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- **Current Position**

- **Researcher in river hydraulics and morphodynamics**

- Experimental and 1D numerical study of the **stock and transport of fine sediments**, focusing on **sand dynamics** (Arc-Isère river system, Rhône River);
- **Bedload and suspended load field measurements** (Arc, Isère, Rhône, Colorado, Mékong, and Amazone rivers);
- Estimation of **bed load** sediment transport and **alternate bar morphodynamics** for sediment mixture (laboratory experiments);
- Experimental and numerical study of **gravel bar morphodynamics** (Arc River).

- **Education, degrees**

- 2015: **Accreditation to supervise research** (“Habilitation à diriger des recherches” abbreviated HDR) “Sediment dynamics in river systems: experiments and modelling”;
- 1998-2002 : **Ph.D. Thesis on coastal hydraulic and morphodynamic**: “Numerical modelling of the sediment transport on a sandy beach” (LEGI, Grenoble); Supervisor: Philippe Larroude ;
- 1995-1998 : School of **geotechnical engineering** (Polytechnical engineering school of Grenoble University I - 3 year degree course, Master level).

- **Professional experiences**

- 2007-2020: Supervision of 9 PhD, 10 postdocs or engineers, and 24 graduate students;
- 2015-2016: **Sabbatical year at INRS** (Québec, Canada). Study of **fine sediment dynamics over a gravel bed** using a medical scanner;
- 2004-2006: **Post-doctoral** position in Kyoto University, DPRI, Japan. Elaboration of a **N-line model** for mid and long-term morphodynamical evolution; study of the **suspension dynamics (settling velocity** of particles for low and high concentrations, **phase-lag effects** in the sheet-flow regime and over ripples);
- 2002-2004: **Post-doctoral** position in Lund University, Sweden; Elaboration of a **sediment transport model for channel evolution at coastal inlets** (CIRP program, USA). Estimation of **roughness height** under plane bed conditions, elaboration of a **bed-load and suspended load sediment transport formula** for the nearshore;
- 2001-2002: **Teaching position** at the **ENSHMG** (national engineering school of mechanics and hydraulics of Grenoble, MSc. level): Tutorials and seminars in hydraulics and mechanics.

- **Editorial, invited talk**

- **Reviewer** for about 10 international peer-reviewed journals in areas of expertise;
- **3 invited research talks** at international workshops.

- **Five recent publications**

- Antoine, G., Camenen, B., Jodeau, M., Némery, J. & Esteves M. (2020). Downstream erosion and deposition dynamics of fine suspended sediments due to dam flushing. *J. Hydrology*. doi: 10.1016/j.jhydrol.2020.124763
- Perret, E., Berni, C., & Camenen, B.(2020) How does the bed surface impact low-magnitude bedload transport over gravel-bed rivers? *Earth Surface Processes & Landform*. doi: 10.1002/esp.4792
- Santini, W., Camenen, B., Le Coz, J., Vauchel, P., Guyot, J.-L., Lavado, W., Carranza, J., Paredes, M., Pères-Arévalo, J. J., Arévalo, N., Espinoza-Villar, R., Julien, F. & Martinez, J.M. (2019). An index concentration method for suspended load monitoring. *Earth Surface Dynamics*., 7(2): 515-536
- Camenen, B., Naudet, G., Dramais, G. Le Coz, J & Paquier A. (2019). A multi-technique approach for evaluating sand dynamics in a complex engineered piedmont river system. *Science of the Total Environment*, 657:485-497.
- Launay, M., Dugué, V., Faure, J.-B., Coquery, M., Camenen, B. & Le Coz J. (2019) Numerical modelling of the suspended particulate matter dynamics in a regulated river network.. *Science of the Total Environment*, 665:591-605.

45 publications in international journals, 14 publications in national journals

56 publications in peer reviewed conference proceedings

8 technical reports or book chapters

h-index: 15 (Web of Science)