

CURRICULUM VITAE

Feb. 2017

David HURTHER

Born September 7th 1972 in Strasbourg, France
Research Scientist (First Grade) at CNRS
Affiliated at LEGI, UMR 5519, Grenoble, France
Nationality : French

Civil status : married (2 children)
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University Education

- 2014 **HDR**, Environmental Fluid Mechanics, doctoral school IMEP2, University of Grenoble,
- 2001 **PhD**, Environmental & Civil Engineering (River hydrodynamics & Instrumentation). *Swiss Federal Institute of Technology, Lausanne (EPFL)*. Switzerland. Director: Prof. W.-H. Graf.
- 1995 **Master of Science** in Mechanical Engineering. *Louis Pasteur University of Strasbourg*. France.
- 1995 **Master of Engineering** in Electrical Engineering (digital signal processing and opto-electronics). *University of Applied Sciences, Offenburg*, Germany.

Professional Career

- Jan. 2003 **Research Scientist** at CNRS (grade II and I) in the *Laboratory of Geophysical and Industrial Flows (LEGI), UMR 5519*, Grenoble, France
- Dec. 2001 to Dec. 2002 Annual **Post-doctoral Scholar** at *Woods Hole Oceanographic Institution*, Massachusetts, USA.
- Oct. 1997 to Oct 2001 **Research and Teaching Assistant**. *Swiss Federal Institute of Technology, Lausanne (EPFL)* Switzerland.
- March 1996 to Sept 1997 **French National Military Service** as detached Scientist. *Swiss Federal Institute of Technology, Lausanne (EPFL)*. Switzerland.

Distinctions and Awards

John F. Kennedy award (first prize), 2001, *IAHR biannual congress, Beijing, China*.

Annual post-doctoral scholar award in ocean science and engineering, 2001, *Woods Hole Oceanographic Institution*, Massachusetts, USA

Collective responsibilities

Member of the board of the doctoral school "Terre, Univers, Environnement", University Grenoble Alpes: since January 2017.

Teamleader of MEIGE group at LEGI (14 permanent staff): June 2015-January 2017.

Member of the Board of LEGI (as teamleader: June 2015 to January 2017, as elected rank B staff representative: Jan. 2008 to Jan. 2014).

Associate Editor at American Geophysical Union (AGU) for the journal *Water Resources Research*. 2007-2014.

Associate Editor at the Int. Assoc. of Hydraulic Res. (IAHR), *Journal of Hydraulic Research*. 2011-2013.

Member of the scientific committee of **River Flow 2014**. International Conference on Fluvial Hydraulics.

Member of the scientific committee & chairman at Int. Symp. on **Ultrasound Doppler Methods** (since sept. 2014)

Member of the scientific & local organizing committees & chairman at the **Congrès Français de Mécanique 2009**

Member of internal recruitment committees (two permanent CNRS Research Engineers positions at LEGI).

Reviewer in the following international research journals:

Journal of Fluid Mechanics, Exper. in Fluids, Journal of Geophysical Research, Coastal Engineering, Continental Shelf Research, Journal of Hydraulic Eng., Journal of Hydr. Res., Meas. Science & Techn.

In charge of **LEGI seminars** (between 2006 à 2010)

Keynote and Invited Presentations

1. **Hurther D.** (2017). Sediment transport physics across the wave breaking affected coastal nearshore region. Invited Lecture at the 2nd Young Researcher Workshop organized by the Hydralab+ consortium at UPC, Barcelona, Spain.
2. 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. 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 acoustic techniques. Main 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.

PhD & Habilitation committees

Member of 14 PhD committees between 2005 and 2015:

- 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. Hémmérlé (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

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

Teaching & Education duties

Invited Lecturer at the "Young Researcher Workshop" organized by Hydralab+ consortium at UPC, Barcelona, Spain, 2017.

Since Sept. 2010, in charge of the graduate course **Flow Measurement Science**, Joseph Fourier University of Grenoble.

Member since 2010 of the steering committee of the international master in **Environmental Fluid Mechanics**. Université Grenoble Alpes. <http://www-meca.ujf-grenoble.fr/master-MEI/EFM/>

Organisator and Lecturer at the "Young Researcher Workshop-Hydralab 3" at IMFT, Toulouse, France, 2008.

Economic valorisation

European Patent n°FR0202187 « Ultrasonic velocity measurement process and system for liquids in pipes and channels ». University Louis Pasteur of Strasbourg, inventors : O. Scrivener, **D. Hurther**, S. Fischer, B. Schwaller, P. Schmitt.

Staff management

Post-docs:

- E. Mignot (2007-2008). ATER at ENSHMG
- E. Mignot ,(2008-2009) DGA-ECORS post-doc
- F.X. Chassagneux (2012-2013). ATER at ENSE3
- T. Revil-Baudard (2014-2015). Hydralab IV post-doc
- G. Fromant (2016-2017). Hydralab+ post-doc
- G. Fromant (2017-...). ANR MESURE post-doc

PhD students

- PhD co-director (with E. Barthelemy) of M. Bricault (2003-2007). Doctoral School TUE, Grenoble Univ.
- PhD director of F.X. Chassagneux (2009-2012). Doctoral School IMEP-2 . Grenoble Univ..
- PhD director (with J. Le Coz, co-director, IRSTEA Lyon) of S.A. Moore (2008-2012). Doctoral School TUE, Grenoble Univ.
- PhD co-advisor (with Dr. S. Hulscher & J.S. Ribberink as directors) of S. Naqshband (2011-2014) , U. Twente, The Netherlands.

Master students

- 12 master students between 2004 and 2017