

## Curriculum Vitae

**Thomas Hermans, Associate Professor, Ghent University**  
**Laboratory for Applied Geology and Hydrogeology**



**Date of Birth** 7th of April 1987  
**Place of Birth** Verviers (Belgium)  
**Civil status** Married  
**Nationality** Belgian

### Career

10/2022 – **Associate Professor**, Hydrogeology and Applied Geophysics, Ghent University  
10/2017 – 09/2022 **Assistant Professor**, Hydrogeology and Applied Geophysics, Ghent University  
06/2016 – 09/2017 **Adjunct Lecturer**, Geostatistics, University of Liege  
10/2015 – 09/2016 **Postdoctoral Researcher**, Stanford University (California, USA)  
04/2014 – 09/2017 **Postdoctoral Researcher**, Belgian National Science Foundation (F.R.S.-FNRS),  
University of Liege  
10/2011 – 12/2011 Visiting researcher, **Stanford University**  
10/2010 – 04/2014 **PhD in Engineering/Geophysics**, Belgian National Science Foundation (F.R.S.-FNRS),  
University of Liege  
02/2010 – 03/2010 Visiting researcher, **Ghent University**

### Education

2010-2014 **PhD degree in Engineering/Geophysics**, University of Liege,  
2009-2010 **Master degree in Engineering/Mining and Geology**, University of Liege  
2005-2008 **Bachelor degree in Engineering/Major in Geology/Minor in Constructions**,  
University of Liege

### Awards

03/2017 **AILg Award** for young researchers – 1500 €  
09/2015 **Vocatio Foundation Award** – Imaging the subsurface with geophysics – 10000 €  
07/2015 **Wallonia-Brussels International** – Excellence fellowship – 14400 €  
02/2015 **Belgian American Educational Foundation** – Postdoctoral fellowship – 45000 \$  
12/2013 **Ernest Dubois Award** - PhD thesis in the Water domain – 20000 €

### Research interest

Groundwater modeling, uncertainty quantification, hydrogeophysics, inverse modeling, saltwater intrusions, geothermal energy

### Development cooperation related activities

2023 – 2025 Implications of the Tigray War on the Sustainability of the Water Supply and Hydro-Systems: An Insight for Reconstruction and Development (VLIR-UOS SI)  
2022 – present Assessing water resources in complex basins and under arid climate in Morocco – Global Minds  
2021 – present Member of the Asean+ platform Steering Committee  
2021 – present Mapping fracture zones in crystalline bedrock for groundwater resources management in Cameroon (University of Yaoundé) – Global Minds  
2021 – 2022 Exploring the Geothermal potential of the Southern Andes in Ecuador (University of Azuay) – Global Minds

2020 – 2022	Adapting Figuig Oasis (Université Mohammed 1er, Oujda, Morocco) to Climate Change – SI (VLIR-UOS)
2019 – present	Salt water intrusions in the Southern Central Region of Vietnam (VIGRM) – TEAM project (VLIR-UOS) + 2 Global Minds Capacity Building
2013 – 2017	Characterization of aquifers and water resources in Burkina Faso using electrical resistivity tomography (Training courses, survey design, student supervision)
2013 – 2014	Building research capacity in Rwanda for geophysical laboratory experiment

### Main Scientific Publications and projects

The full list of [projects](#) and [publications](#) are available on the institutional repositories of Ghent University  
61 articles in peer-reviewed journals, 2028 citations (Google Scholar, 22/04/2024), h-index: 25, i10-index: 46.

1. Hermans, Thomas et al. 2023. “Advancing Measurements and Representations of Subsurface Heterogeneity and Dynamic Processes: Towards 4D Hydrogeology.” *HYDROLOGY AND EARTH SYSTEM SCIENCES* 27 (1): 255–287.
2. Lopez Alvis, Jorge, Frédéric Nguyen, Majke. C. Looms, and Thomas Hermans. 2022. “Geophysical Inversion Using a Variational Autoencoder to Model an Assembled Spatial Prior Uncertainty.” *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH* 127 (3). doi:10.1029/2021jb022581. IF = 3.9
3. Cong-Thi, Diep, Linh Pham Dieu, Robin Thibaut, Marieke Paepen, Huu Hieu Ho, Frédéric Nguyen, and Thomas Hermans. 2021. “Imaging the Structure and the Saltwater Intrusion Extent of the Luy River Coastal Aquifer (Binh Thuan, Vietnam) Using Electrical Resistivity Tomography.” *WATER* 13 (13). doi:10.3390/w13131743. IF = 3.53
4. Hermans, T., Nguyen, F., & Caers, J. (2015). Uncertainty in training image-based inversion of hydraulic head data constrained to ERT data: workflow and case study. *Water Resources Research*, 51, 5332-5352. IF = 3.792, peer reviewed.
5. Hermans, T., Oware, E., & Caers, J. (2016). Direct prediction of spatially and temporally varying physical properties from time-lapse electrical resistance data. *Water Resources Research*, 52, 7262-7283. IF = 3.792, peer reviewed.

### Scientific activities

- Member of professional and scientific associations: American Geophysical Union (AGU), European Geosciences Union (EGU) International Association of Hydrogeologist (IAH)
- Reviewing for International scientific journals, conferences and funding bodies  
<https://publons.com/author/1398312/thomas-hermans#stats>
- More than 15 Invited talks at International Conferences and session chair at international conferences (AGU, EGU, CMWR)
- Organization committee of groundwater Quality conference (Liege, 2019) and IAH Annual meeting (Brussels, 2021)

### Academic activities

2020 – present	Chair of the Examination committee of the Master in Science in Sustainable Land Management
2020 – present	Secretary of the Study committee of the Master in Science in Sustainable Land Management

### Supervision of students

#### PhD

10 ongoing PhDs as main promoter, 5 as co-promoters.  
7 graduates PhD students since 2021 (5 as main promoter, 2 as co-promoter)

#### Master

5 ongoing master students  
25 master students since 2014