VALENTINA NOACCO

Water and Environment Engineering Research group
Department of Civil Engineering, University of Bristol, 93-95 Woodland Rd, Bristol, BS8 1US
valentina.noacco@bristol.ac.uk +44 7501643322

Employment

Nov 2017 - **NERC Knowledge Exchange Fellow**, University of Bristol

present Improving the understanding and consideration of uncertainty in the (re)insurance

industry (collaboration with XL Catlin, OASIS LMF).

Apr – Oct 2017 Research Associate: Applied Sensitivity, University of Bristol

Advancing model development and validation in the (re)insurance industry using Global Sensitivity Analysis (collaboration with (re)insurance company XL Catlin).

NERC-funded grant to Professor Thorsten Wagener.

Education

2012-2017 **PhD Civil Engineering**; University of Bristol

Investigating long-term drivers and controls on fluvial dissolved organic carbon and nitrate in the UK. NERC and University of Bristol doctoral studentship award.

Supervisors: Dr Nicholas Howden, Professor Thorsten Wagener.

2011-2012 MSc Water and Environmental Management (distinction); University of Bristol

Thesis title: Understanding the spatial heterogeneity of soil carbon on the North

Wyke Farm Platform at Rothamsted Research.

2006-2011 BSc Environmental and Resources Engineering (100/110)

Thesis title: Sewage treatment, focusing on sewage sludge and its utilization in

agriculture.

Grants and awards

2017	Green Capital Change Maker Award
2016	Bristol University Alumni Travel Grant for EGU: £500
2015	British Hydrological Society (BHS) Travel Grant for AGU: £500
2015	Green Capital Change Maker Gold Award
2014	British Hydrological Society (BHS) Travel Grant for EGU: £650
2014	Best poster prize for 2 nd year-PhD student at Natural Systems and Processes Poster Session, Bristol University
2013	BHS 2 nd prize for best poster at Peter Wolf Early Career Hydrologists' Event, Imperial College, London
2012	Best overall MSc student in the Department of Civil Engineering, Bristol University

Other experience

2013-2015 **Teaching assistant** for various undergraduate and master courses in Civil

Engineering (University of Bristol)

2012 Internship at South West Water, Exeter

Conference presentations

Selected presentations include:

2018	Models to Decisions (Cambridge, UK) Overcoming the "valley of death" –
	Transferring tools and expertise on sensitivity analysis to the (re)insurance sector
2018	European Geophysical Union General Assembly (Vienna, Austria) <i>Overcoming the</i> "valley of death" – Transferring tools and expertise on sensitivity analysis to the (re)insurance sector
2017	American Geophysical Union Fall Meeting (New Orleans, US) How can sensitivity analysis improve the robustness of mathematical models utilized by the re/insurance industry?
2016	European Geophysical Union General Assembly (Vienna, Austria) <i>What drove Dissolved Organic Carbon (DOC) concentration variability in the River Thames (UK) between 1884 and 2014?</i>
2015	American Geophysical Union Fall Meeting (San Francisco, US) How Population Growth and Land-Use Change Increased Fluvial Dissolved Organic Carbon Fluxes over 130 Years in the Thames Basin (UK).

Publications

Noacco, V., T. Wagener, F. Worrall, T. P. Burt, and N. J. K. Howden (2017), Human impact on long-term organic carbon export to rivers, J. Geophys. Res. Biogeosci., 122, doi:10.1002/2016JG003614.

- **Noacco, V.**, T. Wagener, C. Duffy, and N. Howden (2018), Drivers of dissolved organic carbon concentration variability in the River Thames between 1884 and 2013 (under review).
- **Noacco, V.**, Wagener, T., Howden, N. (2018) Understanding dominant controls on nitrate export through analysing a process-based model across three temperate catchments (submitted).
- Harris, P., Howden, N.J.K., Peukert, S., **Noacco, V.**, Ramezani, K., Tuominen, E., Eludoyin, B., Brazier, R., Shepherd, A., Griffith, B., Orr, R., Murray, P., (2016) Contextualized Geographically Weighted Principal Components Analysis for Investigating Baseline Soils Data on the North Wyke Farm Platform, in: Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment. Springer International Publishing, Cham, pp. 651–655. doi:10.1007/978-3-319-18663-4_99
- Shepherd, A., Harris, P., Griffith, B., **Noacco, V.**, Ramezani, K., Tuominen, E., Eludoyin, A., Hopkins, A., Collins, R.P., Fraser, M.D., others, (2014) Spatial soil variation on the North Wyke Farm Platform., in: EGF at 50: The Future of European Grasslands. Proceedings of the 25th General Meeting of the European Grassland Federation, Aberystwyth, Wales, 7-11 September 2014. pp. 239–241.

Outreach and public engagement

2016-2017 **Forest School**, volunteer and ran sustainability projects for years 3-6 students, Bannerman Road Community Academy, Bristol.

2013 **Inspire Summer School**, volunteer for summer school for 30 year 11 girls to encourage them to go into STEM, University of Bristol.