

## PERSONAL INFORMATION

**Marco Redolfi**

 Università degli Studi di Modena e Reggio Emilia

Dipartimento di Ingegneria Enzo Ferrari

Via Vivarelli 10, 41125 Modena, Italy

 +39 0592 056162

 [marco.redolfi@unimore.it](mailto:marco.redolfi@unimore.it)

 <http://personale.unimore.it/Rubrica/dettaglio/mredolfi>

 [https://bitbucket.org/Marco\\_Redolfi](https://bitbucket.org/Marco_Redolfi)

 [ORCID 0000-0003-4036-3247](https://orcid.org/0000-0003-4036-3247)

Gender Male | Date of birth 20 April 1984 | Nationality Italian

## WORK EXPERIENCE

- August 2023 – Present **Associate professor**  
UNIMORE | Università degli Studi di Modena e Reggio Emilia, Modena, Italy
- January 2023 – July 2023 **Researcher (RTD-A)**  
University of Trento, Italy
- March 2021 – December 2022 **Scientific collaborator**  
University of Trento, Italy
- February 2015 – January 2020 **Postdoctoral research fellow**  
University of Trento, Italy
- January 2011 – June 2011 **Postgraduate research fellow**  
University of Trento, Italy

## EDUCATION AND TRAINING

- 2011–2014 **Joint PhD in River Science**  
University of Trento, Italy. Queen Mary University of London, UK
- 2006–2010 **Master degree in Environmental Engineering**  
University of Trento, Italy. Mark: 110/110
- 2003–2006 **Batchelor degree in Environmental Engineering**  
University of Trento, Italy. Mark: 110/110, Cum Laude
- 1998–2003 **Technical school of electronics and telecommunications**  
Istituto tecnico G. Marconi, Rovereto, Italy. Mark: 100/100

## RESEARCH INTERESTS

River hydrodynamics and morphodynamics. Sedimentary patterns. Fluvial bifurcations. Sediment transport in gravel-bed rivers. Multidisciplinary approach based on field data analysis, laboratory-scale physical models and mathematical analysis

FELLOWSHIPS

2011–2014 **SMART Erasmus Mundus Joint Doctorate fellowship**  
University of Trento, Italy. Queen Mary University of London, UK

HONORS

2019 **Starting grant for young researchers**  
Financial support given on a competitive basis by University of Trento to encourage researchers to participate in competitive research calls

2019 **Invited research visit**  
St. Anthony Falls Laboratory, University of Minnesota, USA

APPOINTMENTS

**Membership in scientific societies**

Member of the American Geophysical Union  
Member of the European Geosciences Union  
Member of the Italian Group of Hydraulics

PERSONAL SKILLS

Mother tongue Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	B2	B2	C1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user  
[Common European Framework of Reference for Languages](#)

Communication skills Presenter at international scientific meetings and public dissemination events

Organisational / managerial skills

- Member of the Local Organizing Committee of the River Coastal and Estuarine Morphodynamics 2017, Trento-Padova, Italy. Editor of the book of abstracts (Eds. Stefano Lanzoni, Marco Redolfi and Guido Zolezzi, ISBN: 978-88-8443-752-5)
- Organizer of the Weekly Seminar of the group of Hydraulics and Morphodynamics (GIAMT), Department of Civil, Environmental and Mechanical Engineering, University of Trento

Digital competences

SELF-ASSESSMENT				
Information Processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

[Digital competences - Self-assessment grid](#)

Driving licence B

ADDITIONAL INFORMATION

Citation Metrics Articles in Publication List in the Last 10 Years (Scopus): 19. Sum of the Times Cited (Scopus): 215. H-index (Scopus): 9

## SELECTED PUBLICATIONS

- 1 Redolfi, M. (2023). Defining the length parameter in river bifurcation models: a theoretical approach. *Earth Surface Processes and Landforms*, 48(11), 2121–2132. doi:10.1002/esp.5673
- 2 Redolfi, M., Carlin, M., and Tubino, M. (2023). The impact of climate change on river alternate bars. *Geophysical Research Letters*, 50, e2022GL102072. doi:10.1029/2022GL102072
- 3 Ragno, N., Redolfi, M., and Tubino, M. (2022). Quasi-universal length scale of river anabranches. *Geophysical Research Letters*, 49, e2022GL099928. doi:10.1029/2022GL099928
- 4 Redolfi, M. Free alternate bars in rivers: key physical mechanisms and simple formation criterion. *Water Resources Research* 57(12), e2021WR030617, doi:10.1029/2021WR030617
- 5 Redolfi, M., Musa, M., and Guala, M. (2021). On steady alternate bars forced by a localized asymmetric drag distribution in erodible channels. *Journal of Fluid Mechanics*, 916, A13. doi:10.1017/jfm.2021.122
- 6 Redolfi, M., Zolezzi, G., and Tubino, M. (2019). Free and forced morphodynamics of river bifurcations. *Earth Surface Processes and Landforms*, 44, 973– 987. doi:10.1002/esp.4561
- 7 Redolfi, M., Bertoldi, W., Tubino, M., and Welber, M. (2018). Bed load variability and morphology of gravel bed rivers subject to unsteady flow: A laboratory investigation. *Water Resources Research*, 54, 842–862. doi:10.1002/2017WR021143
- 8 Redolfi, M., Guidorizzi, L., Tubino, M., and Bertoldi, W. (2017). Capturing the spatiotemporal variability of bedload transport: A time-lapse imagery technique. *Earth Surface Processes and Landforms*, 42, 1140– 1147. doi:10.1002/esp.4126
- 9 Redolfi, M., Tubino, M., Bertoldi, W., and Brasington, J. (2016). Analysis of reach-scale elevation distribution in braided rivers: Definition of a new morphologic indicator and estimation of mean quantities. *Water Resources Research*, 52, 5951– 5970, doi:10.1002/2015WR017918
- 10 Redolfi, M., Zolezzi, G., and Tubino, M. (2016). Free instability of channel bifurcations and morphodynamic influence. *Journal of Fluid Mechanics*, 799, 476–504. doi:10.1017/jfm.2016.389

## STATEMENT AND SIGNATURE

**Statement** According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.

**Signature**