



Prof. Ing. Chiara BISCARINI

Civil hydraulic engineer – PhD in Sea and Engineering Sciences
Associate Professor
Scientific Sector Hydraulic and Maritime Works and Hydrology (ICAR/02)

Biographical notes:

Present positions:

to 2020 – President of the Quality Presidium of the University for Foreigners Perugia

since 2019 – Director of the CENTRE FOR SUSTAINABLE HERITAGE CONSERVATION – SheC.

since 2017 - Rector's delegate for Technological Innovation in Education.

since 2017 – Associate Professor of Hydraulic and Hydrology (ICAR/02) at the University for Foreigners Perugia

since 2014 - Vice-chair - UNESCO CHAIR Water Resources Management and Culture
<http://www.unescowaterchair.org/>

Studies and academic career

2017 to date	University for Foreigners of Perugia, Associate professor in Hydraulics and Maritime Works and Hydrology (ICAR/02) - affiliated to the UNESCO CHAIR Water Resources Management and Culture and to the Department of Human and Social Sciences.
2015 - 2018	Member of the Senate of the University for Foreigners Perugia
2007 to 2017	University for Foreigners of Perugia, Assistant professor in Hydraulics and Maritime Works and Hydrology (ICAR/02) - affiliated to the UNESCO CHAIR Water Resources Management and Culture and to the Department of Human and Social Sciences.
2006	Doctoral Degree in Ph.D. degree in Sea and Engineering Sciences
2005	Research grant for cooperation in research activities at the University of Perugia for the subject area 'Civil Engineering and Architecture' project: "Analysis of algorithms for 2D simulation of processes of flooding floodplains."
2002-2006	Ph.D. student in Sea and Engineering Sciences (XVII cycle), University of Naples "Federico II" in consortium with the Second University of Naples, University of Naples "Parthenope" and together with the Institute for Coastal Marine Environment - CNR and the Zoological Station "Anton Dohrn". Research location: Institute for Coastal Marine Environment of the National Research Council, Institute for Research "Geomare" South Naples.
2001	Member of the Society of Engineers of the Province of Perugia N° 2047.
9 July 2001	License to practice as an engineer with a final vote 120/120.
6 April 2001	MSc in Civil Engineering (1999-2000) at the Faculty of Engineering of the University of Perugia with a final vote of 110/110 cum laude.

SCIENTIFIC ACTIVITY

Roles in research organizations and scientific committees

- Since 2013 Member of the Scientific Committee of the inter-university research centre CIRIAF (Centro Interuniversitario di Ricerca sull'Inquinamento e sull'Ambiente) at University of Perugia and University of Roma Tre.
- Since 2013 Member of the Scientific Committee of the UNESCO Chair on Water Resources Management and Culture
- Since 2008 External collaboration - Headquarters of the World Water Assessment Programme (WWAP) – UNESCO, Perugia.
- 2007-2013 CENTRO WARREDOC - Water Resources Research and Documentation Centre - Università per Stranieri di Perugia
- Since 2007 Member of the Scientific Committee of Honors Center of Italian Universities (H2CU) at Sapienza Università of Rome since 2007

Invitations and awards

- 2017 Invited speaker at the "International Journalism Festival", April, 2016, Perugia, Italy.
- 2014 Invited speaker at the workshop "Water and Human Heritage: Aniene river e Tivoli city", 19 december 2014, Tivoli, Roma.
- 2012 Evaluation of Research Quality (VQR 2004-2010) by the Italian Ministry of Education, University and research: 100% of excellent products.
- 2010 Invited Seminar "Methodological Responses to support decision making in flood stressed areas" per la Seminar Series 8 del Department of Civil Engineering - the City College of New York
- 2010 Invited speaker at the World Water Day UNESCO-WWAP, Perugia, 22 Maggio, 2010.
- 2010 Invited speaker at the Workshop "World Water Day 2010: Clean Water for a Healthy World" World Water Assessment Program WWAP- UNESCO Villa la Colombella, Perugia 22 Marzo 2010.
- 2009 Invited speaker at the Unesco - IHP International Hydrological Program Workshop "Water for life: System under Stress and Societal Responses", Roma 15 Luglio 2009.
- 2009 Invited speaker at the 9th World Water Day, Roma, Accademia dei Lincei, 23 Marzo 2009
- 2008 Invited speaker at the Symposium "The role of hydrology in water resources management", organised by The IHP-Committee of Italy, sponsored by IAHS and co-sponsored by UNESCO, Capri, Ottobre 2008.
- 2005 Invited speaker at the 1st Seminar of the Italian National Committee of IHP-UNESCO under the 2005-2015 United Nations Decade for Action "Water for Life". Casalina (PG), 2 September 2005.

Organization and coordination of international scientific initiatives

- 2014 Chairman of the grant "Best practices for lakes" promoted by Italian Ministry of the Environment Land and Sea, ISPRA - Institute for Environmental Protection and Research, ISPRA, H2CU - La Sapienza Università di Roma, UNESCO Chair of Università per Stranieri di Perugia, Italian hydrotechnical Association, 15th World Lake Conferences.
- 2014 Member of the organizing committee of the Fifteenth World Lake Conference (WLC15) "Lakes: the mirror of the earth." Promoted by ILEC (International Lake Environment Committee - Lake Biwa, Kusatsu, Shiga, Japan), Perugia 1-5 September 2014.
- 2013 Member of the organizing committee of the Workshop "Workshop on Science, Cultural and Human Wellbeing in Lake Areas: Trasimeno Lake case study ". Pre-Conference Meeting of 15th World Lake Conference Castiglione del Lago, 18 September, 2013.
- 2013 Member of the organizing committee of the Workshop "Workshop on UNESCO AND WATER" with the patronage of: UNESCO, H2CU (Honors Centre of Italian Universities), ILEC (International Lake Environment Committee). Italian commission at UNESCO, Palazzo Firenze, Sala del Praticaccio. - Roma, 16 September 2013.
- 2012 Curator of the International Film Festival ACQUADOC 2012 within the Umbria Water Festival Perugia, 17-20 May 2012.
- 2012 Member of the organizing committee of the Workshop "Bidimensional hydraulic modeling with RiverFLO-2D", 10-12 July, 2012, Perugia, Italy.
- 2010 Member of the organizing committee of the Workshop "World Water Day 2010: Clean Water for a Healthy World" World Water Assessment Program WWAP- UNESCO Villa la Colombella .22 March 2010

- 2007 Member of the Local Organization Committee - General Assembly - International Union of Geodesy and Geophysics (IUGG), Perugia, July 2007. More than 4000 scientists from 60 different countries participated at this event.
- 2008 Member of the organizing committee "Second Preparatory Meeting on the Third World Water Development Report (WWDR-3)" underway 19-25 April 2008, UNESCO-WWAP Villa Colombella.
- 2008 Member of the local organizing committee of the International Course "An introduction to Lattice Boltzmann Methods for complex flow simulations", 3-8 March, 2008, CNR, Roma.

Organization and coordination of national scientific initiatives

- 2012 Member of the organizing committee of the conference "Diga 33 - Viaggio attraverso 33 dighe nel mondo. Utilizzi, soluzioni costruttive e impatto socio-economico", 19 maggio 2012 Magione (PG) within the Umbria Water Festival Perugia, 17-20 may 2012.
- 2012 Member of the organizing committee of the workshop "Le sfide del nord e del sud del mondo: tutela ambientale e sviluppo sostenibile", University for Foreigners of Perugia, 27 June 2012.
- 2012 Organizer of the cycle of seminars "Tecnologia e sostenibilità" Dott. Gianluigi Angelantoni CEO of the Angelantoni SpA and of the Archimede Solar Energy.
- 2010 Member of the organizing committee of the "Programma Idrologico Internazionale IHP – UNESCO - Illustrazione del "World Water Assessment Programme" delle Nazioni Unite. 28 april 2010 Roma, Camera dei Deputati, Sala Mercede.
- 2010 Member of the organizing committee of the scientific event "Acqua: priorità in America Latina", 25 march 2010, Istituto Italo Latino Americano, Roma. Promoted by The International Commission on Irrigation and Drainage (ICID)
- 2010 Organizer of the cycle of seminars "Turismo e Sostenibilità" Prof. Jean-Pierre Lozato Giotart, Director of the Pôle Médiation et Ingénierie Touristique et Culturelle des Territoires (Université de Paris III Sorbonne Nouvelle)
- 2009 Member of the local organizing committee of the Conference "Galileo e l'Acqua: guardare il cielo per capire la terra" 17 december 2009 - Aula Marconi CNR, Roma and 18 december 2009 State Archives in Rome.
- 2009 Member of the organizing committee of the "Giornata di Studio in ricordo di Filippo Arredi" 19 december 2009 - Teatro Clitunno, Trevi (Perugia)

Participation in research projects, selected for funding on the basis of competitive calls

<u>Project</u>	<u>Duration</u>	<u>Role</u>
Combined numerical and experimental methodology for fluid structure interaction in free surface flows under impulsive loading	36	National coordinator
GEST RIVER - Definition of integrated methodologies for the maintenance and management of territories from hydraulic risk	36	Scientific responsible of the Unit
COLISEE project, ERASMUS +2014-1-FR01-K203-008505	36	Member of the Scientific Committee of the partner institution
MaReMaP-AIR Marine Resources management plan of the Adriatic and Ionian Region funded by the University of Macerata within EU funds	14	Participant
Progetto Operativo Difesa Suolo (PODiS) – PON ATAS QCS 2000/2006 - Linea attività di supporto indiretto: predisposizione di metodologie e linee guida - Ministero dell'Ambiente e Tutela del Territorio (Roma) funded by the European Commission	72	Head of Hydraulics area
Progetto Operativo Difesa Suolo (PODiS) – PON ATAS QCS 2000/2006 - Linea attività di supporto diretto: Supporto per problematiche di notevole complessità. - Ministero dell'Ambiente e Tutela del Territorio (Roma) funded by the European Commission	72	Head of the working group on coasts
Research grant "Modeling analysis of the events of the hydraulic system Black-Niagara Falls – Velino" funded within "Funding of	12	Principal Investigator

research projects of young researchers of the University for Foreigners of Perugia" 2009

Research grant "Numerical modeling of hydraulic flows through a mesoscopic approach" funded within "Funding of research projects of young researchers of the University for Foreigners of Perugia" 2010	12	Principal Investigator
Research grant "Lattice Boltzmann method for the simulation of rapidly changed currents" funded within "Funding of research projects of young researchers of the University for Foreigners of Perugia" 2012	12	Principal Investigator
USA National Science Foundation – Fluid dynamics (2013-2016): "Particle Image Baro-Velocimetry (PIBV): simultaneous measurement of pressure and velocity in fluids" award n. 1332204– Polytechnic Institute NYU	36	Participant
Bragg grating optical fiber sensors" financed by the Lazio Region through FILAS S.p.A. - Business Lab Centro Atena. (2005-2006).	12	Scientific Tutor

Scientific and technical activities in other research projects:

2007 - 2008.	Cooperates to the research project: "Three dimensional simulation of the Marmore water falls" financed by the National Research Council (CNR).
2005	Ecomar Srl: Snam- projects - Treno Alta Velocita' S.p.A. - ITALFERR S.p.A. - CEPAV DUE – Linea A.V. /A.C. Torino – Venezia Tratta Milano – Verona Progetto Definitivo "Hydraulic and hydrological studies and testing".
2005	Professional collaboration with the Ministry for the Environment and Territory. Subject assignment: 'Technical and scientific support to the activities pertaining the Technical Area relating to hydro-geological risk, support for the development of activities aimed at the implementation of the measures and objectives of the Operative Project Soil conservation - PON ATAS CSF 200/2006 '.
2004 -2005	Participant at the research contract CNR (IAMC)-APAT, Prot. 317/03 - "Soil and natural hazards, environmental emergencies, communication, dissemination, education, environmental education".
2004	VAMS engineering society: Autorità di bacino del Fiume Tevere – "Studies and activities for the definition of hypotheses feasibility work on hydraulic defenses in the stretch of the Tiber from Castel Jubilee and the mouth of Fiumara Grande, related to the objective of achieving a uniform level of safety of the hydraulic and a better urban-environmental usability of the works themselves".
2003	DB CAD srl – professional services for the collaboration in the realization of the event: "2002 - 2003 from the International Year of Mountain to the International Year of Water".
2003	Agnesi: evaluation of hydraulic compatibility for the construction of a directional center of Agnesi.
2003	Professional collaboration with the CNR-IRPI: "Implementation of the virtual museum of water resources with particular reference to the Tiber River."
2003	Professional collaboration with the Department of Civil and Environmental Engineering, University of Perugia for the creation of a multimedia model for the "Logic archiving and classification of photographs relating to archaeological finds related to water adduction Etruscan and Roman water adduction."
2002 - 2003	Manager of Networks Sector at the Engineering Solution Center (ESC), a consortium of companies in the engineering sector, for the development of projects in the field of Geographic Information Systems (GIS), mapping services and engineering services.
2002	Professional collaboration with CNR-IRPI for the "Study, design and implementation of a Virtual Museum of Water Resources."
2002	Assessment of hydraulic compatibility of Nera River Basin in the city of Terni.
2002	Enterprise Certifico s.r.l: implementation of the Environmental Component, Environment Environmental Water Framework of Reference, in the study of Environmental Impact Assessment of the regional service center for the characterization and treatment of hazardous waste, aimed at an analysis of the effects on the aquatic environment surrounding the implementation of the completion of the storage station located in Loc Maratta - Terni on the right bank of the river Nera

- 2001 Assessment of hydraulic compatibility intervention to complete and improve functional station transference ASM Terni - right bank river Nera.
- 2001 Professional collaboration with Engineering Company Sintagma for study interaction of rivers and Hydraulic structures.
- 2001 Contract with the Department of Civil and Environmental Engineering at the University of Perugia within the contract with Consortium Tiber-Nera rivers: "Analysis of the risk of flooding of the Black River in the Terni basin and perimeter of the floodplain, aimed at the design of mitigation works in full compliance with the environmental dynamics, related to a cost-benefit analysis and to land type and use."
- 2000 - 2006 For the Italian Ministry of Environment and Land Protection, General direction of Land Protection within the project "Progetto Operativo Difesa Suolo (PODIS)". Activity of coordination and technical assistance to the Objective 1 regions, support to extremely complex problems:
- Puglia Region. Preparation of the Draft Basin Plan; extract for Hydrogeological Region of Puglia.
 - Sicilia Region. Redaction of the plan for the Hydrogeological structure of the priority catchments.
 - Campania Region. Project for studying the areas with high risk of landslides
 - Sardegna Region. Preparation of the regional scheme for the correct land use (SCUS)
 - Basilicata Region. Drawing up plans for settling regional forest belonging to the land.
 - Molise Region. Pilot project for the implementation of the Spatial Plan of the Community Forestry Alto Molise and drafting plans of settling three forests belonging to the land of the Molise Region falling within the scope of that community. - Project for the construction of a geological database. - Project for the construction of 6 principal hydraulic.
 - Calabria Region. Project for an advance monitoring of sites with high risk of landslides within the cities of S.Luca ed Acri.

EDITORIAL ACTIVITY

Editor of the following books:

Chiara Biscarini, Fabio Russo. Lectures on WATER FOR LIFE: SYSTEMS UNDER STRESS AND SOCIETAL RESPONSES. Science4 Press, 2010, ISBN 9788896504017.

Chiara Biscarini, Valentina Abete, Arnaldo Pierleoni, Antonello Lamanna. Book of abstracts of 15th World Lake Conference. Lakes: the mirrors of the earth BALANCING ECOSYSTEM INTEGRITY AND HUMAN WELLBEING. Science4 Press, 2014, ISBN: 978-88-96504-03-1 (print), ISBN: 978-88-96504-05-5 (online)

Chiara Biscarini, Arnaldo Pierleoni, Luigi Naselli-Flores, Proceedings of 15th World Lake Conference. Lakes: the mirrors of the earth BALANCING ECOSYSTEM INTEGRITY AND HUMAN WELLBEING. Science4 Press, 2014, ISBN: 978-88-96504-04-8 (print), ISBN: 978-88-96504-07-9 (online).

Member of the technical review panel of the following books:

Prof. Ing. A. Noli, Ing. M. Mita, (2006). Manuale sulla valutazione dei processi evolutivi costieri e analisi delle caratteristiche meteo-marine al largo e a riva. PODIS, Ministero dell' Ambiente e Tutela del Territorio.

Prof. Ing. Togna, Ing. Gravino (2006). Identificazione e selezione diffusione di criteri e buone pratiche riguardanti le metodologie di perimetrazione delle aree a rischio di inondazione. PODIS, Ministero dell' Ambiente e Tutela del Territorio.

Dott. Geol. P. Binazzi (2006). Aggiornamento linee guida per capitolati speciali per interventi di ingegneria naturalistica. PODIS, Ministero dell' Ambiente e Tutela del Territorio.

Ing. Nat. P. Cornelini (2005). Manuale di indirizzo delle scelte progettuali per interventi di ingegneria naturalistica. PODIS, Ministero dell' Ambiente e Tutela del Territorio.

Avv. Prof. Mazzone , Avv. Loria (2005) Manuale tecnico-amministrativo del Direttore dei Lavori per gli appalti di opere di difesa del suolo. PODIS, Ministero dell' Ambiente e Tutela del Territorio.

Avv. Prof. Mazzone , Avv. Loria (2005) Manuale tecnico-amministrativo del Responsabile del Procedimento per la realizzazione di opere di difesa del suolo con fondi strutturali comunitari. PODIS, Ministero dell' Ambiente e Tutela del Territorio. PODIS, Ministero dell' Ambiente e Tutela del Territorio.

C.I.N.I. Geo (Consorzio Interuniversitario per l'Ingegneria delle Georisorse), (2004) Manuale sulla valutazione di impatto ambientale nella difesa del suolo. PODIS, Ministero dell'Ambiente e Tutela del Territorio.

Prof. Ing. P. Massacci, Ing. F. Napolitano, Ing. G. Giarda, Dott. B. Pistoni (2003) Metodologie e linee guida per la prevenzione ed il controllo del rischio idrogeologico. PODIS, Ministero dell'Ambiente e Tutela del Territorio.

Ing. Dott. Nat. Paolo Cornelini, Dott. Nat. Giuliano Sauli (2005) Difesa delle coste e salvaguardia dei litorali. Analisi delle caratteristiche meteo-marine al largo e a riva e valutazione dei processi evolutivi costieri. PODIS, Ministero dell'Ambiente e Tutela del Territorio. 05/2003 12/2004

Referee for the following journals

Journal of Hydrology, Landslides Journal Springer, Advances in Water Resources, Water Management, Water,

Member of the following associations

- Associazione Idrotecnica Italiana (All) since 2011
- Gruppo Italiano di Idraulica (GII) since 2011
- Register of Professional Engineers since 2001

TEACHING ACTIVITY

Member of the faculty of the PhD Program in Cooperation for Peace and Development (2009).

Supervisor of several graduate and undergraduate students at the University for Foreigners of Perugia e at the University of Perugia.

Co-supervisor of several Ph.D. students on numerical modeling of river hydraulics phenomena and experimental activities on fluid-structure interaction problems.

National teaching positions

AY 2009/2010

- Lecturer of "Laboratory for Tourism Promotion of sustainable environmental and cultural heritage " University for Foreigners of Perugia. Master of science degree

AY 2009-2010 - Today

- Lecturer of "Socio-economic and territorial analysis by Geographical Information Systems - GIS" University for Foreigners of Perugia. Master of science degree
- Lecturer of "Communication and Management of Natural Hazards" University for Foreigners of Perugia. Master of science degree.

International teaching positions

AY 2008-2009

- Lecturer of "Water Protection" – Second level Master of University for Foreigners of Perugia and Università St. Joseph di Beirut.

AY 2007-2008

- Lecturer of "Evaluation Methodologies of Hydrological Risk in Coastal Areas" - Program for "Certificate on Disaster Management" organizzato dall'International Labour Organization (ILO) at the Water Research and Documentation Center (Worredoc).
- Lecturer of "Temporal Evolution of Wave Height and Shape" Program for "Certificate on Disaster Management" organized by International Labour Organization (ILO) at Water Research and Documentation Center (Worredoc), Perugia.
- Lecturer of "Combined Ex-post and Ex-ante Damage Analysis" - "Certificate on Disaster Management" organized by International Labour Organization (ILO) at Water Research and Documentation Center (Worredoc), Perugia.

from 2008 to 2013

- Tutor and Organiser of the Honors Program: "Rome Eternal City" for Pace University New York with Honor Centre of Italian Universities (H2CU) University of Rome La Sapienza.

PUBLICATIONS

2021

- Agresta, A.; Cavalagli, N.; Biscarini, C.; Ubertini, F. Effect of Bottom Geometry on the Natural Sloshing Motion of Water Inside Tanks: An Experimental Analysis. *Appl. Sci.* 2021, 11, 605.
- Agresta, A.; Cavalagli, N.; Biscarini, C.; Ubertini, F., Ubertini, S., 2021, Enhanced energy dissipation through 3D printed bottom geometry in Tuned Sloshing Dampers, *Journal of Fluids and Structures*, under review.
- Mercuri, A., Fanelli, P., Falcucci, G., Ubertini, S., Jannelli E., Biscarini, C., 2021, Effect of the strain measurement layout on damage detection and localization in a free falling compliant cylinder impacting the water surface, *Fluids*, under review.

2020

- Biscarini, C., Catapano, I., Cavalagli, N., Ludeno, G., Pepe, F. A., & Ubertini, F. (2020). UAV Photogrammetry, Infrared Thermography and GPR for Enhancing Structural and Material Degradation Evaluation of the Roman Masonry Bridge of Ponte Lucano in Italy. *NDT & E International*, 102287.
- Ludeno, G., Biscarini, C., Catapano, I., Cavalagli, N., Ascanio Pepe, F., & Ubertini, F. (2020). Drone based visual inspections, Infrared Thermography investigations and GPR surveys of the Roman masonry bridge Ponte Lucano, Tivoli, Italy. In *EGU General Assembly Conference Abstracts* (p. 19538).
- Sbardella, T., Santucci, V., Biscarini, C., & Nencioni, G. (2020). Can web series improve language learning? A preliminary discussion. *CALL for widening participation: short papers from EUROCALL 2020*, 309.

2019

- Facci, A. L., Falcucci, G., Agresta, A., Biscarini, C., Jannelli, E., & Ubertini, S. (2019). Fluid Structure Interaction of Buoyant Bodies with Free Surface Flows: Computational Modelling and Experimental Validation. *Water*, 11(5), 1048.
- Ridolfi, E., Di Francesco, S., Pandolfo, C., Berni, N., Biscarini, C., & Manciola, P. (2019). Coping with extreme events: Effect of different reservoir operation strategies on flood inundation maps. *Water*, 11(5), 982.
- Santucci, V., Sbardella, T. A. L. I. A., Biscarini, C., Spina, S., & Grego Bolli, G. (2019). Soft skills with learning technologies: the project at the University for Foreigners of Perugia. In *Proceedings of the 13th International Technology, Education and Development Conference (INTED 2019)* (pp. 3700-3708).
- Sbardella, T., Santucci, V., Biscarini, C., Spina, S., & Bolli, G. G. (2019). Raising Lifelong Learning Skills Using Learning Technology at University for Foreigners of Perugia. In *Proceedings of the 2019 2nd International Conference on Education Technology Management* (pp. 54-57).

2018

- Alonso, S., Ridolfi, E., Biscarini, C., & Alfonso, L. (2018). Optimizing the selection of cross-sections using Information theory: a case in the Magdalena River, Colombia. *EPIC Series in Engineering*, 3, 2178-2186.
- Cavalagli, N., Biscarini, C., Facci, A. L., Ubertini, F., & Manciola, P. (2018, July). Experimental analysis on slamming reduction in rectangular liquid tanks subjected to harmonic motion. In *AIP Conference Proceedings* (Vol. 1978, No. 1, p. 42006). AIP Publishing LLC.
- Pagnotta, M. G., Biscarini, C., Baffo, I., & Fabbri, G. (2018). Citizens' perception and risks management evaluation in Natural Disasters. *EGUGA*, 16168.
- Russo, S., Biscarini, C., Facci, A. L., Falcucci, G., Jannelli, E., & Ubertini, S. (2018). Experimental assessment of buoyant cylinder impacts through high-speed image acquisition. *Journal of Marine Science and Technology*, 23(1), 67-80.
- Nardi, F., Annis, A., & Biscarini, C. (2018). On the impact of urbanization on flood hydrology of small ungauged basins: the case study of the Tiber river tributary network within the city of Rome. *Journal of Flood Risk Management*, 11, S594-S603.

2017

- Falcucci, G., Krastev, V. K., & Biscarini, C. (2017). Multi-component Lattice Boltzmann simulation of the hydrodynamics in drip emitters. *Journal of Agricultural Engineering*, 48(3), 175-180.
- Fanelli, P., Biscarini, C., Jannelli, E., Ubertini, F., & Ubertini, S. (2017). Structural health monitoring of cylindrical bodies under impulsive hydrodynamic loading by distributed FBG strain measurements. *Measurement Science and Technology*, 28(2), 024006.
- Cavalagli, N., Biscarini, C., Facci, A. L., Ubertini, F., & Ubertini, S. (2017). Experimental and numerical analysis of energy dissipation in a sloshing absorber. *Journal of Fluids and Structures*, 68, 466-481.

2016

- Biscarini, C., Di Francesco, S., Ridolfi, E., & Manciola, P. (2016). On the simulation of floods in a narrow bending valley: The Malpasset dam break case study. *Water*, 8(11), 545.
- Di Francesco, S., Biscarini, C., & Manciola, P. (2016). Characterization of a flood event through a sediment analysis: The Tescio River case study. *Water*, 8(7), 308.
- Di Francesco, S., Biscarini, C., Pierleoni, A., & Manciola, P. (2016, June). An engineering based approach for hydraulic computations in river flows. In *AIP Conference Proceedings* (Vol. 1738, No. 1, p. 270012). AIP Publishing LLC.

- Pierleoni, A., Di Francesco, S., Biscarini, C., & Manciola, P. (2016, June). Numerical approach for the evaluation of Weibull distribution parameters for hydrologic purposes. In AIP Conference Proceedings (Vol. 1738, No. 1, p. 270013). AIP Publishing LLC.
 - Panciroli, R., Biscarini, C., Jannelli, E., Ubertini, F., & Ubertini, S. (2016, April). Dynamic monitoring of compliant bodies impacting the water surface through local strain measurements. In Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2016 (Vol. 9803, p. 980335). International Society for Optics and Photonics.
 - Di Francesco, S., Biscarini, C., Montesarchio, V., & Manciola, P. (2016). On the role of hydrological processes on the water balance of Lake Bolsena, Italy. *Lakes & Reservoirs: Research & Management*, 21(1), 45-55.
 - Panciroli, R., Biscarini, C., Falcucci, G., Jannelli, E., & Ubertini, S. (2016). Live monitoring of the distributed strain field in impulsive events through fiber Bragg gratings. *Journal of Fluids and Structures*, 61, 60-75.
- 2015**
- Panciroli, R., Biscarini, C., Giovannozzi, A., Maggiorana, P., & Jannelli, E. (2015, March). Structural health monitoring through fiber Bragg grating strain sensing. In AIP Conference Proceedings (Vol. 1648, No. 1, p. 190002). AIP Publishing LLC.
 - S Di Francesco, C Biscarini, P Manciola (2015) Numerical simulation of water free-surface flows through a front-tracking lattice Boltzmann approach, *Journal of Hydroinformatics* 17 (1), 1-6
- 2014**
- S Di Francesco, C Biscarini, V Montesarchio (2014), An evaluation of Computational Fluid dynamics model for flood risk analysis, *EGU General Assembly Conference Abstracts* 16, 11671
 - A Zarghami, C Biscarini, S Succi, S Ubertini (2014), Hydrodynamics in Porous Media: A Finite Volume Lattice Boltzmann Study, *Journal of Scientific Computing* 59 (1), 80-103
 - A Zarghami, SD Francesco, C Biscarini (2014), Porous substrate effects on thermal flows through a REV-scale finite volume lattice Boltzmann model, *International Journal of Modern Physics C* 25 (02)
 - S Di Francesco, C Biscarini, V Montesarchio, P Manciola (2014), On the role of Hydrological balancing in lake basin management, *Lakes: the mirrors of the earth*, 113.
 - V Abete, U Bartocchini, C Biscarini (2014), A tool for sharing best practices in lakes basin management. *Lakes: the mirrors of the earth*, 299.
 - R. Panciroli, C. Biscarini, A. Giovannozzi, P. Maggiorana, E. Jannelli, Structural health monitoring through fiber bragg grating strain sensing, *AIP Conference Proceedings* 1648.
- 2013**
- F Nardi, C Biscarini, S Di Francesco, P Manciola, L Ubertini, Comparing a large-scale dem-based floodplain delineation algorithm with standard flood maps: the tiber river basin case study, *Irrigation and Drainage* 62 (S2), 11-19
 - S Di Francesco, A Zarghami, C Biscarini, P Manciola, Wall roughness effect in the lattice Boltzmann method, *AIP Conference Proceedings* 1558, 1677-1680
 - F. Nardi, C. Biscarini, S. Di Francesco and P. Manciolan (2013) "On the investigation of the performances of a DEM-based hydrogeomorphic floodplain identification method in a large urbanized river basin: the Tiber river case study in Italy" Posters HS6.4 Hydrology and remote sensing: current platforms and the future SWOT mission EGU2013-12931.
 - C. Biscarini, S. Di Francesco, F. Nardi and P. Manciola (2013) "Detailed simulation of complex hydraulic problems with macroscopic and mesoscopic mathematical methods," *Mathematical Problems in Engineering*, Volume 2013 (2013), Article ID 928309.
 - F Nardi, C Biscarini, An Automated Gis Partitioning Approach For a Large Scale River Basin Landscape, *Proceedings of the International Conference "Landscape and Imagination"*.
- 2012**
- Di Francesco S, Falcucci G, Biscarini C, Manciola P: (2012). LBM method for roughness effect in open channel flows. , *AIP Conference Proceedings* 1479, 1777 (2012).
 - Di Francesco S, Biscarini C, Manciola P, Nardi F (2012). Metodo Lattice Boltzmann per la Simulazione di correnti rapidamente variate. In: *XXXIII Convegno Nazionale di Idraulica e Costruzioni Idrauliche*.
 - Nardi F, Biscarini C, Di Francesco S, Manciola P (2012). Sull'ottimizzazione Di Un Metodo Semplificato su base Idrogeomorfologica per la Caratterizzazione Geometrica Delle Aree Golenali Su Larga Scala. In: *XXXIII Convegno Nazionale di Idraulica e Costruzioni Idrauliche*.
- 2011**
- Falcucci G, Ubertini S, Biscarini C, Di Francesco S, Chiappini D, Palpacelli S, De Maio A, Succi S (2011). Lattice Boltzmann Methods for Multiphase Flow Simulations across Scales. *Communications In Computational Physics*, vol. 9, p. 269-296, ISSN: 1815-2406, doi: 10.4208/cicp.221209.250510a
 - Biscarini C, Di Francesco S, Mencattini M (2011). Application of the lattice Boltzmann method for large-scale hydraulic problems. *International Journal Of Numerical Methods For Heat & Fluid Flow*, vol. 21, p. 584-601, ISSN: 0961-5539, doi: 10.1108/09615531111135846

- Biscarini C, Testa M (2011). Three-Dimensional numerical modelling of the Marmore waterfalls. *Progress In Computational Fluid Dynamics*, vol. 11, p. 105-115, ISSN: 1468-4349, doi: 10.1504/PCFD.2011.038836
 - Biscarini C (2010). "Computational fluid dynamics modelling of landslide generated water waves". *Landslides*, vol. 7, p. 117-124, ISSN: 1612-510X, doi: 10.1007/S10346-009-0194-Z
- 2010**
- Biscarini C., Di Francesco S., Manciola P. (2010). CFD modelling approach for dam break flow studies. *Hydrology And Earth System Sciences*, vol. 14/2010, p. 705-718, ISSN: 1027-5606, doi: 10.5194/hess-14-705-2010
 - Di Francesco S., Biscarini C., Manciola P. (2010). Mesoscopic modeling of dam break flow. In: -. *Hydraulic Model Report CH80/10*. Edinburgh, may, 2010, vol. CH80/10, p. 137-145.
 - Di Francesco S, Biscarini C, Manciola P (2010). Mesoscopic modeling of dam-break flow. In: *Proceedings of Third IAHR Workshop on Hydraulic Structures (IJREWHS '10)*.
 - Biscarini C., Di Francesco S., Manciola P. (2010). Sviluppo di un Modello Numerico Mesoscopico per Flussi a Pelo Libero. In: -. *Atti del XXXII Convegno Nazionale di Idraulica e Costruzioni Idrauliche*. Palermo, Italy, 14 - 17 september, 2010, Walter Farina Editore, ISBN: 9788890389511
- 2009**
- Biscarini C., S. Di Francesco, P. Manciola (2009). A Methodology to Support Decision Making in Flood Plan Mitigation. In: -. *European Geosciences Union*. Vienna, 19-24, april 2009, vol. 11, Vienna: Copernicus Gesellschaft mbH
 - Manciola P, Di Francesco S, Biscarini C (2009). Flood Protection and Risk Management: the case of Tescio River Basin. *IAHS PUBLICATION*, vol. 327, p. 174-183
 - Violante C, Biscarini C, Esposito E, Molisso F, Porfido S, Sacchi M (2009). The consequences of hydrological events on steep coastal watersheds: the Costa d'Amalfi, eastern Tyrrhenian Sea. *IAHS PUBLICATION*, vol. 327, p. 102-113
 - Biscarini C, Di Francesco S, Pizzuto L, Mencattini M (2009). Free surface lattice boltzmann method for hydraulic problems. In: *First International Conference on Computational Methods for Thermal Problems, ThermaComp2009*.
 - Manciola P, Di Francesco S, Venturi S, Biscarini C (2009). Perimetrazione delle aree inondabili. In: *Atti del Convegno "Il bacino del Tevere", Atti 9° Giornata mondiale dell'acqua*, Roma, Accademia dei Lincei, 23 Marzo 2009 . *ATTI DEI CONVEGNI LINCEI*, ISSN: 0391-805X
- 2008**
- Biscarini C, Grassi S, Testa M (2008). Modellazione Numerica Di Un Flusso In Caduta: La Cascata Delle Marmore. In: *31° Convegno Nazionale di Idraulica e Costruzioni Idrauliche*. Perugia, 09-12 September 2008.
 - Manciola P, Di Francesco S, Biscarini C (2008). Photographic sampling technique applicata ai sedimenti fluviali del Torrente Tescio. In: *Atti 31° Convegno Nazionale di Idraulica e Costruzioni Idrauliche*. Perugia, 09-12 September 2008
- 2007**
- Biscarini C, Di francesco S, Violante C (2007). Potential landslide tsunamis waves offshore ischia island (italy). In: *XXIV International Union Of Geodesy And Geophysics General Assembly*.
- 2006**
- Biscarini C, Esposito E, Porfido S, Violante C (2006). Impulse waves modeling for coastal area risk analysis. *Geophysical research abstracts*, issn: 1029-7006
 - Biscarini C, Di Natale M, Esposito E, Porfido S, Violante C (2006). Hydrogeological risk analysis in coastal area. In: *Water for Life: Water Resources and Risk Management Perspectives*. vol. National research council publication no. 2907, ISBN: 88-88885-04-8, PERUGIA
- 2005**
- C. Biscarini (2005). Ph.D. Thesis "Hydrogeological Risk Analysis in Coastal Area"
 - Biscarini, C., DI NATALE, M., Esposito, E., Porfido, S., & Violante, C. (2005). Hydrogeological risk analysis in coastal areas. *Seminario IHP – UNESCO 2005-2015 United Nations Decade for action WATER FOR LIFE*. 2 September 2005 Casalina di Deruta (PG). Abstract
 - Biscarini, C.; Esposito, E; Porfido, S; Violante, C (2005) Impulse waves modeling for coastal area risk analysis Poster Programme - NH8.03 Geohazards in coastal areas. *European Geosciences Union General Assembly 2006*, Vienna Austria 2-7 April 2006
 - Biscarini C., Porfido S., Violante C., Esposito, Pelosi N., Sacchi (2005) Flooding events in the Sorrento Peninsula coastal zone South Italy since the XVIII century . 07715 *European Geosciences Union 2005*. Abstract
- 2004**
- S. Porfido, C. Violante, E. Esposito, C. Biscarini, N. Pelosi, M. Sacchi (2004). Landslide phenomena and flood events at Bonea river basin (Amalfi coast, southern Italy). *Geophysical research abstracts*, issn: 1029-7006
 - Biscarini C., Porfido S., Alaia F., Esposito E., Pelosi N., Tesaro A., Violante C. (2004) Le alluvioni storiche. L'alluvione attraverso il recupero delle fonti storiche – In "Il nubifragio dell'ottobre 1954 a Vietri sul mare - Costa di Amalfi, Salerno. Scenario ed effetti di una piena fluviale catastrofica in un'area di costa rocciosa" *Pubbl. GNDCI n. 2870*, ISBN 88-88885-03-X.

- Esposito E, Porfido S, Violante C, Biscarini C, Alaia F, Esposito G (2004). Water events and historical flood recurrences in the Vietri sul Mare coastal area (Costiera Amalfitana, southern Italy). *IAHS PUBLICATION*, vol. 286, p. 95-106
- Biscarini C, Esposito E, Porfido S, Alaia F, Tesauro A, Esposito G, Pelosi N, Filoselli P, Violante C, Vittori E (2004). L'alluvione attraverso il recupero delle fonti storiche. In: Pubbl. *GNDCI* - Il nubifragio dell'ottobre 1954 a Vietri sul mare - Costa di Amalfi, Salerno. Scenario ed effetti di una piena fluviale catastrofica in un'area di costa rocciosa. vol. 2870, ISBN: 88-88885-03-X
- Biscarini C, Porfido S, Tesauro A, Vittori E (2004). Scheda per il censimento dei beni architettonici. In: Pubbl. *GNDCI* - Il nubifragio dell'ottobre 1954 a Vietri sul mare - Costa di Amalfi, Salerno. Scenario ed effetti di una piena fluviale catastrofica in un'area di costa rocciosa. vol. 2870.
- Manciola P, Biscarini C, Cingolani A (2004). La mappatura delle aree inondabili. In: Accademia Nazionale dei Lincei - I grandi bacini idrografici, Roma, 6 novembre 2002, Roma, Accademia Nazionale dei Lincei, Marzo 2004, p. 101-135, Atti dei Convegni Lincei . *ATTI DEI CONVEGNI LINCEI*, vol. 198, p. 101-135, i grandi, ISBN: 88-218-0909-9, ISSN: 0391-805X

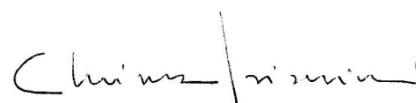
2003

- C. Biscarini, L. Ubertini, P. Maciola et al (2003) "Restauro Urbano: Difesa del Patrimonio storico e culturale di Roma da inondazione del Tevere". Forum Tevere - Consulto Internazionale idee per il Tevere "Facoltà di Architettura Valle Giulia" Roma
- Biscarini C., Esposito E., Porfido S., Violante C., Alaia F., Esposito G., (2003): Water events and historical flood recurrences in Vietri sul Mare (Costiera Amalfitana, southern Italy). UNESCO/IAHS/IWHA symposium on "The Basis of Civilization – Water Science?", Rome.
- Biscarini C., Esposito E., Pelosi N., Porfido S., Violante C., (2003): The Augustus Aqueduct in Campania, Southern Italy. UNESCO/IAHS/IWHA, Mostra "Dare Acqua", 3-6/12/2003 Roma.
- C. Biscarini L. Ubertini, P. Manciola, M. Torelli, O. Stefanucci, A. Cingolani, M. Vergoni (2003). Give water. *International Symposium on The Basis of Civilization - Water Science?, IAHS/IHP*, Roma, Italia.

2002

- C. Biscarini L. Ubertini, P. Manciola, M. Torelli, O. Stefanucci, A. Cingolani, M. Vergoni (2002) "Dare Acqua: il percorso dell'acqua dalla sorgente al suo utilizzo" *Ministero degli Affari Esteri Celebrazione Ufficiale per la Giornata Mondiale dell' Alimentazione 2002*.
- C. Biscarini, P. Manciola, A. Cingolani. (2002). Mappatura delle aree inondabili. *Giornata di studi su Grandi bacini idrografici. Accademia nazionale dei Lincei*.

Perugia, January 10, 2021



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