

Prof. Veerle Cnudde

Full professor

Ghent University (Belgium), Faculty of Sciences, Geology Department

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Pore-scale Processes in Geomaterials Research group (PProGRess, <http://www.pprogress.ugent.be/>) + Centre for X-ray Tomography (UGCT, www.ugct.ugent.be)

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Education and Professional Career

1997-1999 Bachelor in Geology, Dept. of Geology, Ghent University/ Belgium

1999-2001 Master in Geology, option Minerals and Geo-materials; Dept. of Geology, Ghent University/ Belgium

2001-2005 PhD in Science: Geology; Exploring the potential of X-ray tomography as a new non-destructive research tool in conservation studies of natural building stones. Dept. of Geology and Soil Science, Ghent University/ Belgium

2006-2010 Post-doc in Physics and Geology department, Ghent University

2008 Co-Founder spin-off Inside Matters (Belgium)

2010-2015 Assistant research professor at Dept. of Geology, Ghent University/ Belgium

1/2/2015 Associate professor at the Dept. of Geology, Ghent University/ Belgium

1/10/2018 Full professor at the Dept. of Geology, Ghent University/ Belgium

1/2/2019 Dual professorship as Full professor at Dept. of Earth Sciences, as Chair holder "Porous media imaging techniques"- Hydrogeology, Utrecht University (UU), the Netherlands

Commitment, Appointments and Scientific Volunteer Jobs (selection)

2010 Co-organiser seminar "X-ray tomography as a multidisciplinary research tool/75 participant/ Belgium

From 2010 Member IUGS/IAEG Heritage Stone Task Group, Member of IAEG C10

From 2010 Member of Geologica Belgica, Belgium, Member of BLUG-UBLG, Belgium Luxembourg,

From 2010 Coordinator Pore-scale Processes in Geomaterials Research group, PProGRess,

From 2010 Member of steering group of consortia *DuraBuildmaterials* & HybridCT/UGent/Belgium

From 2010 Co-coordinator Centre for X-ray Tomography, Ghent University

From 2010 Member of the Board of Examiners of more than 35 PhD students

2012 Co-organiser 4rd Flemish-Dutch natural stone day, The Netherlands

From 2012 Member of Proposal Review Committee of the Swiss Synchrotron, Switzerland

From 2010 Review for more than 35 several International Scientific journals

From 2014 Elected Faculty member, Ghent University/ Faculty of Sciences/ Belgium

From 2014 Member of InterPore

From 2015 Co-Chair InterPore BeNeLux

2013 Organiser 1st ICTMS, 2013, Belgium

2015 Co-organiser Mini-symposium 1.7: Pore Scale Processes and Upscaling of Flow and Transport at InterPore/Italy

2017 Elected council member InterPore

2019: co-organiser MS #10: Advances in imaging porous media: techniques, software

and case studies.

2018-present Research & valorization director as faculty board member, Faculty of Sciences, UGent

Professional Awards, Offers and Recognitions

2020 Kimberly-Clark Distinguished lectureship award 2020
2010 Selected as Tenure track research assistant professor: Faculty of Sciences/ Dept. of Geology and Soil Science, Ghent University/Belgium
2007 – 2010 Post-doc funded by the Research Foundation - Flanders (FWO)/Belgium
2006 – 2007 Post-doc funded by Special Research Fund of Ghent University
2002 –2005 Ph.D. scholarship funded by the government agency for Innovation by Science and Technology/Belgium
2001 Ph.D. scholarship funded by Special Research Fund of Ghent University

Most important Publications

1. [1] Cnudde, V., et al., 2004. X-ray-CT used for the localisation of water repellents & consolidants inside natural building stones. *Materials Char.* 53, 259-271.
2. [2] Cnudde, V., et al., 2008. High-speed neutron radiography for monitoring the water absorption by capillarity in porous materials. *Nuclear Instruments and Methods in Physics Research B: Beam interactions with materials and atoms* 266(1):155-163.
3. [3] Cnudde, V., et al., 2009. Porosity and microstructure characterization of building stones and concretes. *Engineering Geology*, 103(3-4):79-83.
4. [4] Cnudde, V., et al., 2011. High-resolution X-ray CT for 3D petrography of ferruginous sandstone for an investigation of building stone decay. *Microscopy Research and Technique*, 74: n/a. doi: 10.1002/jemt.
5. [5] Cnudde, V., et al., 2013. Multi-disciplinary characterisation and monitoring of the Kandla grey under different external conditions. *Quarterly Journal of Engineering Geology and Hydrogeology* 46(1):95-106.
6. [6] Cnudde, V., Boone, M., 2013. "High-resolution X-ray computed tomography in geosciences: a review of the current technology and applications." *Earth-science reviews*, 123: 1-17. SCI-IF (2013): 7.135.
7. [7] Boone, M., Nielsen, P., De Kock, T., Boone, M., Quaghebeur, M., Cnudde, V., 2014. Monitoring of stainless steel slag carbonation using X-ray computed microtomography. *Environmental Science & Technology*, DOI: 10.1021/es402767q. SCI-IF(2014): 5,33.
8. [8] De Boever, W., Derluyn, H., Van Loo, D., Van Hoorebeke, L., Cnudde, V., 2015. "Data-fusion of high resolution X-ray CT, SEM and EDS for 3D and pseudo-3D chemical and structural characterization of sandstone." *MICRON* 74: 15-21. SCI-IF (2014): 1.988.
9. [9] Bultreys, T., Van Hoorebeke, L., Cnudde, V., 2015. "Multi-scale, micro-computed tomography based pore network models to simulate drainage in heterogeneous rocks." *Advances in Water Resources* 78: 36-49. SCI-IF (2014): 3.417.
10. [10] Bultreys, T., De Boever, W., Cnudde, V., 2016. "Imaging and image-based fluid transport modeling at the pore scale in geological materials: A practical introduction to the current state-of-the-art." *Earth Science Reviews* 155: 73-128 SCI-IF (2014): 7.885.