



Present occupation

2012 –
Director of the Observatory of Environmental Sciences of Rennes (OSUR) <http://osur.univ-rennes1.fr/news.php>
Director of research at CNRS –ECOBIO-research Team Dynamo

University education

1984 - Master of Sciences, University of Lyon I, France
1986 - PhD in biological Sciences, University of Lyon I, France
1993 – Habilitation to supervise research (HDR), University of Toulouse III, France

Career since graduation

1987 - 1988 - Associate Researcher at the International Institute for Applied System Analysis (I.I.A.S.A.) in Vienna, Austria.
1988 - Associate Researcher at the University of Minnesota, Duluth, U.S.A.
1988 – 1994 - Research Scientist in the Research Centre on Fluvial Ecosystems (C.E.S.F.) in the French National Centre for Scientific Research (C.N.R.S.).
1995 - 2002 - Research Scientist in the Ecology & Biology Centre of the University of Rennes I; France.
2002 – 2006 - Director of the Department “Ecosystem Functioning” in the Centre of Functional and Evolutionary Ecology (CEFE) in Montpellier, France.
2006 -2007 - Visiting scientist at the University of Vienna, Austria in the department of Limnology & Hydrobotany (Sabbatical from CNRS).
2007- 2011: Chair of Hydroecology, Head of the Water sciences Group, School of Geography, Earth & Environmental Sciences, College of Life Sciences, University of Birmingham, United Kingdom.

Awards

2008 - Silver Medal of the National Centre of the Scientific Research in France (CNRS)
1988 - Major in the C.N.R.S. competition 1988.
1987 - First Prize of the French Society of Ecology

Major research interests

For the last 30 years I have been working in the scope of ecosystem functioning. More specifically, I am interested in the relationships between physical and biological processes and how they interact to contribute to the resistance and resilience of ecosystems to natural and anthropogenic disturbances. I am specialized on river and wetland ecosystems with a watershed perspective. I have lead researches in Europe and USA on the consequences of human disturbances in river catchments basins on the functioning of stream and wetlands ecosystems. More specifically, I am working on the capacity of landscapes features such as soils, riparian and hyporheic zones to regulate diffuse nitrogen fluxes and assessing their contribution at the catchment level.

PUBLICATIONS (PhD & post docs en italique)

67 publications in ISI-WoS
ISI Impact Factor: 4200 citations – Google Scholar: 7515 citations
ISI H Index 34 – Google Scholar H = 44

Abbott B.W, Baranov V., Mendoza-Lera C., Nikolakopoulou M., Harjung A., Kolbe T., Balasubramanian M.N., Vaessen T.N., Ciocca F., Campeau A., Wallin M., Romeijn P., Antonelli M., Gonçalves J., Detry T., Laverman A.M., de Dreuzy J.R., Hannah D.M., Krause S., Oldham C., Pinay G. 2016;

- Using multi-tracer inference to move beyond single-catchment ecohydrology. *Earth Science Reviews*, 160: 19-42.
- Kolbe, T., Marçais, J., Thomas, Z., Abbott, B.W., de Dreuzy, J.-R., Rousseau-Gueutin, P., Aquilina, L., Labasque, T., **Pinay, G.**, 2016. Dominance of local flows and extended transit times in shallow aquifers. *Journal of Hydrology*, in press
- Thomas Z., Rousseau-Gueutin P., Kolbe, T., Abbott B.W., Marçais J., Peiffer S., Frei S., Bishop K., **Pinay, G.**, Pichelin P., de Dreuzy J.-R., 2016. Residence Time Distribution in small catchments: constitution of a virtual observatory to assess generic flow and transport models. *Journal of Hydrology*, in press
- Thomas Z, Abbott B.W, Troccaz O., Baudry J. **Pinay G.** 2016. Proximate and ultimate controls on carbon and nutrients. *Biogeosciences*, 13: 1863-1875
- Hamilton L., Trimmer M., Bradley C., **Pinay G.** 2016. Deforestation for oil palm alters the fundamental balance of the soil N cycle. *Soil Biology & Biochemistry*, 95: 223-232.
- Harun S., Baker A., Bradley C., **Pinay G.** 2016. Spatial and seasonal variations in the composition of dissolved organic matter in a tropical catchment: the Lower Kinabatangan River, Sabah, Malaysia. *Environmental Science: Processes & Impacts*, 18: 137-150.
- Pinay G.**, Peiffer S., De Dreuzy J.R., Krause S., Hannah D.M., Fleckenstein J.H., Sebilo M., Bishop K., Hubert-Moy L. 2015. Upscaling nitrogen removal capacity from hot spot to the landscape. *Ecosystems*, 18 (6): 1101-1120.
- Mouquet N., Lagadeuc Y., Devictor V., Doyen L., Duputié A., Eveillard D., Faure D., Garnier E., Gimenez O., Huneman H., Jabot F., Jarne P., Joly D., Julliard J., Kéfi S., Kergoat G.J., Lavorel L., Le Gall L., **Pinay G.**, Pradel R., Schurr F.M., Thuiller W. and Loreau M. 2015. Improving predictive ecology in a changing world. *Journal of Applied Ecology*, doi: 10.1111/1365-2664.12482
- Harun S., Baker A., Bradley C., **Pinay G.**, Ian Boomer I. and Hamilton L. 2015. Characterisation of dissolved organic matter in the Lower Kinabatangan River, Sabah, Malaysia. *Hydrology Research*, doi:10.2166/nh.2014.196. Volume: 46 Issue: 3 Pages: 411-428
- Klaar M.J., Kidd C., Malone E., Bartlett R., **Pinay G.**, Chapin F.S. and Milner A.M. 2015. Vegetation succession in deglaciated landscapes: implications for sediment and landscape stability. *Earth Surface Processes and Landforms*, 40: 1080-1100.
- Sébilo M., Mariotti A., Mayer B. and **Pinay G.** 2014. Reply to Castellano and David: Long-term fate of nitrate fertilizer and nitrate from agricultural catchments. *Proceeding of the National Academy of Science*, 111 (8): E767-E767.
- Sébilo M., Mariotti A., Mayer B. and **Pinay G.** 2013. Long term release of nitrate from agricultural plant-soil system. *Proceeding of the National Academy of Science*, 110 (45): 18185-18189.
- Crossman J., Bradley C., Miner A. and **Pinay G.** 2013. Influence of environmental instability of groundwater-fed streams on hyporheic fauna on a glacial floodplain, Denali National Park, Alaska. *River Research and Application*, 29 (5): 548-559.
- Li Q., Wang X., Bartlett R., **Pinay G.**, Kan D., Zhang W., Sun J. 2012. Ferrous iron-phosphorus in sediments: development of a quantification method through 2,2'-bipyridine extraction. *Water Environmental Research*, 84 (11): 2037-2044.
- Welti N., E. Bondar-Kunze E., M. Mair M., P. Bonin P., Wanek W., **Pinay G.** and Hein T. 2012. Mimicking floodplain reconnection and disconnection using 15N mesocosm incubations. *Biogeosciences*, 9, 4263-4278.
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- Parn J., **Pinay G.** and Mander U. 2012. Indicators of nutrient transport from agricultural catchments in the temperate climate: A review. *Ecological Indicators*, 22: 4-15.
- Welti N., Bondar-Kunze E., Tritthart M., **Pinay G.** and Hein T. 2012. Nitrogen dynamics in complex river floodplain systems: effects of restoration. *Rivers Systems*, 20 (1-2): 71-85.
- Welti N., Bondar-Kunze E., Singer G., Tritthart M., Zechmeister-Boltenstern S., Hein T., and **Pinay G.** 2012. Large-scale controls on potential respiration and denitrification in riverine floodplains. *Ecological Engineering*, 42: 73-84.
- Tritthart M., Welti N., Bondar-Kunze E., **Pinay G.**, Hein T. and Habersack H. 2011. Modelling highly variable environmental factors to assess potential microbial respiration in complex floodplain landscapes. *Environmental Modelling & Software*, 26: 1097-1111.
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BOOKS

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- N.E. Haycock, T. Burt, K. Goulding & **G. Pinay** Editors. 1997. *Buffer zones: their processes and potential in water protection*. Quest Environmental Publ. 326 pages. ISBN 0 953 0051 00.
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BOOK CHAPTERS

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