



## Curriculum vitae Europass



### Personal Information

First name / Surname **Gogu Constantin Radu**  
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E-mail radu.gogu@utcb.ro  
Nationality Romanian  
Date of birth 18.09.1966  
Gender Male

### Education

Date 1997 - 2000  
Qualification/ Diploma **PhD. in Applied Sciences** – with the thesis title: **Advances in groundwater protection strategy Using vulnerability mapping and hydrogeological GIS databases [in English]**  
Institution Laboratory of Engineering Geology, Hydrogeology and Geophysical Prospecting, Belgium  
Date 1992 - 1994  
Qualification/ Diploma **Master of Sciences**– with the paper title: **Study on the seepage through heterogeneous rocks (case study: The Poiana Uzului dam) [in French]**  
Institution Technical University of Civil Engineering-Bucharest, School of Mines Paris-France, Pierre et Marie Curie, University-France, Liege University-Belgium, Genoa University-Italy, TEMPUS Program  
Date 1985 - 1990  
Qualification/ Diploma **Diploma of Engineer in Hydraulic Structures** - with the Diploma Paper: **Study on a 3D numerical modeling simulation of a underground hydro-power station excavation (case study: Rucar hydro-power station)**  
Institution Technical University of Civil Engineering - Bucharest, Romania

### Experience

Date Since 2011  
Position **Director - Groundwater Engineering Research Centre (CCIAS)**  
Employer Technical University for Civil Engineering, Bucharest, Romania  
Date Since 02.2009  
Position **Senior Lecturer**  
Employer Technical University for Civil Engineering, Bucharest, Romania  
Date 2006 – 2009  
Position **Senior Researcher**  
Employer Technical University of Catalonia (UPC), Department of Geotechnical Engineering and Geo-Sciences, Barcelona, Spain  
Date 2003 - 2005  
Position **Project Coordinator & Spatial database designer – HazNETH Project**

Employer	Swiss Federal Institute of Technology (ETH) - Department of Cartography, Switzerland
Date	2000 - 2003
Position	<b>Researcher &amp; Spatial database designer – GEOWARN Project</b>
Employer	Swiss Federal Institute of Technology (ETH) - Department of Cartography, Switzerland
Date	1997 - 2000
Position	<b>Research engineer</b>
Employer	University of Liege, Laboratory of Engineering Geology, Hydrogeology and Geophysical Prospecting (LGIH), Belgium
Date	1997 - 2000
Position	<b>Senior Lecturer</b>
Employer	Technical University for Civil Engineering - Bucharest
Date	1995 - 1997
Position	<b>Doctoral research engineer and Co-ordinator</b>
Employer	Technical University of Civil Engineering Bucharest, Department of Hydraulic Structures, Computing Centre
Date	1994 - 1997
Position	<b>Program Co-ordinator - GIS Postgraduate Course</b>
Employer	UNIGIS network (Manchester Metropolitan University, University of Salzburg, Free University of Amsterdam, University of Salford, University of Huddersfield, Technical University of Civil Engineering Bucharest)
Date	1993 - 1996
Position	<b>Lecturer - Water Resources Engineering Courses, General Computer knowledge and the FORTRAN Programming Course</b>
Employer	Technical University of Civil Engineering Bucharest
Date	1993 - 1996
Position	<b>Assistant manager - Water Resources Engineering Courses</b>
Employer	Technical University of Civil Engineering Bucharest
Date	1993 - 1995
Position	<b>Research engineer and Co-ordinator</b>
Employer	Technical University of Civil Engineering Bucharest, Department of Hydraulic Structures, Computing Centre
Date	1990 - 1992
Position	<b>Analyst - Civil Engineer</b>
Employer	Ministry of Public Works and Regional Planning, Computing Centre
Date	1991 - 1992
Position	<b>Lecturer</b>
Employer	Technical University of Civil Engineering Bucharest, Department of Elasticity and Plasticity Theory
Date	1991 - 1992
Position	<b>Analyst-Programmer - ANCAV program (FORTRAN on minicomputer, C++ on PC) designed for underground structures' analysis - Finite Element Method</b>
Employer	Technical University of Civil Engineering Bucharest, Department of Elasticity and Plasticity Theory

Date	June - August (1985,1986,1987,1988)
Position	Bucharest Subway - construction site (tunnel excavation, concrete walls execution, seepage problems, topographical measurement)
Employer	Bucharest Subway
<b>Grants / Fellowships</b>	
Date	2004
Grant	Research Grant awarded by Ministry of Research (Spain)-frame of "Ramon y Cajal" Program - 230.000 euro
Date	1999
Position	Grant awarded by Walloon Region (Belgium) for the project entitled "Aquifers vulnerability study based on GIS" - 5.000 euro
Date	1998
Position	Research Fellowship awarded by Belgian Office for Scientific, Technical and Cultural Affairs for the research project entitled "Application of Geographical Information Syste to optimise the preparation of spatial data for groundwater modelling applied in Global Change scenarios" - 13.000 euro
Date	1997
Position	Grant awarded by Research Support Scheme of the Open Society Institute/Higher education Support Programme - Prague, Czech Republic for the research project "Groundwater Vulnerability Assessment in Romania, Using Geographical Information Systems" - 10.000 euro
<b>Projects participation</b>	
Since 2010 - <b>Project Director – SIMPA Project</b> - Technical University for Civil Engineering, Bucharest, Romania - Budget: 3.904.117 lei (907.900 euro) - <i>National Authority for Scientific Research</i>	
2007 – 2010 - <b>Project Director – ECAVAS Project</b> - Technical University for Civil Engineering, Bucharest, Romania - Budget: 1.295.665 lei (301.300 euro) - <i>Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding</i>	
01.2011 – 2013 - <b>Researcher</b> - Tailored Improvement of Brownfield Regeneration in Europe-TIMBRE; (www.timbre-project.eu), Funded by EU - FP7	
05.2007 – 11.2009 - <b>Project Director – HEROES Project (Spanish National Research Project)</b> - Technical University of Catalonia, Spain 100.000 euro - Ministry of Research - Spain	
10.2007 – 11.2009 <b>Team leader, GIS solution development, 3D model designer</b> - 3D geological model of the sedimentary media in the Barcelona region to predict the behavior of the tunneling machine excavating the Subway L9 line. (Barcelona City - Airport) - GEO – 3D; Technical University of Catalonia, Spain	
02.2006 – 2009 - <b>Researcher, Spatial database designer, GIS analyst</b> - GEOMODELS regroupes several universities and public research organizations having the purpose of applying and developing new geosciences technologies	
01.2006 – 2009 - <b>Romanian team coordinator in charge with the GIS based Decision Support System (DSS)</b> - Groundwater Artificial recharge Based on Alternative sources of water: aDvanced Integrated technologies and managEment – GABARDINE; Funded by EU - FP6; ( <a href="http://www.gabardine-fp6.org/home.aspx">www.gabardine-fp6.org/home.aspx</a> ), - 60.000 euro (Romanian partner)	
08.2006 – 11.2008 - <b>Spatial data developer, Geohidroconsult team coordinator</b> - Techniques, technology and ontology for geospatial data and services portals – TITOS	
08.2006 – 11.2008 - <b>Team leader GIS solution implementation, Spatial database designer</b> - Integrated Information System for elaborating the Romanian Groundwater Atlas - SITAR	
08.2006 – 11.2007- <b>Team leader, Project initiator</b> – Sustaining Romanian research applied to groundwater vulnerability and protection at the European level – AQUAPROTECT ( <a href="http://www.aquaprotect.ro">www.aquaprotect.ro</a> )	

## Achievements

11.2005 – 2007- **GIS analyst** - Spatial Data Infrastructures with Applications in Environment Protection - INSPAM

05.2003 – 12.2004 - **GIS analyst, Researcher** - Open Architecture and Spatial Data Infrastructure for Risk Management- ORCHESTRA; Funded by EU - FP6 (IST) (<http://www.eu-orchestra.org>)

02.1999 – 08.2000 - **GIS analyst - GIS team coordinator and trainer** - Prototype hydrogeological maps for the Walloon region, Belgium (Waremmé-Momalle and Modave-Clavier, scale 1:25,000)

10.1998 – 08.2000 - **Spatial database designer, GIS analyst** - Hydrogeological data base design – University of Liege/Department of Natural Resources and Environment - Ministry of the Walloon Region

05.1998 – 05.1999 - **PI, Researcher, GIS analyst** - Application of Geographical Information Systems to optimize the preparation of spatial data for groundwater modeling applied in Global Change scenarios - Belgian Office for Scientific, Technical and Cultural Affairs

Over **40 research studies** and about **35 scientific publications** – including 2 course notes and scientific articles in Computers and Geosciences (Elsevier), Remote Sensing of Environment (Elsevier), Environmental Geology, Hydrogeology Journal (Springer), Cartographica (University of Victoria, Canada).

**Scientific reviewer** for Journal of Environmental Management (Elsevier), Advances in Water Resources (Elsevier), Water Resources Management (Elsevier), Hydrogeology Journal (Springer), Groundwater (Blackwell).

Since 2011 - **Initiated, organized, and currently coordinating** the Groundwater Engineering Research Centre (CCIAS) in the Technical University of Civil Engineering ([www.ccias.utcb.ro](http://www.ccias.utcb.ro))

Since 2011 - **Coordinator of the Postdoctoral Research Program in Applied Hydraulics** - Technical University of Civil Engineering

2011 - **Member of the PhD Committee** for the PhD in Environmental Sciences thesis submitted by Alberto Jimenez-Madrid entitled: “Establishing safeguard areas for the protection of groundwater intended for human consumption in karst media as required by Water Framework Directive”, Faculty of Science. University of Malaga (Spain).

2011 - Set-up a **hydrogeological experimental site** (five wells, up to 25 m in depth, equipped with pumps and monitoring equipment) with the purpose to: (1) develop experimental research work and (2) for teaching purposes "in situ" hydrogeologic (pumping and tracer tests) and geophysical measurements (electrical sounding and profiling).

2011 - **Organized** a postgraduate course dedicated to the protection of groundwater resources at the Technical University for Civil Engineering, Bucharest.

2010 - **Introduced a new curriculum** of “Environmental engineering spatial data models. Geospatial analysis fundamentals” for the Master of Science level in Sustainable development (Technical University of Civil Engineering University).

2008 - 2012 - One of the PhD **thesis coordinators** of Violeta Velasco at Technical University of Catalonia, Barcelona (Spain), Department of Geotechnical Engineering and Geosciences. Subject: “Improving hydrogeological models of sedimentary media in an urban environment using GIS based 3D geological instruments”

2006 – 2012 - **Committee member** to evaluate different Master of Sciences and Diploma paper works at the Technical University of Catalonia, Barcelona (Spain) and at the Technical University of Civil Engineering (Bucharest);

2006 -2009 - **Designing and developing the hydrogeological spatial database** of Barcelona region (Barcelona, Delta de Llobregat, Belta del Besos)- Spatial query and analysis tools for geochemical data and geological analysis to improve groundwater models, Technical University of Catalonia, Barcelona, Spain

2003 – 2005 - **Designing, setting-up, developing, and coordinating the project** “Geo-spatial system for natural hazard assessment studies in Switzerland” ([www.hazneth.ethz.ch](http://www.hazneth.ethz.ch)) - (ETH - IKA), Swiss Federal Institute of Technology, Switzerland

2000 – 2003 - **Designing and developing the GEOWARN spatial database** for data management of dormant volcano monitoring system - (ETH - IKA), Swiss Federal Institute of Technology, Switzerland

## Negotiations/Workshops/ Conferences/Projects

1999 – 2000 - **GIS co-ordination tasks** of the general hydrogeological maps prototypes for the Walloon Region (Waremmé–Mommale and Modave-Clavier, scale 1: 25,000), Department of Natural Resources and Environment, Ministry of the Walloon Region, Belgium

1998 – 2000 - **Designing and developing the hydrogeological spatial database** (HYGES) of Laboratory of Engineering Geology, Hydrogeology and Geophysical Prospecting - (LGIH), University of Liege, Belgium

1994 - 1998 - **Initiated, organized, and coordinated a two years Postgraduate** course in Geographical Information Systems offering Diploma and Master of Sciences, developed in collaboration with Manchester Metropolitan University in the frame of UNIGIS (Manchester Metropolitan University, University of Salzburg, Free University of Amsterdam, University of Salford, University of Huddersfield) international universities network ([www.unigis.org](http://www.unigis.org))

23.12.2011 – **Organizer** - Seminary on *Cartographic Web Services*, Technical University of Civil Engineering, Bucharest, Romania

13.09.2010 – **Organizer** - Workshop on *Groundwater resources vulnerability assessment and mapping*, University of Bucharest, Faculty of Geology and Geophysics, Romania

05.05.2010 – **Organizer** - The international workshop “*Flood Risk Assessment and Alert Service for Romania*”, Technical University of Civil Engineering, Bucharest, Romania

08 – 11. 10.2008 – **Organizer** - The international workshop: *Current trends in hydrogeology modeling and investigation techniques as support for groundwater management and protection*, Danube Delta, Tulcea, Romania;

2006 – 2007 – **Organizer** - International workshops (4 events) on “*Sustaining Romanian research on groundwater protection*”, University of Bucharest, Faculty of Geology and Geophysics, Romania

07 -08.06.2006 – **Organizer** - Workshop in Hydrogeology “*Hydrogeology, the Universe, and everything*”, Les Preses (La Garrotxa), Catalonia, Technical University of Catalonia, Spain

2003 – 2004 – **Delegate** - Delegate of the Swiss Federal Institute of Technology (ETH Zurich) – Institute of Cartography (IKA) to the European Community (EU) to negotiate collaboration partnerships in the frame of Information Society Technology (FP6) – Finalised with the participation of ETH Zurich - IKA in the ORCHESTRA (<http://www.eu-orchestra.org>) consortium

2002 – 2003 – **Delegate** - Delegate of the Swiss Federal Institute of Technology (ETH Zurich-IKA) – to the EU to defend the spatial data infrastructures part of the GEOWARN project - frame of IST - (FP5)

12.2002 - **Special guest (expertise)** - The “2<sup>nd</sup> Workshop World Organisation of Volcano Observatories, USGS Menlo Park, California, USA

1998 – 2001 - **Invited speaker - COST-A620** - “Vulnerability and risk mapping for the protection of carbonate (karst) aquifers”, **April 1999**-St.Veit/Glan, Austria, **October 1998**-Bled, Slovenia, **May 1998**-Neuchatel, Switzerland, **March 1998**-Liege-Belgium

11.1998 – **Organizer** - “*3rd Annual Big Meeting of UNIGIS Universities network*”: Manchester Metropolitan University, University of Salzburg, Free University of Amsterdam, University of Salford, University of Huddersfield, Technical University of Civil Engineering Bucharest, Sinaia, Romania

03.1996 – **Organizer** - The international seminar: “*Geographical Information Systems on Urban Cadastre*”, Bucharest, Romania

## Personal skills and competences

Mother tongue(s)

Other language(s)

Self-assessment

European level (\*)

**English**

**French**

**German**

**Spanish**

**Romanian**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C1	Proficient user
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user

<b>Swiss German</b>	C2	Proficient user	C1	Proficient user	C2	Proficient user	C1	Proficient user	B2	Independent user
<b>Catalan</b>	C1	Proficient user	B1	Independent user	A1	Basic User	A1	Basic User	A2	Basic User
<b>Italian</b>	C1	Proficient user	B1	Independent user	A2	Basic User	A2	Basic User	A2	Basic User
<b>Russian</b>	A1	Basic User	A2	Basic User	A1	Basic User	A1	Basic User	A1	Basic User

(\*) [\*Common European Framework of Reference \(CEF\) level\*](#)

#### **Tasks and skills:**

- About 20 years of management and projects coordination experience at a national and international level
- Experience of working within an international environment
- Strong knowledge in ARC-GIS, ARC/INFO (ESRI) Geographical Information System (GIS) packages and .NET, Visual Basic, Arc/Objects, UML, and SQL applications; Interface between ARC/INFO and GMS (Groundwater Modelling Software);
- Skilled in programming languages: Visual Basic, Arc/Objects, FORTRAN, C++, SQL
- Experienced in processed based simulation modelling (Finite Element Method) applied to groundwater flow and transport of contaminants (numerical methods programming skills)
- Experienced in hazard, vulnerability, and risk assessment using Overlay and Index methods (GIS based techniques)
- Good knowledge of torrent streams, land-slides, debris flow problems and related phenomena

#### **Driving licence**

**B**

#### **References**

- Professor Lorenz Hurni - ETH - Department of Cartography, Switzerland
- Professor Francois Zwahlen – University of Neuchatel, Switzerland
- Professor Vincent Hallet - University of Namur, Department of Geology, Belgium
- Professor Jesus Carrera - Technical University of Catalonia, Spain
- Professor James R. Petch - Manchester University, United Kingdom

31.05.2012

dr. ing. Constantin Radu Gogu