CURRICULUM VITAE

Nicola Surian

EDUCATION:

1991-1995: Ph.D. in Earth Sciences at the University of Padova, with a dissertation on the "The fluvial terraces in the Vallone Bellunese, Venetian Alps" (in Italian). Supervisor: Prof. Giovanni Battista Pellegrini.
1991: Graduate in Geological Sciences at the University of Padova, with a thesis in geomorphology and remote sensing. Supervisors: Prof. G.B. Pellegrini and Dr. B. Marcolongo.

EMPLOYMENT HISTORY:

2018-: Full Professor at the Dept. of Geosciences of the University of Padova.
2014-2018: Associate Professor at the Dept. of Geosciences of the University of Padova.
2012-2014: Researcher (Assistant Professor) at the Dept. of Geosciences of the University of Padova.
2004-2011: Researcher (Assistant Professor) at the Dept. of Geography of the University of Padova.
2001-2003: Geologist at the Autorità di Bacino dei fiumi Isonzo, Tagliamento, Livenza, Piave, Brenta-Bacchiglione (Venice): his activity dealt mainly with fluvial issues.
2000-2001: Research fellowship (for 2 years) at the Dept. of Geology, Palaeontology and Geophysics (University of Padova).
1998-2000: Professional geologist working on geological mapping within the National Project CARG-P.A.T. (Sheet n. 25 "Rabbi").
1996-1998: Post Doctoral Fellow (for 2 years), Dept. of Geology, Palaeontology and Geophysics, University of Padova. Research in fluvial geomorphology.
1995: Visiting Scholar (for 6 months) with the "Sediment Transport and Geomorphology Research Group" of the U.S. Geological Survey in Boulder (Colorado, U.S.A.).

RESEARCH EXPERIENCE:

<u>Principal scientist in the following projects:</u>

- 2019-2021: "Estimate of bedload transport in the Tegnas Torrent (Dolomites, Italy) using the virtual velocity approach" – funded by the Basin Authority of the Eastern Alps. Budget: 40,000 €.
- 2017-2018: "Application of the MQI (Morphological Quality Index) to selected streams of the Veneto Region, identified as possible highly modified water bodies" – funded by the Regional Environmental Agency (ARPAV). Budget: 39,200 €.
- 2009-2013: Cariparo Excellence Research Project 2008-2009 – funded by Cariparo Foundation. Title: "Linking geomorphological processes and vegetation dynamics in gravel-bed rivers". Budget: 297,000 €. Participants: University of Padova (N. Surian and M.A. Lenzi); University of Trento (M. Tubino).
- 2008-2010: PRIN 2007 – funded by Ministry of University and Research (MIUR). Title: "Present evolutionary trends and possible future dynamics of alluvial channels in Northern and Central Italy". Budget: 190,000 €; the budget managed by N. Surian for the University of Padova unit: 35,000 €. Participants: University of Padova (N. Surian - Project Leader); University of Firenze (M. Rinaldi); University of Pavia (L. Pellegrini), IRPI-CNR – Torino (G. Lollino).

- 2006-2008: PRIN 2005 – funded by Ministry of University and Research (MIUR). Title: "Present and recent dynamics of river channels in Northern and Central Italy: evolutionary trends, causes and management implications". Budget: 108,657 €; the budget managed by N. Surian for the University of Padova unit: 36,600 €. Participants: University of Padova (N. Surian - Project Leader); University of Firenze (M. Rinaldi); University of Pavia (L. Pellegrini).

Main research projects (not as a principal scientist) during the last 10 years:

- 2018-2019: H2020 Project "CLARA"; budget managed by N. Surian for the University of Padova unit: 10,000 €
- 2014-2017: "Etsch-2000. Evolution of the Etsch River: historical changes in channel morphology over 2 millenia" project funded by Provincia Autonoma di Bolzano; principal investigator: G. Zolezzi (University of Trento).
- 2014-2016: "Analysis of sediment management in the Adda, Mera and Oglio rivers (Central Alps, Italy)", project funded by Regione Lombardia; principal investigator: F. Luino (CNR-IRPI); budget managed by N. Surian for the University of Padova unit: 60,000 €.
- 2011-2015: EU-FP7 Project "REstoring rivers FOR effective catchment Management" (REFORM), coordinator T. Buijse (Deltares); involved in the research unit of the University of Firenze leaded by M. Rinaldi.
- 2010-2013: research project funded by ISPRA (Istituto Superiore per la Protezione e la Ricerca Ambientale) for the "Development of a general framework for analysis, post-monitoring assessment and definition of mitigation actions according European Directives 2000/60/CE e 2007/60/CE"; principal investigator: M. Rinaldi.
- 2009-2013: Strategic Project funded by University of Padova "Geological, morphological and hydrological processes: monitoring, modelling and impact in the North-Eastern Italy" (principal investigator: R. Genevois).
- 2009-2010: research project funded by ISPRA (Istituto Superiore per la Protezione e la Ricerca Ambientale) to define a methodology for hydromorphological classification and monitoring of Italian rivers (according to guidelines of the Water Framework Directive 2000/60/CE); principal investigator: M. Rinaldi.

He is author of 80 publications included in Scopus; h-index: 28; citations: 3253 (access on 16 September 2021).

Invited speaker at:

- American Geophysical Union – Fall Meeting, Washington DC (USA), 10-14 December 2018, "Geomorphic Response to Extreme Floods: from Process Understanding to Hazard Assessment".
- International Conference on "Dams, Sediment Discontinuity, and Management Responses in Mediterranean River Basins", Lione (Francia), 5 October 2018, "Physical/ecological processes and sediment (dis)continuity in the Po River (Italy)".
- International Conference on "Geographic and Environmental Impacts of Urmia Lake Conditions", Tabriz (Iran), 23-24 November 2016, "Stream network response to rapid base level changes: preliminary appraisal in the Urmia Lake catchment (northwestern Iran)".
- V Convegno Nazionale AIGeo, Cagliari, 28-30 September 2015, "Fluvial dynamics, extreme floods and geomorphological hazard".
- Workshop of "Gestrans" project, Die (France), 3-5 November 2010;
- Workshop "Great European Dynamic Rivers and the Free Space for Rivers concept", Moulins (Francia), 22-23 October 2009; "The erodible corridor: a key tool for management of large gravel-bed rivers in north-eastern Italy".

Research Awards:

2016. Certificate for **"Highly Cited Research" in "Geomorphology"**; awarded by the Editors of "Geomorphology" in recognition of the contribution to the quality of the journal made by: "A method for the assessment and analysis of the hydromorphological condition of Italian streams: The Morphological Quality Index (MQI)" (paper published in 2013 and cited in 2014/2015 up until June 2016 according to data from Scopus).

Member of the Editorial Board of: "Geomorphology" (since 2019); "Water" (since 2018); "Geomorphologia Slovaca et Bohemica" (since 2010).

Review of papers for:
International journals (review of about 165 paper from 2005 to 2020): Advances in Water Resources; Anthropocene; Applied Geography; Aquatic Sciences; Catena; Earth Surface Processes and Landforms; Earth Surface Dynamics; Environmental Fluid Mechanics; Environmental Management; Geodinamica Acta; Geografia Fisica e Dinamica Quaternaria; Geomorphology; Géomorphologie; Global and Planetary Change; Hydrological Processes; Hydrology and Earth Systems Sciences; Journal of Environmental Management; Journal of Geophysical Research; Journal of Hydrology; Journal of Atmospheric and Oceanic Technology; Journal of Soils and Sediments; Land Use Policy; Natural Hazards and Earth System Sciences; Quaternary International; Rendiconti Lincei; Rendiconti Online della Società Geologica Italiana; River Research and Applications; Science of the Total Environment; Scientific Reports; Sedimentology; Water Resources Research; Wires Water; Zeitschrift fur Geomorphologie.

Review of research projects funded by:
Swiss National Foundation;
Netherlands Organization for Scientific Research;
UEFISCDI - Executive Agency for Higher Education, Research, Development and Innovation Funding (Romania);
National Science Centre of Poland;
Ministry of Business, Innovation and Employment of New Zealand;
MIUR;
Provincia Autonoma di Trento.

TEACHING EXPERIENCE:

Courses:
At present teaching “Physical geography and geomorphology”, “Geomorphological mapping and remote sensing”, “Fluvial and coastal dynamics and hazard”, University of Padova.

He also taught:
2018-2021: “Hydromorphology”, University of Pavia
2009-2011: “Geomorphological analysis and Remote Sensing”, University of Padova
2005-2010: “Fluvial Geomorphology”, University of Padova
2004-2010: "Geographic Information Systems and Remote Sensing", University of Padova
2006-2008: “Geomorphological mapping”, University of Padova
2000-2001 and 2003-2004: “Geomorphology”, University of Padova and University of Venice

Student supervision: 8 PhD theses; more than 60 MSc and BSc theses.

Nicola Surian

16 September 2021