PhD Eng. Claudia Cherubini

PhD In Environmental Engineering Lecturer in Water Engineering

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CURRICULUM VITAE

PERSONAL DETAILS

Date of birth: 18/04/1980 Nationality: Italian 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)
- **2007 PhD** in "Engineering for the Defence of Ecosystems"

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)
- **2012-08/2015 Associate professor** at Polytechnical Institute LaSalle Beauvais (France)
- 2013-present National Scientific Habilitation to the function of Associate Professor in Italy
- 08/2015 -31/08/16 Lecturer in Water Engineering at University of Queensland, Australia
- 09/2016 Senior Lecturer in Water Engineering at Brunel university London, UK

ACADEMIC ACTIVITIES

- 2014-present Supervisor of PhD thesis of Nicoletta Allegretti with an international cotutelle PhD with Polytechnic of Bari. Title of thesis 'Innovative hydrogeological practices for the exploitation of groundwater resources as a source of geothermal energy in heterogeneous aquifers.'
- 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
- 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)

- 2012-External Referee of the PhD in "Programa de ciencias del mar" of the Universidad Politecnica de Cataluña. Doctoral Thesis of Margarita Díez Rilova titled: "Caracterización de la dispersión de contaminantes en la zona costera"
- 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 (reductive dechlorination)
- 2006 Research at Lawrence Berkeley National Laboratory (LBNL) (fracture flow in the vadose zone)
- 2009-2010 Research at USGS Menlo Park (CA) laboratory (effect of heterogeneity on converging flow tracer tests)
- 2011 Guest researcher Pan European Non Homogeneous Turbulence Laboratory of ERCOFTAC

FUNDED PROJECTS – PRINCIPAL INVESTIGATOR

- Geostatistics to characterise, cleanup and monitoring of contaminated sites LaSalle Beauvais 2015
- New Staff Research Start-up Grant 'Conceptual and mathematical modelling of unsaturated flow in a single synthetic fractures.' The University of Queensland 2015-2016

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

Referee for the journals:

- Journal of Hydrology Editors-in-Chief: A. Bardossy, P. Baveye, L. Charlet, K.P. Georgakakos, G. Syme, C. Corradini, P.K. Kitanidis Elsevier IF= 2.514 ISSN: 0022-1694
- Hydrogeology Journal (HJ) executive editor: C.I. Voss ISSN: 1431-2174 2010 IF= 1.326
- Environmental Earth Sciences Editors: J.W. LaMoreaux; G. Dörhöfer Springer ISSN: 1866-6280 (2010) Impact Factor (IF) 0.678
- Journal of Geosciences (IJG) Editors in Chief J.Bourgois, S. Jin ISSN Print: 2156-8359 ISSN Online: 2156-8367 Impact Factor (IF): 2012 still computing
- Structural Control and Health Monitoring Editors: Lucia Faravelli, Satish Nagarajaiah Wiley Impact Factor: 0.982 Online ISSN: 1545-2263
- Applied Mathematical Modelling Elsevier éditeurs: Johann Sienz Impact Factor 1.706

CONSULTANT ACTIVITY

- 12/01/03 12/31/03 a full-time contract (2 years) of employment Italian Ministry of Environment and Protection of the Territory
- 2004 Consultant of Italian Ministry of Environment and Protection of the Territory
- 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)
- 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.

HONORS AND AWARDS

- Proposal of a Senior Lectureship in Water Engineering at Brunel University London,
 College of Engineering, Design and Physical Sciences, Department of Mechanical,
 Aerospace & Civil Engineering
- 2015 Monash Engineering Women's Leadership Award to attend the Future Women Leaders Conference in Melbourne on the 26th and 27th November.
- 2015 Guest speaker in the Industry Panel for Undergraduate & Postgraduate students during the Seymour Whyte Distinguished Lecture at the University of Queensland
- 2013-2015 : 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) in February 2011
- 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.
- 2007 Invitation to collaborate with SNAMPROGETTI (Fano)

MEMBERSHIPS

- **2011-2015 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

LECTURES AT INSTITUT POLYTECHNIQUE LASALLE BEAUVAIS 2012-2015

Claudia Cherubini has given lectures in the following Bachelor and Master Courses (a total of 158 hours of lectures):

- Geostatistics (applications with ISATIS) –Bachelor
- Hydrogeology –Bachelor
- Environmental Geochemistry (behavior of pollutants in subsurface) –Bachelor
- Environmental Data Management –Bachelor

- Cleanup techniques Master
- Geostatistics for contaminated sites (applications with Kartotrak) -Master
- Risk assessment for human health–Master
- Management of contaminates sites –Master
- Solute transport in aquifers
- Hydrogeology of fractured rocks –Master

LECTURES AT UNIVERSITY OF QUEENSLAND 2016

Claudia Cherubini has given lectures in the Bachelor Course (a total of 20 hours of lectures):

• Groundwater flow modelling

COMPUTER KNOWLEDGE

Risk Assessment: RBCA, RISC, ROME and GIUDITTA

GIS (Geographic Information System): ARCGIS (ARCVIEW), MICROSTATION, BENTLEY DESCARTES, GEOMEDIA PROFESSIONAL

Systems of data elaboration – Geostatistics: ISATIS (Geovariance), ARCGIS (Geostatistical Analyst), Geostat Office.

Flow and contaminant transport modeling: TOUGH2, iTOUGH2, TMVOCBio, GMS 6.5 (MODFLOW, FEMWATER, SEAM3D), MODFLOW (ESI, Advanced GWVistas 4), MODFLOW (Processing Modflow Pro), MODPATH, MT3DMS, PHT3D

Flow modeling in fractured media: FEFLOW(WASY), TOUGH2, iTOUGH2, TMVOCBio Seawater intrusion modeling: FEFLOW(WASY), SUTRA (USGS), TOUGH2, TMVOCBio Unsaturated flow modeling: TOUGH2, iTOUGH2, FEFLOW; FEMWATER

LANGUAGE SKILLS

She knows besides Italian **6 foreign languages** (English, German, Spanish, French, Portuguese and Japanese) certified, except for Portuguese, by the achieving of international language exams and attendance of languages courses abroad as specified below:

- English:

- certification of "FIRST CERTIFICATE IN ENGLISH" conferred by "University of Cambridge" in 1997.
- TOEFL iBT taken on 14/05/10 with the following score: 91
 - Reading 25
 - Listening 21
 - Speaking 23
 - Writing 22

- 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) confered 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.

- Portuguese

• Not certified knowledge of the **Portuguese** language, written and oral.

Japanese

1. Japanese basic language course at the Momiji school in Bari

29/04/16

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La sottoscritta acconsente, ai sensi del D. Lgs. 30/06/2003 n. 196, al trattamento dei propri dati personali e alla pubblicazione del presente curriculum vitae sul sito dell'Università di Ferrara.

