

**Updated
September 3, 2025**

Personal information

Name / Surname

Address

Telephone

Professional Email

Nationality

Date of birth

Elena Crestani

Work experience

Dates

Occupation or position held

Main activities and
responsibilities

Name of employer and address

Sep 2020 - today

Laboratory and data analysis technician

Analysis and development of predictive models for flood events in the rivers of the Veneto region. Support for educational and research activities within the hydraulic laboratory. Field activities such as bathymetric surveys using hydrographic drones, velocity and discharge measurements with ADCP.

University of Padova, Padova, Italy.

Dates

Occupation or position held

Main activities and
responsibilities

Name of employer and address

Apr 2015 - Sep 2020

Research fellow

Analysis and development of predictive models for flood events in the rivers of the Veneto region.

University of Padova, Padova, Italy

Dates

Occupation or position held

Main activities and
responsibilities

Name of employer and address

Jan 2013 - Apr 2015

Research fellow

Study of saltwater intrusion in coastal aquifer through a physical model and study of a well-field test through the application of a numerical model.

University of Padova, Padova, Italy

Education and training

Dates

Title of qualification awarded

Name and type of organization

2010-2013

Doctoral School of Civil and Environmental Engineering Sciences

University of Padova, Padova, Italy

Dates

Title of qualification awarded

Name and type of organization

June 2009

Licensure as Civil and Environmental Engineer

Ordine degli Ingegneri, Padova, Italy

Dates

Title of qualification awarded

Name and type of organization

20 Marc 2009

Master of Science in Environmental Engineering

University of Padova, Padova, Italy

Dates

Title of qualification awarded

Name and type of organization

15 Sept 2006

Bachelor of Science in Environmental Engineering

University of Padova, Padova, Italy

**Personal skills
and competences**

Mother tongue

Other language(s)

Technical and Computer
skills and competences

Organisational skills and
competences

Italian

English

Geostatistics; groundwater and water resource numerical modelling and physical simulation; hydraulic risk analysis; hydraulic construction teaching; data assimilation technique (e.g., Kalman filtering). Software and programming languages: Fortran, Matlab, XML, AutoCad, Office suite (word, excel, power point), Latex, Delft-FEWS, HEC-RAS, LabVIEW

Conference organization (in the Local organizing committee of the 10th Symposium on River, Coastal and Estuarine Morphodynamics – RCEM 2017)

Publications and selection of conferences

Record of publications and presentations at international conferences and meetings.
Selected publications and presentations.

- E. Taschin, M. Bolla Pittaluga, E. Crestani, S. Lanzoni. ANALISI MORFODINAMICA E STIMA DELLA PORTATA FORMATIVA LUNGO I TRATTI MONOCURSALI DEL FIUME PO, Convegno Nazionale di Idraulica e Costruzioni Idrauliche 2024, Parma.
- E. Crestani, G. Passadore, D. P. Viero, L. Carniello, E. Bertuzzo, B. Matticchio, L. D'Alpaos and A. Rinaldo. Sistema integrato di previsione delle piene in tempo reale nel bacino idrografico del Piave. Convegno Nazionale di Idraulica e Costruzioni Idrauliche 2022, Reggio Calabria.
- Crestani E., Camporese M., Belluco E., Bouchedda A., Gloaguen E., Salandin P. Large-Scale Physical Modeling of Salt-Water Intrusion. *Water*. 2022; 14(8):1183. <https://doi.org/10.3390/w14081183>.
- E. Crestani, Mel R., Passadore G., Viero D.P., Carniello L., Matticchio B., Boscolo P., Cremonese S., Saccardo I., De Fanti B., Puiatti M., D'Alpaos L., Rinaldo A.. Sistema integrato di previsione delle piene in tempo reale nel bacino idrografico Brenta-Bacchiglione. Convegno Nazionale di Idraulica e Costruzioni Idrauliche 2018, Ancona.
- Crestani E., Camporese M., Salandin P., Numerical and physical modeling of cutoff walls against saltwater intrusion, EGU, Vienna, Austria, 23-28 Apr 2017
- Ronco P., Crestani E., Passadore G., Viero D., Carniello L., Botter G., D'Alpaos L., Rinaldo, A., Implementazione di un sistema di previsione per la gestione delle piene in tempo reale: il Bacchiglione nel Vicentino, IDRA2016, Bari, 14-16 Sept 2016.
- Crestani E., Camporese M., Salandin P., Saltwater intrusion in coastal aquifers: laboratory experiment and numerical interpretation, IDRA2016, Bari, 14-16 Sept 2016.
- Crestani E., Camporese M., Salandin P., A benchmark laboratory experiment for salt-water intrusion in coastal aquifers. CMWR Toronto, 20-24 Jun 2016.
- Crestani E., Camporese M., Salandin P., Physical and numerical modeling of seawater intrusion in coastal aquifers. EGU, Vienna, Austria, 23-28 Apr 2016.
- Crestani E., Camporese M., Salandin P., Laboratory experiments of salt water intrusion. EGU, Vienna, Austria, 12-17 Apr 2015.
- E. Crestani, M. Camporese, P. Salandin, Assessment of hydraulic conductivity distributions through assimilation of travel time data from ERT-monitored tracer tests, *Advances in Water Resources*, Volume 84, 2015, Pages 23-36, ISSN 0309-1708, <https://doi.org/10.1016/j.advwatres.2015.07.022>.
- Ruzza, V., Crestani, E., Darvini, G., Salandin, P. (2015). Losses identification in water distribution networks through EnKF and ES. *Journal of Applied Water Engineering and Research*, 3(1), 12–18. <https://doi.org/10.1080/23249676.2015.1032373>
- V. Ruzza, E. Crestani, G. Darvini, P. Salandin, Losses Identification in Uncalibrated Water Distribution Networks: A Case Study, *Procedia Engineering*, Volume 89, 2014, Pages 1545-1552, ISSN 1877-7058, <https://doi.org/10.1016/j.proeng.2014.11.451>.
- Crestani, E., Camporese, M., Baú, D., and Salandin, P.: Ensemble Kalman filter versus ensemble smoother for assessing hydraulic conductivity via tracer test data assimilation, *Hydrol. Earth Syst. Sci.*, 17, 1517–1531, <https://doi.org/10.5194/hess-17-1517-2013>, 2013.
- Crestani E., Camporese M., Salandin P., Hydraulic conductivity identification by EnKF and travel time modeling of transport. IAMG 2013, Madrid, Spain, 2-6 Sept 2013.
- Crestani E., Camporese M., Salandin P., Hydraulic conductivity identification by EnKF and travel time modeling of transport. Fall Meeting AGU, San Francisco, California, 3-5 Dec 2012.
- Crestani E., Camporese M., Salandin P., Assessment of local hydraulic parameters by EnKF data assimilation in real aquifers: a case study in downtown Padova (Italy). CMWR 2012, Urbana-Champaign, Illinois, USA, 17-21 Jun 2012.

Padova, September 3, 2025

Place and date

Elena Crestani
Name Surname