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PhD In Environmental Engineering  
Associate Professor in Water Engineering/Hydrogeology  
National Scientific Habilitation to Full Professor  
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Honorary Senior Lecturer in Water Engineering  
School of Civil Engineering | The University of Queensland, Australia  
Adjunct professor at the National Institute of Oceanography and  
Experimental Geophysics (Trieste)



## CURRICULUM VITAE

### PERSONAL DETAILS

Date of birth: 18/04/1980

Citizenship: Italian

Since 2016: Australian Permanent Resident Employer Nomination Scheme (subclass 186) (renewed as Resident Return Visa)

Marital status: single

Driving licence: B

### EDUCATION STUDIES

- **1998 - secondary education at a scientific high school (60/60)**
- **2003 - M.S. Civil Engineering I** Faculty of Engineering of Polytechnic of Bari (**110 cum laude**)  
Thesis title: ‘Innovative methodologies for the remediation of contaminated sites. Implementation of the conceptual numerical model for the construction of a permeable reactive barrier in the Esso depot of Naples’
- **2007 - PhD in “Engineering for the Defence of Ecosystems” Polytechnic of Bari.** Thesis  
Title: ‘Studies on the environmental behavior of chlorinated ethenes for the application of Monitored Natural Attenuation. Field tests and modeling of reactive transport at the Frankenthal site (European Project KORA)’

### ACADEMIC EXPERIENCE

- **2008 Post Doctoral Fellow at CNR** (National Centre of Research)
- **2008-2009 Research Fellow** at Polytechnic of Bari (Italy)
- **2009-2012 Research Associate** at Polytechnic of Bari (Italy)
- **16/07/2012-31/08/2015 Associate Professor** (Maître de Conférence) at Polytechnical Institute LaSalle Beauvais (France)
- **01/09/2015–31/08/16 Lecturer in Water Engineering** at University of Queensland (Australia)
- **01/09/2016 -31/08/17 Senior Lecturer in Water Engineering** at Brunel University London (UK)
- **01/09/17- 31/08/20 Tenure-track (RTDb) Associate Professor in Hydrogeology at University of Ferrara** through ‘direct call of scholars of the highest repute working permanently abroad in University’
- **01/09/20- 01/10/23 Associate Professor in Hydrogeology at University of Ferrara**
- **02/10/23- present Associate Professor in Water Engineering/hydrogeology at University of Trieste**
  - **01/09/2016- 31/08/2019 Honorary (adjunct) lecturer** at University of Queensland (Australia)
  - **01/11/2019-present Honorary (adjunct) Senior lecturer** at University of Queensland (Australia)
  - **01/04/22-present Adjunct Professor at National Institute of Oceanography and Experimental Geophysics (OGS) in Trieste**
  - **2018-2034 National Scientific Habilitation** to the function of **Full Professor** in Italy
  - **2026 – visiting professor at the University of Melbourne- invited by Professor Guillermo Narsilio Ferrero, Deputy Head (Research) of the Department of Infrastructure Engineering**

### REFEREEING ACTIVITIES FOR PROJECTS SUBMITTED TO IMPORTANT INTERNATIONAL BODIES

- **2025- International scientific expert reviewer of the Water Research Commission (South Africa)** for projects related to Managed Aquifer Recharge (MAR)
- **2025 International scientific expert of the French National Research Agency (ANR)** for projects related to Managed Aquifer Recharge (MAR)

- **2023- International scientific expert reviewer** of the **US Department of Defense SERDP** Call for Peer Reviewers - Quantitative Groundwater Plume Characterization to Support Transition Assessments
- **2019- International scientific expert reviewer** of the **US Department of Defense SERDP** Call for Peer Reviewers - Quantitative Groundwater Plume Characterization to Support Transition Assessments
- **2016- International scientific expert** of the **Evaluation Committee “Ecosystem dynamics to improve their sustainable management”** of the French National Research Agency (ANR).

#### **ACADEMIC ACTIVITIES-**

##### **PhD supervision and PhD viva examination experience**

- 2023 –present **Supervisor of PhD student Danial Sheini Dashtgoli** for the project ‘Integration of geophysical and geological data and hydrogeological modelling for characterisation of geothermal resource in the Friuli Plain’ with University of Trieste and National Institute of Oceanography and Experimental Geophysics (OGS)
- 2023- present **Supervisor of PhD student Muhammad Sufyan** for the project ‘Environmental resilience within territories: water availability and recharging artificial phreatic aquifers by high surface waters quality’ at the University of Udine
- 2023 -2027 **Supervisor (Associate Advisor) of PhD student Ali Ranjbar at the University of Queensland for the project** ‘Numerical modelling with Robust decision-making approach and bargaining theory for robust optimal pumping solutions in heterogeneous coastal aquifers’
- 2017- 2020 **Supervisor (Associate Advisor) of PhD student Jiawei Li at the University of Queensland.** Thesis title: ‘Investigations of fluid flow through fractures in Enhanced Geothermal Systems’
- **2025 Appointed as external referee** by Anna University Chennai (India) (Faculty of Information and Communication Engineering) for the PhD thesis: ‘Optimized Deep Learning Techniques for sustainable agriculture through crop recommendation and leaf disease detection’
- **2022 Appointed as external examiner by Brunel University London (Department of Civil Engineering College of Engineering, Design and Physical Sciences) of the doctoral thesis** submitted by Keith Atkinson Adams, titled: ‘A multi-hazard cascading risk model for coastal rail infrastructure: numerical modelling & engineering failure analysis’
- **2022 Appointed as external referee by The Kreitman School of Advanced Graduate Studies** at Ben-Gurion University of the Negev, Israel. for the Doctoral thesis ‘Measurements and Modeling of Flux Probability Distribution in Heterogeneous Unsaturated Soil Probability Distribution in Heterogeneous Unsaturated Soil’ (By GAL WEISSMAN) advised by Prof. OFER DAHAN, Prof. GOLAN BEL.
- **2012 Appointed as External Referee of the PhD in “Programa de ciencias del mar” of the Universidad Politécnica de Cataluña.** Doctoral Thesis of Margarita Díez Rilova titled: “Caracterización de la dispersión de contaminantes en la zona costera” in Spanish.
- 2019- 2020 **Scientific supervisor of the external (sabbatical) PhD student Ali Ranjbar, K.N.Toosi** University of Technology, Tehran (Iran) at the University of Queensland. Thesis title: ‘Evaluation of Sea Level Rise and Extracting Rate Effect on Saltwater Intrusion into Coastal Aquifer under Heterogeneity Algorithms of Hydraulic Conductivity’.
- **2014-2017 Cosupervisor of PhD thesis** of Nicoletta Allegretti with an international cotutelle PhD between Polytechnic of Bari and Polytechnic Institute UniLaSalle Beauvais. Title of thesis ‘Innovative hydrogeological practices for the exploitation of groundwater resources as a source of geothermal energy in heterogeneous aquifers.’

##### **Post Doc supervision**

**2019-2022 Supervisor of Post Doc Fellow Sathish Sathasivham** on the project: ‘Study of mitigation of the effects of climate changes and subsidence on saltwater intrusion in coastal areas’

**2022-2024 Supervisor of Post Doc Fellow Nandini Viswa** on the project: ‘Analysis of the infiltration processes in the unsaturated zone, aimed at optimising water resources management for climate change adaptation’

#### **EDITORIAL ACTIVITIES**

- **2024- present Associate Editor of Earth Systems and Environment** Topic 2. Climate and Earth system modeling, climate predictability and variability <https://link.springer.com/journal/41748/editorial-board>
- **2024- present Associate Editor of Journal of Hydroinformatics** [https://iwaponline.com/jh/pages/Editorial\\_Board](https://iwaponline.com/jh/pages/Editorial_Board)

- **2023- present Associate Editor of Frontiers in Water for the section ‘Water and the critical zone’** <https://www.frontiersin.org/journals/water/sections/water-and-critical-zone/editors>
- **2017-2019 Member of the Editorial Board of Heliyon**, Elsevier from 1st January 2017 until 31st December 2019.
- **2020- present Member of the Editorial Advisory Board topic 'Earth Sciences' of Heliyon** (Open access). Heliyon Earth Science is a section of Heliyon fully dedicated to publishing valuable research in the fields of earth science.
- **2021- present member of Editorial Topic Board for the journal 'Water'** (mdpi).
- **2024- present Editor of Special Issue ‘Artificial Intelligence for Sustainable Management of Groundwater Resources: New Developments, Challenges and Untapped Potentials’** for the journal Water (mdpi)
- 2021-2022 Editor of Special Issue: Mechanisms and processes of water movement, contamination, protection and sustainable management of groundwater, aquifers and geothermal resources. Journal Environmental Earth Sciences (Springer)
- 2021- present Editor of Special issue: 'Groundwater management in a changing world: challenges and endeavours' for the journal Water (mdpi)
- 2023- present Editor of Special issue: ‘Innovative Geoengineering Solutions to Protect Land and Freshwater Resources from Climate Change Impacts in Vulnerable Coastal Areas’ for the journal Water (mdpi)

#### **OTHER ACADEMIC & RESEARCH ACTIVITIES**

- 2024 -In the **Board of Directors of the II level Master in ‘TECNOLOGIA E MANAGEMENT DEL CICLO IDRICO INTEGRATO’** (integrated water cycle technology and management) University of Trieste- University of Udine. Lecturing in the module ‘Numerical modelling of aquifers’
- **2022 scientific responsible** of the University of Ferrara within the Framework agreement with the Municipality of Ferrara for scientific collaboration activities for research and analysis to support the disciplines of the government of the Territory and Urban Planning
- **2013- 2015 responsible** of the **specialization 'Hydrogeology and Industrial Risks'** of the engineering geology graduate program at LaSalle Beauvais
- **2012-2013 and 2013-2014 responsible of the pedagogical reform** of the 4th and the 5th year for the specialization 'Hydrogeology and Industrial Risks' at LaSalle Beauvais
- **2023- present Appointed as Lecturer of English for STEM (Science, Technology, Engineering and Mathematics) PhD student course at University of Trieste**
- 2019-2022 **Appointed as Lecturer of English for STEM** (Science, Technology, Engineering and Mathematics) PhD student course at University of Ferrara for three consecutive years
- **2012 Lecturer at Master “Pianificazione Territoriale e Ambientale” (Territorial and Environmental Planning)**
- **2011 Lecturer** in MSc Module “**Mineral Resource Assessment**” at University of Exeter- Camborne School of Mines after formal invitation.
- **2011 Lecturer at Master “Pianificazione Territoriale e Ambientale” (Territorial and Environmental Planning)**
- **2008 Lecturer at University of Siena** at “**PhD International course on Advanced Numerical Modeling of Flow and Transport in Soils and Aquifers**”
- **2009 Lecturer at Polytechnic of Milan** within the **Interpolytechnic doctorate school**
- **2007 Lecturer** at the course "Technician for waste management" at **CISEM**
- **2008 Lecturer** (for Polytechnic of Bari) at I.F.T.S within the project “Technician for monitoring and management of environment and territory
- **2003-2012 Collaboration** to the didactic of the undergraduate and postgraduate courses Polytechnic of Bari

#### **RESEARCH ABROAD**

- **2005 Research** at **Geowissenschaftliches Zentrum der Universität Göttingen** (numerical modelling of reductive dechlorination as cleanup technique for contaminates aquifers)
- **2006 Research** at **Lawrence Berkeley National Laboratory (LBNL)** (numerical modelling fracture flow in the vadose zone for nuclear waste disposal)
- **2009-2010 Research** at **USGS Menlo Park (CA) laboratory** (numerical modelling effect of heterogeneity on converging flow tracer tests)
- **2011 Guest researcher** Pan European Non Homogeneous Turbulence Laboratory of ERCOFTAC

## ACTIVITIES OF SCIENTIFIC COLLABORATION

- **2013-2015 responsible of international exchanges and researches** of LaSalle Beauvais and US Universities (exchanges with Michigan State University-MSU, University of Texas el Paso-UTEP, University of Nevada-Reno- UNR, University of Georgia-UGA, University of Arkansas-UARK)
- **2008 Collaboration within the research project PRIMAC** - Protection of coastal aquifers from seawater intrusion (European project)
- **2006 Collaboration within the Yucca Mountain (Nevada) Project of Lawrence Berkeley National Laboratory (USA).**
- **2005 Collaboration within the European research project KORA (Deutschland)**
- **2004 Collaboration with ENI S.p.A. (AgipPetroli) and Enitecnologie** within the Research Project “New Strategies of Remediation and Environmental Monitoring of Contaminated Groundwater with Innovative Materials”.
- **2004 Collaboration with ENI S.p.A.(AgipPetroli), Enitecnologie and Polytechnic of Bari** within the post degree (master) Project of Formation titled: “Systems and study Techniques for the Remediation of polluted Soils and Groundwater”
- **2006 Scientific Organizing Secretary** of the II National A.I.G.A. Congress.

## HONORS AND AWARDS

- **2025 invited speaker** at the **Frontier Science& Technology Forum**, an advanced academic event launched by the Academic Divisions of the Chinese Academy of Sciences (CASAD).
- **2024 representative of the only Italian university invited at UNCCD (United Nations Convention to Combat Desertification) COP16** event ‘Innovative Approaches to Combat Land Degradation, Desertification, and Drought: Leveraging Technology and Collaboration’ at the Science Pavilion on 6th December 2024 in Riyadh
- **2024-2020 member on the Scientific Committee of RemTech Expo**, the only Environmental Technology Hub, specialised in the themes of remediation, regeneration and sustainable development of territories.
- **2023 Invited at La Sapienza University of Rome** for Fondazione Bellisario’s event: ‘**Donne che fanno la differenza**’ (Women who make the difference)
- **2023 Invited as speaker at TED x Ferrara**. Title of talk: Le città del futuro resilienti ai cambiamenti climatici
- **2023 Invited to deliver lectures at the Winter School (21 Days)** of the to the Department of Civil Engineering, IIT Madras and IIT Patna aDST on the topic “Advances in Geospatial Technologies
- **2022 – Interviewed by ABC Australia to explain coastal instabilities in geotechnical terms**
- **2022 Invited by Westlake University (China) to give a seminar** titled: Numerical modeling and geostatistical techniques for water resources management’. The seminar was sponsored by the Ministry of Science and Technology of China and Westlake University.
- **2019 Chairman at the Australasian Groundwater Conference: Groundwater in a changing world. 24-27 November 2019, Brisbane, Queensland, Australia**
- **2013-2021: Co-convener at EGU (European Geoscience Union) General Assembly** for the Session: NP6.2 Turbulence, Vortices and Waves in Stratified and Rotating Fluids
- **2013** in the expert committee ‘**prix Roberval**’ 26th edition
- **2012 Winner of “Division Outstanding Young Scientists Award” for the Division on Nonlinear Processes in Geosciences** of the European Geosciences Union (EGU)
- **2011 Winner of Prize XXIII Edizione Premio Marisa Bellisario “DONNE: INNOVAZIONE E CAPITALE UMANO”** category “**Giovani Ricercatrici e Talenti dell’Innovazione.**”
- **2012 Invited Lecturer** at the Centre for Physics of Geological Processes (PGP), University of Oslo.
- **2010** Among a short list of 35 selected applicants for a tenure-track assistant **professorship at Stanford University (Ca)** at Department of Civil & Environmental Engineering
- **2011 Invited lecturer** at “INTERNATIONAL WORKSHOP ON TURBULENCE, DIFFUSION AND MIXING EFFICIENCY: Climate and Pollution” at UPC Barcelona
- **2010 Formally invited** to undertake **lectures on geostatistics** applied to environmental geology in the MSc Module “Mineral Resource Assessment” at the University of Exeter (Camborne school of Mines)
- **2011 Solicited contribution** of an oral presentation at EGU meeting in Vienna (8 April 2011) at session on Mixing NP6 – Turbulence, Transport and Diffusion “**Mixing, Diffusion and Lagrangian transport in Geophysical Flows**”

- **2011 Invited** to undertake **lectures on hydrogeology at USGS Menlo Park (CA) in Summer 2012**
- **2011 Invited** as a **visiting scientist** to collaborate with the **Unsaturated-Zone Flow Project**, U.S. Geological Survey, Menlo Park, CA, USA
- **2007** “Best Student Paper” for the paper “*A hydrodynamic model of a contaminated fractured aquifer*” 5th International Conference IASME / WSEAS 2007.

#### **FUNDED PROJECTS – PRINCIPAL INVESTIGATOR**

- **Only scientific responsible of EU Project ‘AIR BREAK:** Co-producing healthy clean commuting air spots in town’ funded by UIA Program (Urban Innovative Actions) Start date: 01/07/2020 End date: 30/06/2023. Total contribution: 4.999.986,80 €
- New Staff Research Start-up Grant 2016 ‘Conceptual and mathematical modelling of unsaturated flow in single synthetic fractures.’ The University of Queensland 2015-2016
- Geostatistics to characterise, cleanup and monitoring of contaminated sites. LaSalle Beauvais 2015
- FAR 2018 University of Ferrara
- ANVUR 2017 Finanziamento delle attività base di ricerca, Funding of research activities
- ANVUR 2018 Departments of excellence admitted to funding

#### **COLLABORATION IN FUNDED PROJECTS**

- Hydrogeological platform at Polytechnical Institute LaSalle Beauvais 2012-2015
- RELA-VALBIOR “Network of laboratories to support research in the area of “Innovative technologies for the valorisation of residual biomass of the productive sectors of Apulia Region” within the frame of Regional Framework Program for Scientific Research 2010- 2012
- Effect of heterogeneity on converging flow tracer tests at USGS Menlo Park (CA) 2009-2010
- Protection of coastal aquifers from seawater intrusion (PRIMAC) 2007-2008
- Fracture flow in the vadose zone at Lawrence Berkeley National Laboratory (LBNL) 2006
- Reductive dechlorination as a groundwater remediation strategy (KORA).Geowissenschaftliches Zentrum der Universität Göttingen (Germany) 2005
- ENI S.p.A. (AgipPetroli) and Enitecnologie within the Research Project “New Strategies of Remediation and Environmental Monitoring of Contaminated Groundwater with Innovative Materials” 2004
- Collaboration with ENI S.p.A.(AgipPetroli), Enitecnologie and Polytechnic of Bari within the post degree (master) Project of Formation titled: “Systems and study Techniques for the Remediation of polluted Soils and Groundwater” 2004

#### **CONSULTANT ACTIVITY**

- 2004 - Consultant of Italian Ministry of Environment and Protection of the Territory for contaminates sites of national interest
- Nov 2006/Nov 2007- junior expert of Sector of Remediation and Waste, Apulia Region
- Dec 2007/ March 2009 Member of the Technical Committee of Remediation of Apulia Region- Sector of Remediation and Waste, expert in remediation techniques of contaminated soil.
- 2006 Consultant of Society TTE SRL (Tetra Tech Europa) for risk assessment applied to contaminated sites
- 01/01/05 -31/03/05 Consultant of STUDIO AGLIETTO S.R., on risk assessment and flow and contaminant transport modeling in aquifers.
- 2005 collaboration with Polytechnic of Bari for development of the Preliminary Remediation Project of the site Syndial of Brindisi, for SNAMPROGETTI

#### **Referee for the journals:**

- Transport in Porous Media, Editor: Martin Blunt ISSN: 0169-3913 IF= 2.211
- Journal of Hydrology Editors-in-Chief: A. Bardossy, P. Baveye, L. Charlet, K.P. Georgakakos , G. Syme, C. Corradini , P.K. Kitanidis Elsevier ISSN: 0022-1694 IF= 3.727
- Hydrogeology Journal (HJ) executive editor: C.I. Voss ISSN: 1431-2174 2010 IF= 2.071
- Water — Open Access Journal MDPI (ISSN 2073-4441; CODEN: WATEGH) Impact Factor: 1.832 (2016)
- Environmental Earth Sciences Editors: J.W. LaMoreaux; G. Dörhöfer Springer ISSN: 1866-6280 (2010) Impact Factor (IF) 1.435

- Hydrology and Earth System Sciences (HESS) (chief-executive editor) Erwin Zehe ISSN, 10275606 IF 4.936
- Vadose Zone Journal Editor Michael Young ISSN: 1539-1663 Impact Factor: 3.634
- Journal of Cleaner Production Co-Editors-in-Chief: Jiří Jaromír Klemeš, Cecília Maria Villas Bôas de Almeida, Yutao Wang ISSN: 0959-6526 Impact Factor: 6.395
- Natural Resources Research Editor-in-Chief: John Carranza. ISSN: 1520-7439 Impact Factor: 2.00
- Applied Sciences — Editor-in Chief Prof. Dr. Takayoshi Kobayashi Open Access Journal ISSN 2076-3417 Impact Factor 2.217
- Journal of Marine Science and Engineering Co-Editors-in-Chief Prof. Dr. Tony Clare, Prof. Dr. Dong-Sheng Jeng, Prof. Dr. Boris Peter Koch, Prof. Dr. Charitha Pattiaratchi, Prof. Dr. Magnus Wahlberg, Prof. Dr. Gary Wilson, Prof. Dr. Roshanka Ranasinghe ISSN 2077-1312 Impact Factor: 1.732 (2018)
- Energy. The International Journal Editor-in-Chief: Henrik Lund ISSN: 0360-5442 Impact Factor: 5.537
- Groundwater for sustainable Development, Elsevier, Editor-in-Chief: Prosun Bhattacharya, Jochen Bundschuh ISSN: 2352-801X IF= 1.35
- Journal of Rock Mechanics and Geotechnical Engineering (JRMGE) Editor-in-Chief: Q. Qian ISSN: 1674-7755. E-ISSN: 2589-0417 IF=0.6
- Arabian Journal of Geosciences, Editor-in-Chief: Abdullah M. Al-Amri ISSN: 1866-7511 Impact Factor 1.141
- International Journal of Geosciences (IJG) Editors in Chief J.Bourgois, S. Jin ISSN Print: 2156-8359 ISSN Online: 2156-8367 Impact Factor (IF): 0.72
- Structural Control and Health Monitoring Editors: Lucia Faravelli, Satish Nagarajaiah Wiley Impact Factor: 0.982 Online ISSN: 1545-2263
- Applied Mathematical Modelling Elsevier editors: Johann Sienz Impact Factor 1.706

### **MEMBERSHIPS**

- **2019 – present IAH** (International Association of Hydrogeologists) Member
- **2011-2019 EGU** (European Geoscience Union) Member
- **2008** Member of **International Scientific Committee** of WSEAS International Conference Rhodes 20-22 August
- **2009** Member of **International Program Committee** WSEAS International Conference Acapulco, Mexico 25- 27 January
- **2009** Member of **International Scientific Committee** WSEAS International Conference Moscow 20 -22 August
- Member of the **International Program Committee** of the international Book “Theoretical and Experimental Aspects of Heat and Mass Transfer” Copyright 2008 by WSEAS Press ISBN: 978-960-6766-31-2 ISSN: 1790-2769

### **ACTIVITIES REGARDING PATENTS**

Collaboration in the intellectual property for the patent **Process for treating and generating energy from biomasses**

<https://patents.google.com/patent/WO2017216720A3/en>

### **PUBLICATIONS**

#### ***Refereed full papers (International indexed journals)***

- 1 Dashtgoli, D. S., Giustiniani, M., Busetti, M., Cherubini, C., Alessandrini, G., & Narsilio, G. (2025). Artificial Intelligence in Deep Geothermal Energy: Trends, Insights, and Future Perspectives. *Renewable Energy Focus*, 100781.
- 2 2025 Cherubini, C., & Bala Anand, M. (2025). A Novel Deep Learning-Based Soil Moisture Prediction Model Using Adaptive Group Radial Lasso Regularized Basis Function Networks (AGRL-RBFN) Optimized by Hierarchical Correlated Spider Wasp Optimizer (HCSWO) and Incremental Learning (IL). *Water*, 17(16), 2379.

- 3 2025 Ranjbar, A., Cherubini, C. & Baldock, T. Determining Robust Optimal Pumping Solutions in a Heterogeneous Coastal Aquifer Using a Robust Decision-Making Approach and Bargaining Theory to Resolve Multiple Sources of Uncertainty. *Earth Syst Environ* (2025). <https://doi.org/10.1007/s41748-025-00585-3>
- 4 2025 Muthu, B. A., & Cherubini, C. (2025). Underwater Digital Twin Sensor Network-Based Maritime Communication and Monitoring Using Exponential Hyperbolic Crisp Adaptive Network-Based Fuzzy Inference System. *Water*, 17(9), 1324.
- 5 2025 Dabral, R., Sandhu, H. A. S., Trivedi, M., & Cherubini, C. (2025). Optimal operation of reservoir for sustainable water management using multi-criteria decision-making approach. *Journal of Hydroinformatics*, 27(5), 878-899.
- 6 2025 Sharma, A. Sandhu, H.A.S., Cherubini, C. Enhanced landslide susceptibility zonation using GIS-Based ensemble techniques *Environmental Earth Sciences*, 2025, 84(1), 37
- 7 2024 Vadivel, T.; Barathi, K.; Arulkumar, G.; Anand, M.B.; Cherubini, C. Wastewater Management Using a Neural Network-Assisted Novel Paradigm for Waste Prediction from Vermicomposting. *Water* 2024, 16, 3450. <https://doi.org/10.3390/w16233450>
- 8 2024 Sufyan, M., Martelli, G., Teatini, P., Cherubini, C., & Goi, D. Managed Aquifer Recharge for Sustainable Groundwater Management: New Developments, Challenges, and Future Prospects. *Water*, 16(22), 1-28.
- 9 2024 Sheini Dashtgoli, D., Sadeghian, R., Mahboubi Ardakani, A.R., Mohammadnezhad, H., Giustiniani, M., Busetti, M., Cherubini, C. Predictive modeling of shallow tunnel behavior: Leveraging machine learning for maximum convergence displacement estimation (2024) *Transportation Geotechnics*, 47, art. no. 101284.
- 10 2024 Sheini Dashtgoli, D., Giustiniani, M., Busetti, M., Cherubini, C. Artificial intelligence applications for accurate geothermal temperature prediction in the lower Friulian Plain (north-eastern Italy) (2024) *Journal of Cleaner Production*, 460, art. no. 142452.
- 11 2024 Sandhu, H.A.S., Gusain, H.S., Arora, M., Cherubini, C., Singh, D.K., Tripathi, N. Monitoring of spatio-temporal glaciers dynamics in Bhagirathi Basin, Gharhwal Himalayas using remote sensing data(2024) *Environmental Earth Sciences*, 83 (10),
- 12 2024 BalaAnand, M., Cherubini, C. A Multi-Objective Improved Hybrid Butterfly Artificial Gorilla Troop Optimizer for Node Localization in Wireless Sensor Groundwater Monitoring Networks (2024) *Water (Switzerland)*, 16 (8), art. no. 1134.
- 13 2024 Pastore, N., Andriani, G.F., Cherubini, C., Diprizio, G., Anaclerio, F., Morelli, P., Giasi, C. I.PORE NETWORK MODEL TO PREDICT FLOW PROCESSES IN UNSATURATED CALCARENITES (2024) *Italian Journal of Engineering Geology and Environment, (Special Issue 1)*, pp. 261-273.
- 14 2024 Dabral, R., Singh Sandhu, H.A., Cherubini, C. Metaheuristic algorithms for Optimization of Reservoir Operations on Ravishankar Sagar Reservoir) Manuscript NURW-Urban Water Journal In press. DOI: 10.1080/1573062X.2024.2329095
- 15 2023 Nicola Pastore, Claudia Cherubini, Concetta I. Giasi. Integrated Hydrogeological Modelling for Sustainable Management of the Brindisi Plain Aquifer (Southern Italy) *Water* 2023, 15(16), 2943; <https://doi.org/10.3390/w15162943>
- 16 2023 Arjuman Rafiq Reshi, Har Amrit Singh Sandhu, Claudia Cherubini and Akshar Tripathi Estimating Land Subsidence and Gravimetric Anomaly Induced by Aquifer Overexploitation in the Chandigarh Tri-City Region, India by Coupling Remote Sensing with a Deep Learning Neural Network Model. *Water* 2023, 15(6), 1206; <https://doi.org/10.3390/w15061206>
- 17 2023 Claudia Cherubini, Sathish Sadhasivam, Nicola Pastore. Dynamics of Coastal Aquifers: Conceptualization and Steady-State Calibration of Multilayer Aquifer System—Southern Coast of Emilia Romagna *Water* 2023, 15(13), 2384; <https://doi.org/10.3390/w15132384>
- 18 2022 Nicola Pastore, Claudia Cherubini, Assessment of seasonal Borehole Thermal Energy Storage in the seawater intrusion region of a carbonate aquifer, *Geothermics*, Volume 106, 2022, 102581, ISSN 0375-6505, <https://doi.org/10.1016/j.geothermics.2022.102581>.
- 19 2022 Ranjbar, A.; Cherubini, C.; Pastore, N. Experimental Investigation on Water Seepage through Transparent Synthetic Rough-Walled Fractures. *Water* 2022, 14, 3199. <https://doi.org/10.3390/w14203199>
- 20 2021 Pastore, Nicola; Cherubini, Claudia; Giasi, Concetta I. Analysis of gravel back-filled borehole heat exchanger in karst fractured limestone aquifer at local scale. DOI:10.1016/j.geothermics.2020.101971. pp.101971-1-101971-15. In *GEOTHERMICS - ISSN:0375-6505 vol. 89*
- 21 2021. Pastore, Nicola; Cherubini, Claudia; Giasi, Concetta I.; Rapti, Dimitra Numerical model of the behavior of chlorinated ethenes in a fractured, karstic limestone aquifer. DOI:10.1007/s10040-020-02248-1. pp.667-686. In *HYDROGEOLOGY JOURNAL - ISSN:1431-2174 vol. 29 (2)*

- 22 2021. Sadhasivam, Sathish; Cherubini, Claudia; Nicola, Pastore; Giasi, Concetta I.; Dimitra, Rapti Impacts of Desalinated and Recycled Water in the Abu Dhabi Surficial Aquifer. DOI:10.3390/w13202853. pp.2853-1-2853-23. In WATER - ISSN:2073-4441 vol. 13 (20)
- 23 2020 J. Li, W. Yuan, Y. Zhang, C. Cherubini, A. Scheuermann, S.A. Galindo Torres, L. Li, Numerical investigations of CO<sub>2</sub> and N<sub>2</sub> miscible flow as the working fluid in enhanced geothermal systems, Energy 206 (2020) 118062, <https://doi.org/10.1016/j.energy.2020.118062>
- 24 2020 Nicola Pastore, Concetta Giasi, Cherubini Claudia Cherubini Numerical model assessment of chlorinated solvents behavior in fractured and karstic limestone aquifer. Submitted to Journal of Contaminant Hydrology, Elsevier, Impact Factor 2.680
- 25 2020 Ali Ranjbar, Claudia Cherubini, Development of a robust ensemble meta-model for prediction of salinity time series under uncertainty (case study: Talar aquifer) ,Heliyon,Volume 6, Issue 12,2020, e05758,ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2020.e05758>.
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#### LANGUAGE SKILLS

- **English :**
  - IELTS 08/10/15 with the overall band score 8
  - certification of “FIRST CERTIFICATE IN ENGLISH” conferred by “University of Cambridge” in 1997.
- **German :**
  - certification “ZENTRALE MITTENSTUFENPRÜFUNG” conferred by Goethe - Institut of Bonn;
  - certification “ZERTIFIKAT DEUTSCH” conferred by Goethe – Institut of Bonn;
  - attestation of frequency to the “Intensiv Kurs Deutsch für Junge Erwachsene - Mittelstufe ” conferred by Goethe Institut Berlin;
  - attestation of frequency to “ Intensiv 4 Kurs - Mittelstufe 3 ” conferred by Goethe Institut Bonn.
- **French:**
  - Certification “DELF” (DIPLÔME D’ ETUDES EN LANGUE FRANÇAISE) Unitè A1, A2, A3 conferred by “ Ministère de l’ éducation Nationale ” ;
  - certification “DIPLÔME UNIVERSITAIRE LANGUE ET CULTURE FRANÇAISES” conferred by ‘ Université de Perpignan ;
  - Attestation of “ Certificat de Stage de langue et de civilisation françaises ” conferred by Université de Perpignan.
- **Spanish:**
  - Certification “DELE SUPERIOR” (DIPLOMA DE ESPAÑOL COMO LENGUA EXTRANJERA) conferred by Instituto Cervantes ;
  - Attestation of “Curso intensivo de Español, nivel Avanzado” conferred by the school Don Quijote;
  - Attestation of “Curso intensivo preparatorio de Español, nivel Avanzado” conferred by the school DILE in Salamanca.
- **Slovene**
  - Certified intermediate (B2) knowledge of the **Slovene** language, written and oral and current attendance of C1 course
- **Russian**
- Attendance of A1+ **Russian** language course
- **Arabic**
- Attendance of A1 **Arabic** language course
- **Portuguese**
  - Not certified knowledge of the **Portuguese** language, written and oral.
- **Japanese**
- Japanese basic language course (2009) at the Momiji school in Bari

