

CURRICULUM VITAE

February 2019

David HURTHER, 46 years old, married, 2 children
Lab. of Geophys. & Indust. Flows (LEGI), CNRS, Univ.
Grenoble Alpes, France
www.legi.grenoble-inp.fr/web/spip.php?auteur45&lang=fr

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University Education

- 2014 **HDR** (Research Habilitation), Environmental Fluid Mechanics, University of Grenoble Alpes.
- 2001 **PhD**, Environmental & Civil Engineering (Hydrodynamics & Instrumentation). *Swiss Federal Institute of Technology, Lausanne (EPFL)*. Switzerland. Director: Profs. W.-H. Graf and U. Lemmin.
- 1995 **Master of Science** in Mechanical Engineering (Fluid Mechanics) and **Master of Engineering** in Electrical Engineering (Signal Processing & Optoelectronics). *Louis Pasteur University of Strasbourg*. France & *University of Applied Sciences, Offenburg*, Germany.

Employment

- 2016 **Directeur de Recherche** (Senior Scientist) at CNRS, *Laboratory of Geophysical and Industrial Flows (LEGI), CNRS, Univ. Grenoble Alpes*, France.
- 2003 **Chargé de Recherche** (Assoc. Scientist) at CNRS, *Laboratory of Geophysical and Industrial Flows (LEGI), CNRS, Univ. Grenoble Alpes*, France.
- 2001 **Post-doctoral Scholar** at *Woods Hole Oceanographic Institution*, Massachusetts, USA.
- 1997 **Research & Teaching Assistant**. *Swiss Federal Institute of Technology, Lausanne (EPFL)* Switzerland.

Distinctions and Awards

- John F. Kennedy award** for the best PhD paper & presentation, 2001, *IAHR world congress, Beijing, China*.
- Annual post-doctoral scholar award** in ocean science and engineering, 2001, *Woods Hole Oceanographic Institution*, Massachusetts, USA.

Collective duties & teaching

- Member of the Executive Board**, doctoral school "Terre, Univers, Environnement" (7 labs, ~300 faculty staff), University Grenoble Alpes.
- Member of the Executive Board** of the LEGI laboratory (~110 staff, as rank A1 staff representative, Professors & Research Directors).
- Teamleader** of MEIGE group at LEGI (14 permanent staff) from 2015-2017.
- Associate Editor** at American Geophysical Union (AGU) for the journal *Water Resources Research*. 2007-2015.
- Associate Editor** at the Int. Assoc. of Hydraulic Res. (IAHR), *Journal of Hydraulic Research*. 2011-2013.
- Since 2010, **Member of the steering committee** of the international master **Environmental Fluid Mechanics**, University Grenoble-Alpes, France.
- Since 2010, in charge of the **Flow Measurement Science** course (lectures+lab. sessions) taught in the intern. Master program **Environmental Fluid Mechanics**, University Grenoble Alpes, France.

Peer-reviewed Publications (37 in total since 1998)

see at <http://www.legi.grenoble-inp.fr/web/spip.php?auteur45&lang=en>

Keynote and Invited Presentations

- Hurther D.** (2017). Acoustic High-Resolution measurements of Boundary Layer sediment transport processes in geophysical wave and current driven flows. Invited Lecture at annual foresight study meeting "Voir la mécanique de l'invisible", June 2nd 2017, Institut de Mécanique des Fluides de Toulouse, France.
- Thorne P.D. and **Hurther D.** (2017). Perspectives of ongoing acoustic developments for measuring sediment dynamics. Invited Presentation at Acoustics'17 international conference of the American Society of Acoustics.

Boston, USA.

3. **Hurther D.** (2016). On the use of underwater acoustic scattering in coastal sediment transport physics". Invited Presentation at International Workshop on Turbulent mixing and sediment transport in the ocean. Sun Yat-Sen University, Guangzhou, China.
4. **Hurther D.** (2015). On the use of ultrasound scattering for sediment transport physics in geophysical flows. Invited Lecture at summer school « Septième Ecole Interdisciplinaire de Rennes sur les systèmes complexes en Environnement » Géosciences Rennes, France.
5. **Hurther D.** (2014). Underwater acoustic scattering and its application to sediment transport physics in coastal and river flows. Keynote Lecture at the 9th Intern. Symposium on Ultrasonic Doppler Methods. University of Strasbourg, France.
6. **Hurther D.** (2014). High-Resolution Acoustic flow instrumentation within Hydralab IV-WISE project. Invited speaker at the closing Hydralab IV conference. Lisbon, Portugal.
7. Thorne P.D. and **Hurther D.** (2013). High-Resolution Acoustic Concentration and Velocity Profiling. Keynote lecture at the *Intern. Workshop on acoustic and seismic monitoring of bedload and mass movements*. ETH Zürich, Switzerland.
8. **Hurther D.** (2010). Diffusion acoustique de particules en suspension et application à l'étude de processus hydro-sédimentaires. Main invited lecture at the annual workshop of the GDR TRANSNAT. EDF-LNH, Chatou, France.
9. **Hurther D.** (2009). Measurement of near-bed turbulence and sediment dynamics using ultrasound scattering theory. Invited lecture at the National TELFORD Institute workshop on *Advances in Flow, Density & Sediment Measurement Techniques in the Laboratory & the Field*. University of Dundee. United Kingdom.

Recent Research Projects 2015-2019

2017-2020	ANR Astrid Maturation MESURE, Coordinator .
2015-2019	H2020 project HYDRALAB+, Principal Investigator of JRA COMPLEX.
2018-2022	ANR SHEET-FLOW, Taskleader .
2012-2016	dutch(STW)-british(EPSRC) project SINBAD, Participant .

PhD & Habilitation committees

Member of 17 PhD committees between 2005 and 2019:

- S. Fischer (2006): Examineur, Univ. Louis Pasteur, Strasbourg, France
- M. Bricault (2006): Co-directeur, Inst. Nation. Polytechnique de Grenoble, France
- A. Hauet (2007): Examineur, University Joseph Fourier, Grenoble.
- I. Albayrak (2008): Examineur, EPFL, Lausanne, Switzerland
- F. Abda (2009): Examineur, Univ. Louis Pasteur, Strasbourg, France
- E. Florens (2010): Examineur, Université Paul Sabatier, Toulouse, France
- S.A. Moore (2011): Directeur de these, Université de Grenoble, France
- F.X. Chassagneux (2012): Directeur de these, Université de Grenoble, France
- T. Geay (2013): Examineur, Université de Grenoble, France
- N. Hémmerlé (2014): Rapporteur, Ecole Centrale de Nantes, France
- T. Revil-Baudard (2014): Membre du jury, Université de Grenoble, France
- S. Naqshband (2014): Co-encadrant, University of Twente, The Netherlands
- M. Rouzès (2015): Rapporteur, Université Paul Sabatier, Toulouse, France
- G. Fromant (2015): Rapporteur, Université de Bretagne Occidentale, France
- D. Raus (2018): Rapporteur, Université de Toulouse (INP Toulouse), France
- A. Vergne (2018): Président de jury, Université Grenoble Alpes, France
- L. Chagot (2019): Rapporteur, Université de Toulouse (INP Toulouse), France

Member of HDR committee: N. Sénéchal (2011), Rapporteur, Université de Bordeaux, France