F., Campagnol J., Nikora V., **Radice A.** (2013). Diffusive properties of bed load moving sediments at short time scales. XXXV Congress of IAHR, Chengdu, China.
54. **Radice A.**, Rosatti G. (2012). Sulla modellazione idraulico-morfologica dei corsi d'acqua: il torrente Mallero e la propagazione dell'incertezza legata all'alimentazione solida. XXXIII Convegno di Idraulica e Costruzioni Idrauliche, Brescia.
55. Campagnol J., **Radice A.**, Ballio F. (2012). Insight on how bed configuration affects properties of bed load motion. ICSE 2012, VI International Conference on Scour and Erosion, Paris, France.
56. **Radice A.**, Nokes R., Ballio F. (2010). Preliminary results from an application of PTV to bed-load grains. River Flow 2010, V International Conference on Fluvial Hydraulics, Braunschweig, Germany.
57. Ballio F., Brambilla D., Giorgetti E., Longoni L., Papini M., **Radice A.** (2010). Evaluation of sediment yield from valley slopes: a case study. Debris Flow 2010, Milan, Italy.
58. **Radice A.**, Ballio F. (2010). Coherent particle motion in bed load. I Congress of the European Section of IAHR, Edinburgh, UK.

59. **Radice A.**, Ballio F., Malavasi S. (2009). Applying image analysis to measure the kinematics of the solid phase in different phenomena. Invited paper, XXXIII Congress of IAHR, Vancouver, Canada.
60. **Radice A.**, Ballio F. (2008). Sediment kinematics at abutments of different shape. River Flow 2008, IV International Conference on Fluvial Hydraulics, Cesme-Izmir, Turkey.
61. Ballio F., Carravetta A., Cozzolino L., Della Morte R., **Radice A.** (2008). Sediment erosion under non-uniform flow conditions. River Flow 2008, IV International Conference on Fluvial Hydraulics, Cesme-Izmir, Turkey.
62. Ballio F., Franzetti S., **Radice A.** (2007). Experimental observations on sediment motion under weak one-dimensional bed load. XXXII Congress of IAHR, Venice, Italy.
63. **Radice A.**, Ballio F., Armenio V., Franzetti S. (2006). Scour development and sediment motion at rectangular and trapezoidal abutments. ICSE 2006, III International Conference on Scour and Erosion, Amsterdam, The Netherlands.
64. **Radice A.**, Franzetti S., Ballio F. (2006). Prove sperimentali di erosione localizzata in un condotto rettangolare in pressione. XXX Convegno di Idraulica e Costruzioni Idrauliche, Roma.
65. **Radice A.**, Malavasi S., Ballio F. (2006). Time evolution of erosion depth and sediment motion for abutment scour in a pressure duct. River Flow 2006, III International Conference on Fluvial Hydraulics, Lisbon, Portugal.
66. Berzi D., La Rosa L., Malavasi S., **Radice A.** (2006). Fluctuations in surface granular flow via a PIV - edge detection technique. River Flow 2006, III International Conference on Fluvial Hydraulics, Lisbon, Portugal.
67. **Radice A.**, Malavasi S., Ballio F. (2004). PIV analysis of sediment kinematics in an abutment scour hole. ICSE 2004, II International Conference on Scour and Erosion, Singapore.
68. Ballio F., **Radice A.**, Franzetti S. (2004). An experimental study of live-bed scour at bridge abutments. ICSE 2004, II International Conference on Scour and Erosion, Singapore.
69. **Radice A.**, Teruzzi A., Ballio F. (2004). Misure di erosione localizzata in live bed tramite un sensore ottico. XXIX Convegno di Idraulica e Costruzioni Idrauliche, Trento.
70. Malavasi S., **Radice A.**, Ballio F. (2004). Study of sediment motion in a local scour hole through an image processing technique. River Flow 2004, II International Conference on Fluvial Hydraulics, Naples, Italy.
71. **Radice A.**, Franzetti S. (2002). Stima della profondità dell'erosione alle spalle dei ponti fluviali. XXVIII Convegno di Idraulica e Costruzioni Idrauliche, Potenza.
72. **Radice A.**, Franzetti S., Ballio F. (2002). Local scour at bridge abutments. River Flow 2002, I International Conference on Fluvial Hydraulics, Louvain-la-Neuve, Belgium.

#### *Multimedia*

73. Ballio F., **Radice A.**, Malavasi S. (2006). Sediment motion in local bridge scour. DVD with experimental results, Politecnico di Milano.

#### *Other*

74. Giorgetti E., Brambilla D., Longoni L., Papini M., Alba M., Savazzi G., **Radice A.** (2012). Strumenti per una modellazione integrata dei movimenti di sedimenti sulla Val Rossiga. Monografia relativa all'Accordo di collaborazione tra il Politecnico di Milano e la Regione Lombardia per la sperimentazione di iniziative finalizzate a incrementare l'attrattività del territorio lombardo e la valorizzazione del capitale umano, 61-70.
75. **Radice A.** (2005). Cinematica dei sedimenti in un fenomeno erosivo localizzato. Ph.D. thesis, Politecnico di Milano.
76. **Radice A.** (2000). Fenomeni erosivi in corrispondenza delle spalle dei ponti. M.Sc. thesis, Politecnico di Milano.