

Curriculum Vitae (Laurence Gill)

Current Position and Contact Details

Professor Laurence William Gill

Dept. of Civil, Structural and Environmental Engineering, Trinity College Dublin, Ireland.

Summary

Research interests involve studying the fate and transport of both air and water-borne pollutants in the natural and built environment, as well as the development of passive treatment processes. Much of the work involves extensive field studies to gather data which is then used to develop mathematical models to gain further insight into the processes. The results from these trials are often synthesised into public policy advice and/or new technology. My areas of research interest over the course of my career have been in the fields of on-site sanitation, solar disinfection, air pollution, karst hydrology, catchment hydrology, sediment transport and near-shore wave dynamics.

Career Profile

1999-present Lecturer to Professor, Dept. of Civil, Structural and Environmental Engineering, TCD.

1993-1999 Process engineer Bechtel Water Technology (formerly North West Water Engineering).

Recent Relevant Research Funding as Lead Applicant

2015 - 2018	EPA Research Grants (STRIVE programme 2007-2013) "A framework for the restoration of degraded peatlands" (€347,000, PI)
2015 - 2020	Science Foundation Ireland - Irish Centre for Research into Geoscience (iCRAG). PI for Groundwater research spoke (€2.2 million)
2014 - 2016	Irish Research Council Enterprise Partnership Scheme Postdoctoral Award "Modelling Karst Hydrological Networks" €91 790
2013 - 2016	EPA Research Grants (STRIVE programme 2007-2013) "The impact of on-site wastewater effluent on rivers and wells" (€417,000, PI)
2014 - 2016	Irish Research Council Government of Ireland Postdoct. Fellowship "Using faecal sterols and fluorescent whitening compounds to detect human faecal contamination" €91 790
2010 - 2014	EPA Research Grants (STRIVE programme 2007-2013). "Assessment of disposal options for treated wastewater from single homes in low permeability subsoil" (€506,000, PI)

Publication overview & selected publications

Total Publications: # 319	Senior Author Publications: # 233				
Journal Articles: # 89	Reviews: # 2	Book Chapters: # 5	Books: # 0	Conference publications: # 194	Other: # 36

- Gill L.W., O'Luanaigh, N., Johnston, P.M., Misstear, B.D.R, O'Suilleabhain, C. (2009). Nutrient loading on subsoils from on-site wastewater effluent, comparing septic tank and secondary treatment systems. *Water Research* 43, 2739-2749.
- O'Brien R.J., Misstear B.D.R., Gill L.W., Deakin J.L., Flynn R. (2013). Developing an integrated hydrograph separation and lumped modelling approach to quantifying flow pathways in Irish river catchments. *Journal of Hydrology* 486, 259-270.
- Gill, L.W., Naughton O., Johnston, P.M. (2013). Modeling a network of turloughs in lowland karst. *Water Resources Research* 49, 3487-3503.
- McCormack T., Gill L.W., Naughton O., Johnston P.M. (2014). Quantification of submarine/intertidal groundwater discharge and nutrient loading from a lowland karst catchment. *Journal of Hydrology* 519, 2318-2330.
- Morrissey P., Johnston P.M., Gill L.W. (2015). The impact of on-site wastewater from high density cluster developments on groundwater quality. *Journal of Contaminant Hydrology* 182, 36-50.