# Curriculum vitae with track record: Rita Ugarelli

# PERSONAL INFORMATION

Family name, First name: UGARELLI RITA

Date of birth: 24.02.1973

Sex: F

Nationality: ITALIAN

# **EDUCATION**

2008 PhD: Disputation date: 27.05.2008.

Civil Engineering/DISTART, Bologna University, Italy

2001 Masters' degree

Civil Engineering/DISTART, Bologna University, Italy

#### **CURRENT AND PREVIOUS POSITIONS**

Since 2018	Chief Scientist, SINTEF – Community, Norway
Since 2010,	Adjunct Professor, Norwegian University of Science and Technology (NTNU)-
	Department of Hydraulic and Environmental Engineering, Norway
2011-2018	Senior Scientist, SINTEF – Infrastructure, Water and Environment, Norway
2009-2011	Research Scientist, SINTEF – Infrastructure, Water and Environment, Norway
2008-2009	Researcher and lecturer, Bologna University, DISTART department, Italy
2006-2007	20% position, SINTEF – Infrastructure, Water and Environment, Norway
2005-2008	PhD student and lecturer, Bologna University - DISTART department, Italy
2005-2008	Researcher, Ferrara University (L.A.R.A. project), Italy
2001-2006	Research assistant and lecturer, Bologna University, DISTART department, Italy

# **FELLOWSHIPS, AWARDS AND PRIZES**

"Ing. Icilio Tornani" award from the University of Bologna for the best Mater thesis in Civil Engineering, hydraulics topic.

# SUPERVISION OF GRADUATE STUDENTS AND RESEARCH FELLOWS

2013-2019	Number of PhD completed: 1; Number of PhD ongoing: 1, NTNU - Department of
	Hydraulic and Environmental Engineering, Norway
2018	Number of PhD completed: 1, Free University of Bolzano, Italy.
2001-2019	Number of Master Students: 22, Bologna University, DISTART department, Italy
2001-2019	Number of Master Students: 20, NTNU - Department of Hydraulic and Environmental
	Engineering, Norway
2015-2016	Supervised Master students as TUCEP Erasmus, TRAINEESHIPS at SINTEF: 3

#### **TEACHING ACTIVITIES**

Since 2013	Responsible for the doctoral course on Infrastructure Asset Management applied to urban water systems, NTNU - Department of Hydraulic and Environmental
	Engineering, Norway.
Since 2010	Lecturer at VM8205 - Urban Water Asset Management; TVM 4126 "Water and wastewater engineering specialization course" and TVM 4141 "Advance Urban Water
	Systems"; NTNU - Department of Hydraulic and Environmental Engineering, Norway
2008-2009	Lecturer at the course "Risk and Uncertainty in Hydraulic Systems" for the degree in Civil Engineering (International course with Colombia University), Bologna University,
	DISTART department, Italy
2005-2009	Lecturer in Hydraulics for Civil and Environmental Engineers (70hours per academic year), Bologna University, DISTART department, Italy
	year), Bologna University, DISTART department, Italy

#### ORGANISATION OF SCIENTIFIC MEETINGS

ORGANISATIO	ON OF SCIENTIFIC MEETINGS
2019	Convener of "Water resources policy, management, and society: transdisciplinary approaches to urban-rural water systems", at EGU General Assembly 2019
2018	NATO CYBERWATER 2018 – Water Safety Advanced Research Workshop
2017	Member of the Steering Committee of LESAM Conference (IWA)
Since 2013	Member of the Scientific Committee for LESAM Conference (IWA)
2011	Member of the Scientific Committee of CCWI 2011 (Computing and Control for the Water Indus-try 2011)
INSTITUTION	AL RESPONSIBILITIES
2019	External scientific reviewers of appointment of Thomas Petersson as professor at Chalmers, Sweden.
2018	Member of the evaluation panel for associate professor position in urban water systems at NTNU - Department of Hydraulic and Environmental Engineering, Norway.
2016 2014	External scientific reviewers of appointment of Rafet ATAOUI, IRSTEA, France. Examination of PhD thesis, Valeria Puleo, University of Palermo, Italy.
PROJECT MAN	NAGEMENT EXPERIENCE
2017-2021	H2020 project STOP-IT "Strategic, Tactical, Operational Protection of water Infrastructure against cyber-physical Threats" dealing with security of water critical infrastructure (2017-2021) - (€9.616.000) ( <a href="https://stop-it-project.eu/">https://stop-it-project.eu/</a> ). Role: Project Coordinator
2015-2017	E3 – (NOK 8 000 000) focused on water demand management for the growing city of Oslo (funded by national research council).  Role: Project Manager
2013-2017	DiVA (DI-gital VA-forvaltning – NOK 10 000 000) aiming at developing a tool for digital water management for private consultant companies (funded by national research council)
	Role: Scientific Coordinator
2013-2017	EU FP7 project "Demonstrate that Ecosystem Services are Enabling Innovation in the Water Sector (DESSIN) (Budget (for SINTEF): € 1 161 651)  Role: Work Area Leader
2014-2016	InnoWatING - Innovation in Water Infrastructure – New Generation (Budget NOK 5000000) to introduce smart networks in Norway and developing innovating conditions assessment technologies (knowledge transfer from oil & gas industry) (funded by national research council)  Role: Project Manager
2011-2015	EU FP7 project "TRansitions to the Urban water Services of Tomorrow" (www.trust-i.net/) (Budget (for SINTEF): € 849 650) - the project points the topic of "saving" resources (water, energy, money) while managing the whole urban water cycle and reducing carbon footprint.  Role: WP leader and Project Manager for SINTEF
2012-2014	SMS (Secure Monitored Service) from Oslo VAV (Budget: NOK 7 500 500): to improve efficiency while ensuring security in the monitoring and control (inspections and ICT solutions) of the integrated water system of Oslo (funded by national research council).  Role: Project Manager
2014-2018	EU FP7 project "Preparing for extreme and rare events in coastal regions" (PEARL) (total budget: 6,474,834.28 €) aims at developing adaptive risk management strategies for coastal communities focusing on extreme hydro-meteorological events.  **Role: Project Partner and project manager for SINTEE**

Role: Project Partner and project manager for SINTEF.

#### **COMMISSIONS OF TRUST**

2019	Co-Editor of ASCE J. Environ. Eng. Special Collection "Physical and cyber safety in critical water infrastructure"
2017	Editorial board of "Urban Water"
2017-2018	Member of the independent International Expert Panel for the first and second step and full-proposal stage of the JPI - SUGI-FEW-Nexus Call
2016	Reviewer for TISCA 2016 and Reviewer for Research programme of National Dutch R&D projects.
2015	Reviewer for Technology Foundation STW OTP research proposals.
Since 2009	Reviewer for the scientific journal "Water Science & Technology", "Water resource planning", "Journal of Infrastructure systems", "Hydroinformatics", among all.
2007-2012	Auditor for IWA at IWA International Young Water Professionals
2007	Reviewer for Czech Research Council on the project "Risk of hydraulic malfunction of sewer systems due to deterioration of network", Registration number: 103/07/0264.
2006	Member of the Marie Curie Project Evaluation Committee under the "Operational Maintenance and Rehabilitation of Urban Water Systems" (OPERA).
2006	Member of the Evaluation Committee of the Czech Research Council "CARE-S in Praha", Registration number: 103/08/0134

### MEMBERSHIPS OF ACADEMIES / SCIENTIFIC SOCIETIES

2019	Co-Leader of the Cybersecurity action of the ICT4Water cluster (EASME) Action Plan
2016	Secretariat of ARC, Aqua Research Collaboration, <a href="https://www.arc-online.eu/">https://www.arc-online.eu/</a>
Since 2009	Member of the Technical Commission of the EU – Water Europe
Since 2005	IWA member

# **MAJOR COLLABORATIONS**

Having been involved as active partner in 7 EU funded projects, Rita has a very extensive international network involving R&D EU Institutes, water industry (public and private) and international associations. Below a list of selected most relevant closer partners is provided, but not exhaustive: **R&D**: LNEC and Technical University of Lisbon (Portugal), IWW, Ecologic Institute gGmbH, TU Dresden, University of Duisburg-Essen (Germany), ITA. Universitat Politècnica De València, CETAQUA, EURECAT (Spain), TECHNION (Israel), NTUA and ICCS (Greece), KIOS (Cyprus), INSA, IRSTEA (France), KWR, Deltares (The Netherlands), Luleå University (Sweden), Bologna University, Politecnico of Bari, Trento and Bolzano University, Palermo University, Politecnico of Naples, TU Catania, Perugia University, Ferrara University, Politecnico of Milan (Italy), TU Prague (Czech rep), Budapest University of Technology and Economics (Hungary), Tallin University (Finland), Fachhochschule Nordwestschweiz (Switzerland), Cranfield University, The University Of Exeter (UK).

# **Track record**

The distribution on different types of publications is the following:

- 49 journal publications
- 1 research monographs
- 2 published book chapters
- 27 conference papers published in peer reviewed proceedings

Only peer-reviewed publications are listed. In addition to these publications comes more than 50 research reports and conference presentations. The total number of citations (Google Scholar) of my publications is 485, with an h-index of 12 and an i10-index of 16 (at 30.08.2019).

A total of 77 publications are listed in Cristin:

https://wo.cristin.no/as/WebObjects/cristin.woa/wo/18.Profil.29.25.2.3.20.1

The ten publications from the last 5 years with the highest relevance for the candidature are the following:

- 1. Berardi, Luigi; Simone, Antonietta; Laucelli, Daniele; Ugarelli, Rita Maria; Giustolisi, Orazio (2018). Relevance of hydraulic modelling in planning and operating real-time pressure control: Case of Oppegård municipality. Journal of Hydroinformatics 2018; Volume 20.(3) p. 535-550
- 2. Bruaset, S., Sægrov, S., Ugarelli, R. 2018. Performance based modelling of long-term deterioration to support rehabilitation and investment decisions in drinking water distribution systems. Urban Water Journal 2018; Volume 15.(1) p. 46-52
- 3. D' Ercole, Marianna; Righetti, Maurizio; Raspati, Gema Sakti; Bertola, Paolo; Ugarelli, Rita Maria (2018) Rehabilitation planning of water distribution network through a reliability-based risk assessment. Water 2018; Volume 10:277.(3) p. 1-15
- Ugarelli, Rita Maria; Koti, Juliane; Bonet, Enric; Makropoulos, Christos; Caubet, Juan; Camarinopoulos, Stephanos; Bimpas, Manthos; Ahmadi, Mehdi; Zimmermann, Lisa; Jaatun, Martin Gilje (2018). STOP-IT - Strategic, Tactical, Operational Protection of Water Infrastructure Against Cyber-Physical Threats. 13th International Conference on Hydroinformatics; 2018-07-01 - 2018-07-06.
- 5. Giustolisi, O., Ugarelli, R. M., Berardi, L. Laucelli, D., Simone, A (2017). Strategies for the electric regulation of pressure control valves. Journal of Hydroinformatics 2017; VAVis.L\_Volume 19.(5) VAVis.T\_SideForkortelse621-639
- 6. Rokstad, M. M.; Ugarelli, R. M. (2017). Investigation of the Ability to Accurately Estimate Background Leakage Parameters in WDS Network Simulation Models. Journal of water resources planning and management 2017; VAVis.L\_Volum 143.(4)
- 7. Morley, Mark; Behzadian, Kourosh; Kapelan, Zoran; Ugarelli, Rita Maria. Decision support system for metabolism-based transition to urban water systems of tomorrow. Water Science and Technology: Water Supply 2016; Volume 16.(3) p. 855-863
- 8. Campisano, A.; Modica, C.; Reitano, S.; Ugarelli, Rita Maria; Bagherian, S. (2016). Field-Oriented Methodology for Real-Time Pressure Control to Reduce Leakage in Water Distribution Networks. Journal of water resources planning and management 2016; Volume 142.(12)
- 9. Rokstad, M.M., Ugarelli, R.M. & Sægrov, S. (2015). Improving data collection strategies and infrastructure asset management tool utilization through cost benefit considerations. Urban Water Journal, 1-17. DOI:10.1080/1573062X.2015.1024692
- 10. Rokstad, M.M. & Ugarelli, R.M. (2015). Minimising the total cost of renewal and risk of water infrastructure assets by grouping renewal interventions. Reliability Engineering & System Safety, 142. DOI:10.1016/j.ress.2015.05.014