

Frédéric Bouchette

Shallow-water hydrodynamics and inferred sedimentary processes

I live in Nîmes, a small roman town to the South of France,
along the northwestern Mediterranean coast.

And one possible work postal adress is:

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www.bouchette.org

www.soltc.org

www.gm.univ-montp2.fr

www.gladys-littoral.org

www.math.univ-montp2.fr

www.atlashydrolyttoral.org

Research Gate:

https://www.researchgate.net/profile/Frederic_Bouchette

Research ID:

E-9825-2010 on <http://www.researcherid.com/>



Present-day position and personal informations

Assistant professor (lecturer on permanent position 0441) at University of Montpellier II [UM2]
Géosciences-Montpellier / Institut de Mathématiques et Modélisation de Montpellier

Born on january 2nd, 1973

Mother tongue: French

Marital status: engaged [PACS], two children

Fluent Spanish [C1/C1], English [C1/B2] speaking/writing. Some basics of Norwegian.

C and Bash scripting advanced developer, ASM & OPENGL API skill, advanced GMT user

Open-source and 100% GPL sustainer

Amongst other things, I love playing classic guitar (12th grade) and finger-picking, skiing, trekking, scuba diving,
and doing judo in another life.

I have been member of AGU, ASF, SGF.

Working experience / Position history

Sept 2012 – Aug. 2013	Associate Expert (50%) at Bas-Rhône Languedoc Engineering, Nîmes
Jul. 2011 – Aug. 2012	Gjesteprofessor at University of Oslo (Department of oceanography/ meteorology)
Jan. 2011 – Jul. 2011	Associate expert at Bas-Rhône Languedoc Engineering, Nîmes
Sep. 2010 – present	Assistant Professor at University of Montpellier II, GEOSCIENCES-M [UMR 5243]
June 2009 – Sep. 2010	C.N.R.S. delegate scientist at Institut de Mathématiques Appliquées et Modélisation de Montpellier [UMR 5149]
Aug. 2008 – present	Associated researcher at Institut de Mathématiques et Modélisation de Montpellier [UMR 5149]
May 2001 – Aug. 2008	Assistant Professor at University of Montpellier II, GEOSCIENCES-M [UMR 5243]
Dec. 2000 – May 2001	Lecturer (ATER) at University of Montpellier II
Oct. 1997 – Oct. 2000	PhD grant & Lecturer at University of Montpellier II (french MENRT + Monitorat)

Educational background

- Oct. 1997 – Dec. 2000 PhD at Université Montpellier II [UM2]
 PhD Thesis title: Wave/seabottom interaction. The South East Basin carbonate ramp, France (2001). Institut des Sciences de la Terre et de l'Univers de Montpellier, **22**, pp 250.
 PhD Supervisor: Michel Séguret
 with reviews of V. Rey (LSEET Toulon), F. Guillocheau (Géosciences-Rennes), D. Bernoulli (UTZ, Switzerland), J.-L. Rubino (TOTAL) and M. Daignières (UM2)
- Sep. 1997 – Jun. 1998 Additional training course of Master of Civil Engineering at UM2
- Sep. 1996 – Jun. 1997 Master (DEA) of Earth Sciences at UM2
- Sep. 1992 – Jun. 1996 Graduate classes in several concomitant formations including: Physics, Geosciences, Archaeology and Art History.
 Graduate Thesis: The wave-induced liquefaction process.

Scientific references – Summary

My contribution to published science:

- 42 (22 + 17) papers and short papers in rank A peer-reviewed journals
 4 contributions to books and edition works
 9 scientific and technical reports for academics and engineering
 4 seminars, lectures and invited conferences
 > 70 proceedings with short or long abstracts, oral presentation & posters in conferences,...

My peer-reviewed papers were published in:

journal	I.F.(*)	nbr
Journal of Geophysical Research [Publisher: AGU]	2.96 (1)	2
Quaternary Research [Publisher: Elsevier]	2.3 (1)	2
Sedimentology [Publisher: IAS – Blackwell]	2.1 (1)	2
Marine Geology [Publisher: Elsevier]	1.98 (1)	2
Continental Shelf Research [Publisher: Elsevier]	1.69	1
International Journal of Numerical Methods in Engineering [Publisher: Wiley & Sons]	1.47 (1)	1
Coastal Engineering [Publisher: Elsevier]	2.405 (1)	1
Journal of Coastal Research [Publisher: CERF]	1.366	2
Discrete and discontinuous Dynamical Systems DSDS – B [Publisher: AIMS]	0.995 (1)	1
Ocean Engineering [Publisher: Elsevier]	0.665	1
Bulletin de la Société Géologique de France [Publisher: SGF]	0.68 ?	3
International Review of Mechanical Engineering [Publisher: Praise Worthy Prize]	Unset	1

(*) for the year of publication. The sign (1) refers to Top Three journal for the topic concerned.

Administrative tasks

- 2013 – present Head of the forthcoming littoral program in MISTRALS
- 2011 – present Co-head of national SOERE Littoral-Trait de côte
- 2010 – present Head of SO-LTC (Mediterranean shoreline observatory, see www.soltc.org)
- 2010 – 2012 Deputy director of OSU OREME in charge of scientific observatories
- 2009 & 2012 Involvement in COPS comitees (recruitment of scientists in universities)
- 2009 – present Active member of the Office of Observatory OREME
- 2009 – present Elected member of the Council of Observatory OREME in Montpellier
- 2007 – 2011 Elected member of the Council of Géosciences-M laboratory
- 2007 – 2008 Elected member of Administrative Council of University of Montpellier II
- 2005 – present Leader of GLADYS (scientific group for littoral dynamics in Languedoc Roussillon) and GLADYS 2 (from 2008). See www.gladys-littoral.org
- 2003 – 2005 Nominated member of council of ISTEEM
- 2004 – present Representative member of Observatoire Départemental du Littoral Héraultais

Academic research projects (P.I = Fellow in charge)	
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SOLTC 2013-A	P.I [2013 – 2015] Dotation: 330 000 € from DREAL Title: Deployment of ESPIG OBS Topic: <i>coastal engineering, physics</i>
SOLTC 2013-A	P.I [2013 – 2014] Dotation: 48 000 € from DREAL Title: Processing of littoral data Topic: <i>database, geosciences</i>
COAST_4_ALL	P.I [2012 – 2014] Dotation: 85 000 € from Région LR Title: Cuspate theory and instantaneous sea level Topic: <i>mathematics, physics of waves, coastal engineering</i>
LITTO CMS	Universitary P.I [2012 – 2014] Dotation: 450 000 € from OSEO/ Région Title: HPC computational platform for coastal hydro-morphodynamics Topic: <i>coastal engineering, informatics, cloud computing</i>
SO LTC 2012-A	P.I. [2012 – 2013] Dotation: 350 000 € from DREAL authorities Title: monitoring of shoreline hydrodynamics Topic: <i>coastal engineering</i>
SOBOL	In charge for geosciences-M [2010 - 2011] Dotation 40 000 € from UM2 Title: Sensitive analysis and environment Topic: <i>Applied mathematics, statistics, coastal engineering</i>
SO LTC 2010-B	P.I [2010 - 2011] Dotation 30 000 € from DREAL authorities Title: Observatory "Littoral – Trait de côte" Topic: <i>geophysics, littoral hydro-morphodynamics monitoring, weather forecasting</i>
KUNSHEN	P.I [2011 – 2014] Dotation 418 500 € from France/ Taiwan international program ANR/ NSC (+ grant from Pole Compétitivité) Title: Hydromorphodynamics of sand barrier under extreme typhoon events Topic: <i>From nearshore hydro-morphodynamics field measurement to conceptual modelling</i>
SO LTC 2010-A	P.I [2010 - 2011] Dotation 180 000 € from DREAL authorities Title: Observatory "Littoral – Trait de côte" Topic: <i>geophysics, littoral hydro-morphodynamics monitoring, weather forecasting</i>
NUCLEASPIT I	P.I [2010 – 2011] Dotation 3 000 € from PEPS PTI (Physique théorique et ses interfaces) Title: How can so-called nuclear bomb equation serve the physical modelling of sand spit dynamics ? Topic: <i>Theoretical physics, coastal engineering</i>
LAGUNA I & II	P.I [2009 – 2011] Dotation 9 300 € from Egide European Title: France-Taiwan prospective collaboration for coastal hydrodynamics Topic: <i>Coastal Engineering, Physical experimentation</i>
VULSACO	In charge for Geosciences-M [2006 – 2009] Dotation 28 000 € from : ANR-06-VULN-009 Title: Vulnerability of sandy coast systems to climatic and anthropic changes Topic: <i>Coastal Engineering and Climate change</i>
MICROLIT	In charge for lab. Geosciences-M [2008 – 2010] Dotation 42 000 € from : SHOM + INSU RELIEF Title: Morphodynamics of microtidal sandy shoreface Topic: <i>Sedimentology, Coastal Engineering</i>

Academic research projects (P.I = Fellow in charge)

OILDEBEACH	French P.I. [2009 – 2011] Dotation 50 000 € from: PRECODD Europe AMPERA ERA-NET Ref. CA-016165 (ANR-08-ECOT-002) Title: Buried oil in the intertidal beach zone: coupling between beach morphodynamics, natural degradation, forcings mechanisms and biological activity Topic: <i>Beach management, Applied Mathematics</i>
NAUSICAA	P.I. of the whole project [2005 – 2008] Dotation 284 000 € from Europe BMe-3S0155R-2.2 – INTERREG IIIC Title: Hydrodynamic Atlas for the integrated management of littoral hazards, coastal defence structures and <i>Posidionia oceanica</i> effects Topic: <i>Oceanography</i>
COPTER	In charge for lab. Geosciences-M [2005 – 2008] Dotation 230 000 € from : ANR-05-BLAN-0005 (+ grant from Pole Compétitivité) Title: Conception Optimisation et Prototypage d'ouvrages de lutte contre l'ERosion en domaine littoral Topic: <i>Coastal Engineering</i>
GLADYS (Project)	P.I. of the whole project [2005 - 2006] Dotation 250 000 € from : Languedoc-Roussillon regional authorities Title: Monitoring the hydrodynamics of Languedoc-Roussillon coastline Topic: <i>Coastal engineering, oceanography</i>
PROGELAC	P.I. of the whole project [2003 – 2005] Dotation 35 000 € from : ATIP CNRS Title: high-resolution architecture of Holocene coastal tracts in the north-westernmost Mediterranean sea Topic: <i>Geophysics and sedimentology</i>

Distinctions

2012	Prize « Chercheur d'Avenir » for works on calculation of instantaneous water level
2010 – 2014	PES Prime Excellence Scientifique (a french national grant)
1996	Grant "Jeunesse et Sport" for ASTEME initiative (Geology of Bolivia for Children)
1996	Grant for ASTEME initiative (Geology and landscapes of Bolivia for Children)

Scientific dissemination and related activities

2010 – present	management of numerous SO LTC meetings
Sep. 25–28, 2010	Taiwan-France meeting (Montpellier)
2009 – present	Scientific coordinator of a TV documentary fiction "Ora Maritima" (2 × 52')
2010	Contribution to short (5') documentary video on submersion
Feb. 1–3, 2010	In charge of the organization of the 2 nd workshop MATHOCEAN (Montpellier)
Jul. 14–21, 2009	Taiwan-France meeting and field trip (Montpellier)
2004 – present	management of numerous GLADYS meetings (more than 10)
Feb. 5–7, 2007	Workshop LEFE/IDAO (Montpellier)
2001	5 th french congress of Sedimentology (Montpellier)

Scientific review activity

2010	Member of AERES committee for the evaluation of french research laboratories
2009 – present	Scientific expert for AAP (review of several proposals for french ANR)
2005	Reviewer for Terra Nova, Norois journal

Research supervision

2013	Master Lise Petitjean (supervisor)
2013	Master Soufiane Benjeddi (supervisor)
2012 – 2014	PhD Fabien Réatif (50% effective co-supervisor)
2012 – 2014	PhD Romain Chailain (30% effective co-supervisor)
2011 – 2013	PhD Lucie Campmas (50% effective co-supervisor)
2011 – 2012	Master Fabien Réatif (supervisor); SOLTC funds
2011 – 2012	Master Romain Chailain (co-supervisor); LIRMM funds
2010 – 2011	Master Lucie Campmas (supervisor); GLADYS funds
2010 – 2013	PhD Alexis Nutz (20%; contribution to the supervision)
2010	5 graduate thesis (MASTER 1) in the framework of OSU OREME
2006 – 2011	Member of 7 PhD official committees (Coastal engineering, Civil engineering, Geosciences, Geophysics, Soil dynamics)
2008 – 2009	Post-doc Adrien Lambert (supervisor); Project COPTER ANR-05-BLAN-0005
2008 – 2011	Post-doc Elena Brambilla (supervisor); Project Marie-Curie NESTS
2007 – 2008	Post-doc Cléa Denamiel (supervisor); GLADYS funds
2007 – 2008	Post-doc Elena Brambilla (supervisor); GLADYS funds
2008 – 2010	PhD Afaf Bouharguane (Privileged collaboration; member of examination panel)
2005 – 2009	PhD Nans Bujan (50%; effective co-supervisor; member of examination panel)
2005 – 2008	PhD Olivier Raynal (100%; effective supervisor; member of examination panel)
2004 – 2007	PhD Damien Isèbe (30%; contribution to the supervision; member of examination panel)
2003 – 2006	PhD Cléa Denamiel (50%; effective co-supervisor; member of examination panel)
2001 – 2006	16 graduate thesis (Licence, DEA or MASTER 1 st year or 2 nd year)

Management of industrial and engineering partnerships

2010	Expert for Bas-Rhône Languedoc Ingénierie (BRLi) <i>Topic: sand resources in the Gulf of Aigues-Mortes</i>
2010 – 2012	Expert for Entente Interdépartementale de Démoustication (EID Méd) <i>Topic: review of the submersion process</i>
2008	Partnership with SOGREAH Consultants (Grenoble) <i>Topic: physical experimentation relative to beach morphodynamics and geotubes</i>
2005 – 2009	Expert for Bas-Rhône Languedoc Ingénierie (BRLi) <i>Topic: circulation around geotubes</i>
2004 – 2006	Expert Direction Littorale et Maritime (CG34 Hérault) <i>Topic: general informations on coastal dynamics</i>
2004 – present	Partnership with Direction Régionale de l'équipement Languedoc-Roussillon <i>Topic: detailed analyses of coastal management problems in relation with erosion/submersion</i>

Teaching services

2010 – 2011	
2009 – 2010	
2008 – 2009	
2007 – 2008	
2006 – 2007	
2005 – 2006	Field works (50%),
2004 – 2005	Remote sensing and computer sciences (75%), field works (12%), sedimentology (10%), others (3%)
2003 – 2004	Basin dynamics (10%), sedimentology (10%), geophysics and computer sciences (75%), others (5%)
2002 – 2003	Basin dynamics (15%), sedimentology (15%), geophysics and computer sciences (70%)
2001 – 2002	
1997 – 2001	3×64 ETD [Lecturer]: sedimentology, data processing, field works, geophysics

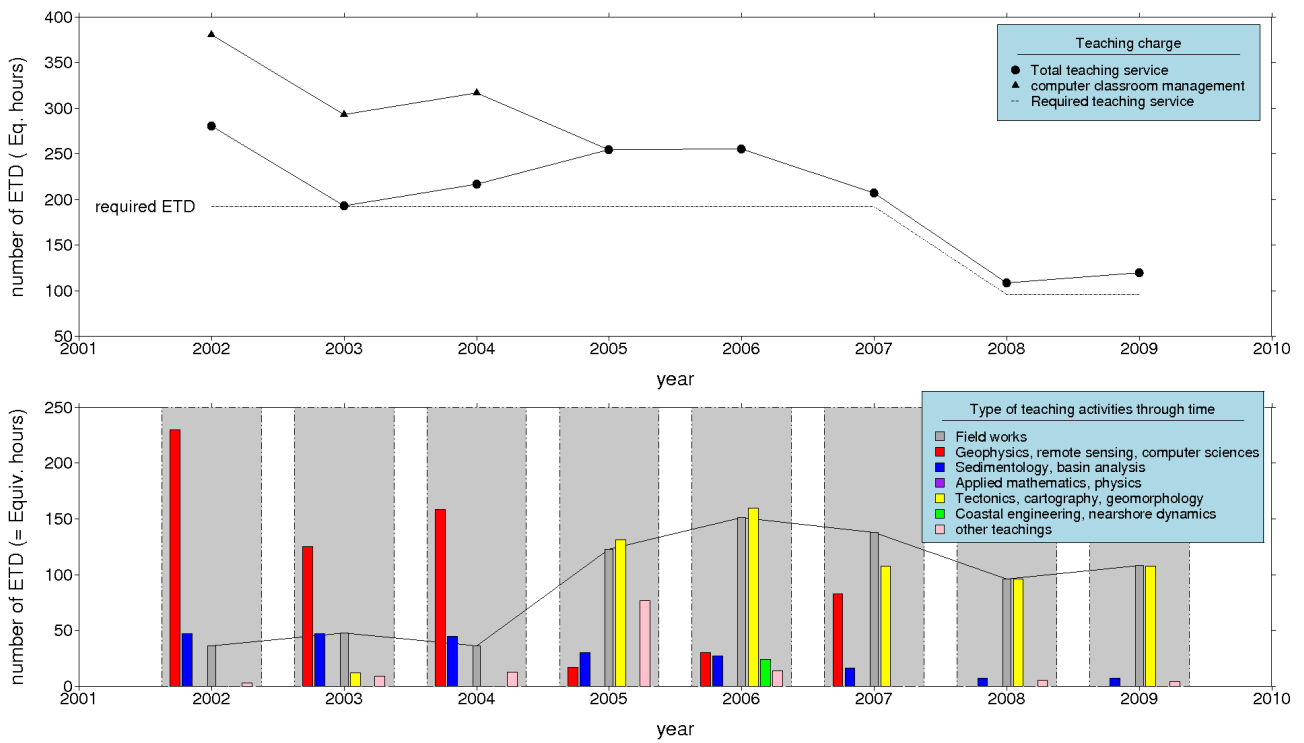


Figure 1: The evolution of my teaching tasks through time