

Prof. Dr. Kristine Walraevens - Concise curriculum vitae

Job address:

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Academic degrees:

1981: Licentiate Sciences, Geology, Ghent University, with Greatest Distinction
1982: Advanced Studies in Soil Science (ITC), Ghent University, with Greatest Distinction
1987: PhD in Sciences, Geology, Ghent University, with Greatest Distinction
Title of doctoral thesis: Hydrogeology and hydrochemistry of the Ledo-Paniselian Aquifer in Flanders

Career:

Aspirant National Fund for Scientific Research (Ghent University), 1982-1986
Researcher National Fund for Scientific Research (Ghent University), 1987-1989
Scientific Collaborator, geological disposal of radioactive waste, Study Centre Nuclear Energy, Mol, Belgium, 1989
Senior Researcher National Fund for Scientific Research (Ghent University), 1989-1993
Research Associate National Fund for Scientific Research (Ghent University), 1993-1998
Visiting Professor Ghent University, 1993-1997
Part-time Professor Ghent University, 1997-1998
Research Director National Fund for Scientific Research (Ghent University), 1998
Associate Professor Ghent University, 1998-2017
Visiting Professor Free University of Brussels, 1998-2007
Director Laboratory for Applied Geology and Hydrogeology, Ghent University, from 1998
Full Professor Ghent University, from 2017

Experience

1. Teaching

- Courses in hydrogeology, hydrogeochemistry, environmental geology, environmental impact assessment, geophysical prospection, geophysical well logging, remote sensing, professional apprenticeship, integrated project in the programmes of geology, physical land resources, environmental sanitation, environmental geotechnics, bio-engineers, survey and planning
- Active in internationalisation of higher education (Socrates, Med-Campus, ...); founder of MSc Sustainable Land Management, as a follow-up of MSc Physical Land Resources; first Program Director of SULAMA

2. Research

- Laureate of Royal Academy of Sciences, Philology and Fine Arts of Belgium, Class of Sciences (1990)
- Author/co-author of over 300 publications, incl. >140 in international journals with peer-review of which 134 in Web of Science, H-index=25, 2061 citations, 35 chapters in books, >50 presentations at conferences
- Editor of 5 books
- Participation in <80 international conferences, including 16 times upon invitation of organizers, 39 times chairperson and >40 times member of scientific committee or organisation committee
- Participation in >20 national conferences, including 11 times member of organisation committee
- Promoter of 26 completed PhDs and 9 ongoing PhDs
- Expert in hydrogeochemistry
- Leading role in 5 European research projects (AVICENNA, PALAEAUX, BASELINE, CRYSTECHSALIN, BRIDGE) mainly related to the hydrogeochemistry of groundwater in Europe; in the BRIDGE project the methodology for determination of background levels, threshold levels and chemical good status of groundwater in European aquifers was deduced, to be incorporated in the EC Groundwater Directive.

3. Development cooperation

- Promoter of 18 completed and 9 ongoing PhDs in Global South (Morocco, Tanzania, Burundi, Palestine, Iran, Ethiopia, Libya, Bangladesh, Tunisia)
- Coordinator of the MED-CAMPUS (EU educational programme with Trans-Mediterranean countries) B-277 “Groundwater Resources Management”, in 1994 and 1995, with university from Cagliari, Tunis, Oujda, Granada
- Coordinator of AVICENNA (EU research programme with Trans-Mediterranean countries) project: “Development of water resource management tools for problems of seawater intrusion and contamination of fresh-water resources in coastal aquifers” (AVI-CT95-73), 1995-1999, with 9 university partners from Italy, Belgium, Tunisia, Morocco, Israel
- Promoter of PhD of Dr. Ibrahimu Chikira Mjemah in framework of VLIR-UOS IUC with Sokoine University of Agriculture, Morogoro, Tanzania (Hydrogeology and Hydrogeochemistry of Dar es Salaam aquifer)
- Promoter of PhD of Dr. Ammar Da’as (Hydrogeological investigation of Jordan area, West Bank, Palestine), sponsored by BTC.
- Promoter of PhD of Dr. Charles Bakundukize of Université du Burundi, sponsored by Nile Basin Initiative, Applied Training Programme (Hydrogeological investigation of Bugesera Region)
- Promoter of PhD of Dr. Yohana Enock Mtoni (Environmental Resources Management Council, Dar es Salaam, Tanzania), sponsored by BTC (Salt water intrusion in Dar es Salaam aquifer)
- Coordinator of North-South-South project 2013-2014 (VLIR-UOS) “Sustainability of Groundwater Exploitation”, together with Mekelle University, Université du Burundi, Nelson Mandela African Institution for Science & Technology, Sokoine University of Agriculture
- Project leader “Hydrogeology Project” in the framework of VLIR-UOS IUC with Mekelle University, Ethiopia
- Team member of “Water Resources and Livelihood Project” in the framework of VLIR-UOS IUC with University of Western Cape, South Africa
- Flemish counterpart of RIP “Groundwater characterization and pollution in Dar es Salaam aquifer” of Sokoine University of Agriculture, Morogoro, Tanzania
- Team member of “Projet Faculté des Sciences” in the frame of VLIR-UOS IUC with Université du Burundi
- Team member of “Water Resources Project” in the framework of VLIR-UOS IUC with Nelson Mandela Institute of Science and Technology, Tanzania
- Promoter of TEAM project 2015-2019 (VLIR-UOS) “Investigation of the hydrogeological framework of Lake Tana Basin for optimal and integrated use of groundwater” with Bahir Dar University, Ethiopia
- Coordinator of North-South-South project 2015-2016 (VLIR-UOS) “Sustainability of Groundwater Exploitation in a Changing Environment”, together with Université du Burundi, Nelson Mandela African Institution for Science & Technology, Mekelle University, Sokoine University of Agriculture, Bahir Dar University
- Flemish counterpart of RIP “Integrated groundwater potential evaluation for sustainable water supply of the city of Mekelle, Northern Ethiopia: Characterizing aquifer properties, potential threats and identifying sustainable management strategies” of Mekelle University
- Professor in ICPs Physical Land Resources (previously ITC Soil Science) at UGent/VUB and Environmental Sanitation at UGent since > 20 years; 2015-2020: promoter of ICP Physical Land Resources (UGent/VUB)
- Project leader of “Hydro(geo)logy Project” in the framework of VLIR-UOS IUC with Bahir Dar University, Ethiopia since 2016
- Co-promoter of TEAM project 2017-2021 (VLIR-UOS) “Optimizing the valorization of water and rock resources for improved livelihoods in the Arusha volcanic region” with Dodoma University, Tanzania
- Co-promoter of SI project 2020-2022 (VLIR-UOS) “Adapting Figuig Oasis to Climate Change through combined management of surface and groundwater” with Université Mohammed I d’Oujda, Morocco
- Since 2020: Director of MSc Sustainable Land Management (UGent/VUB), formerly Physical Land Resources
- Promoter of SI project 2022-2024 (VLIR-UOS) “Shallow groundwater and its sustainable use for safe water supply and irrigation in rural communities of the Lake Tana basin” with Bahir Dar University (Dr. Fenta Nigate)
- Promoter of ITP “Sustainable Land Management” in collab. with Bahir Dar University (Prof. Seifu Tilahun)
- Promoter of SI project 2023-2025 (VLIR-UOS) “Implications of the Tigray War on the Sustainability of the Water Supply and Hydro-Systems: An Insight for Reconstruction and Development” with Mekelle University (Dr. Gebremedhin Berhane Reda)

4. Expert services

- Former co-president of Belgian Committee as national chapter of International Association of Hydrogeologists
- Representative of Science Faculty in Commission for Development Cooperation of Ghent University
- Reviewer for several scientific journals and various scientific advises and advises as expert of the court
- Numerous fundamental and applied scientific research projects for public authorities and private sector
- Recognized by Minister of Environment of Flemish Community as an expert in EIA (Environmental Impact Assessment) in the disciplines of water (geohydrology) and soil (geology and pedology)