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Senior scientists

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EDUCATION

1980 European Bacallaureate (European School Mol)
1984 Licentiate in Geology (MS), Katholieke Universiteit Leuven (title: De magmatische gesteenten te Tammazarra, Anti Atlas, Marokko; Promoter: Prof Dr. D. Vogel)
1986 Post graduate in Informatics (MBA) (KUL)
1994 Advanced course on computational and modelling aspects of oceanography; National Technical University of Athens (Prof. Dr. J. Papadimitrakis) in the framework of MAST Program
1995 PhD in Science, Katholieke Universiteit Leuven (title: Modelling currents and sediment transport phenomena in shelf seas and estuaries; Promoters: Prof. Dr. N. Vandenberghe, Prof. Dr. J. Berlamont)

CAREER

1986 - 1991 Researcher in physical oceanography (hydrodynamic modelling in the Antarctic coastal zone) at the Hydraulics Laboratory (KUL).
1991 - 1994 Project engineer (hydrodynamic and sediment transport modelling in estuaries and harbours, in situ measurements of sediment transport), International Marine & Dredging Consultants NV, Antwerp, Belgium.
1994 - 1995 NFWO scholarship, Hydraulics Laboratory (KUL).
1995 - 1999 Project engineer (hydrodynamic and sediment transport modelling in rivers, estuaries and harbours, hydrological modelling), International Marine & Dredging Consultants NV, Antwerp, Belgium.
1999 – today Researcher at the Royal Belgian Institute of Natural Science, Management Unit of the North Sea Mathematical Models.

CURRENT RESEARCH ACTIVITIES

The main research topics are related to sediment transport modelling and in situ measurements in the southern North Sea; recent sedimentological and morphological evolution of the Belgian Continental Shelf; SPM concentration, transport and dynamics (flocculation, resuspension):

- Scientific coordination of the coastal observatory at MOW1 (Zeebrugge).
- Natural variability of sediment transport due to tides, seasons, meteorological conditions and storms using in situ and remote sensing data.
- Effects of human activities on the distribution, balance and transport of fine sediments.
- Flocculation processes of suspended particulate matter.
- Origin of cohesive sediments in the southern North Sea and the Schelde estuary.
- Development of numerical models for sediment transport.
- MFSD: development of monitoring strategies for evaluation of Good Environmental Status.

EXPERIENCE AT SEA

1995-1999 Several field campaigns (current velocity, sediment transport) in the Schelde estuary.
2000-today Team leader and/or chief scientist during about 60 campaigns with the R/V Belgica since 2000 (in total about 180 days at sea). The focus of the campaigns was on marine geology and sedimentology (suspended sediment concentration, particles size distribution in suspension, bed sampling with Van Veen grab, Reineck core and box core, tripod and ADCP deployment/recuperation, hull-mounted ADCP and multibeam measurements).

SCIENTIFIC AND ENGINEERING PROJECTS

2004 onward Coordinator of MOMO project (Mud transport modelling and monitoring on Belgian Continental Shelf), Ministry of the Flemish Community, AWZ, Belgium.

2012	Coordinator of OMFLOC project (Influence of Organic Matter on FLOcculation of fine grained sediments on the Belgian continental shelf), financed by Royal Belgian Institute of Natural Science.
2011-2012	Editor of the Belgian Initial Assessment report of the Belgian Part of the North Sea in the framework of the EC Marine Strategy Framework Directive.
2007-2011	Partner in QUEST4D (Quantification of erosion/sedimentation patterns to trace the natural vs. anthropogenic sediment dynamics); Belgian Science Policy
2004-2006	Coordinator of MOCHA (Mud Origin, Characterisation and Human Activities in the Belgian coastal area). Belgian Science Policy.
2002-2006	Partner in MAREBASSE (Management, Research and Budgeting of Aggregates in Shelf Seas related to End-users). Belgian Science Policy.
1999-2004	Coordinator of SEBAB (SEdiment BALance of the Belgian Continental Shelf), Ministry of the Flemish Community, AWZ, Belgium.
1999-2001	Partner in BUDGET (Beneficial usage of data and geo-environmental techniques, research of natural sand transports on the Belgian Continental Shelf). Belgian Science Policy.
1998-1999	Partner in EC INTERREG II project. Development of a water management tool of the Yser-basin (Belgium, France).
1994	Partner in EC MAST G8 Coastal Morphodynamics Research Programme. Numerical modelling of cohesive sediment transport using a Lagrangian type of model.
1991-1998	Various engineering projects related to harbour extension works in Antwerp; recirculation of cooling; river flooding studies; dredging studies. These projects were financed by the Ministry of the Flemish Community (AWZ, Aminor), the harbour of Antwerp, Tractebel and DEME.
1990-1991	Numerical Simulation of Long Waves on the Northwest European Continental Shelf, Ministry of Public Health and Environment, MUMM.
1986-1991	ANTAR project: Simulation of wind-induced currents in the Antarctic coastal zones, Belgian Science Policy.

OTHER ACTIVITIES

- Reviewer for Chinese Journal of Oceanography and Limnology, Continental Shelf Research, Ecological Modelling, Estuarine Coastal and Shelf Science, Flow Measurement and Instrumentation, Geo-Marine Letters, Journal of Geophysical Research, Journal of Marine Systems, Journal of Sea Research, Limnology and Oceanography: Methods, Marine Geology, Nature-Geo, Ocean Dynamics, Remote Sensing of Environment, Sedimentary Geology, Sedimentology, Water Research, Water Resources Research.
- External reviewer of research projects for Israel Science Foundation (ISF), Netherlands Organisation for Scientific Research (NWO), US National Science Foundation (NSF), Instituut voor de Aanmoediging van Innovatie door Wetenschap en Technologie in Vlaanderen (IWT), Belgian Navy.
- Member of examination commission master thesis for Marelac (UGent in 2004, 2007, 2008) and Civil Engineering (Hydraulics Laboratory, KULeuven in 2010, 2011).
- Co promoter of O Rodriguez-Palma (Master thesis VUBrussel); M Baeye (PhD, RCMG Ghent University); P Chen (PhD, National Sun Yat-sen University Taiwan)
- Co-convenor or convenor of the workshops “Quantification of erosion/sedimentation patterns to trace the natural vs. anthropogenic sediment dynamics” (Antwerp 2009), “Particles in Europe” (Bologna, 2008), “In-situ measurements of SPM characteristics - Problems and solutions” (Wilhemshaven, 2007), “Mud Origin, Characterisation and Human Activities” (Brussels, 2006), “Current Deflecting Wall Expert-Meeting” (Antwerp, 1998)
- Lecturer of a course on mathematical modelling and coastal engineering, Bandung, Indonesia, 5-23 November 1991 (ABOS Ministry of Development, Belgium) and of a course on cohesive sediment transport and flocculation at National Sun Yat-Sen University, Kaohsiung, Taiwan, 17-27/05/2011

AWARDS

“Estuarine, Coastal and Shelf Science Top Cited Author, 2008 to 2012” award for the paper “Uncertainty of excess density and settling velocity of mud flocs derived from in situ measurements”

PUBLICATIONS

Papers (peer reviewed international)

- Fettweis M, Lee BJ, Baeye M, Van den Zande D. Seasonality of floc size and SPM concentration in the southern North Sea: Biological and physical controls. (in prep)
- Lee BJ, Toorman E, Fettweis M. Flocculation of Fine-Grained Cohesive Sediments Developing Multimodal Particle Size Distributions: Field Investigation and Mathematical Modeling. *Ocean Dynamics* (subm. Jan 2013)
- Fettweis M, Monbaliu J, Nechad B, Baeye M, Van den Eynde D. 2012. Weather and climate related spatial variability of high turbidity areas in the North Sea and the English Channel. *Methods in Oceanography* 3-4, 25-29. doi:10.1016/j.mio.2012.11.001
- Lee BJ, Schlautman MA, Toorman E, Fettweis M. 2012. Competition between kaolinite flocculation and stabilization in divalent cation solutions dosed with anionic polyacrylamides. *Water Research* 46, 5696-5705. doi:10.1016/waters.2012.07.056
- Baeye M, Fettweis M, Legrand S, Dupont Y, Van Lancker V. 2012. Mine burial in the seabed of high-turbidity area - Findings of a first experiment. *Continental Shelf Research* 43, 107-119. doi:10.1016/j.csr.2012.05.009
- Lee BJ, Fettweis M, Toorman E, Molz F. 2012. Multimodality of a particle size distribution of cohesive suspended particulate matters in a coastal zone. *Journal of Geophysical Research* 117 (C03014). doi:10.1029/2011JC007552
- Fettweis M, Baeye M, Lee BJ, Chen P, Yu CS. 2012. Hydro-meteorological influences and multimodal suspended particle size distributions in the Belgian nearshore area (southern North Sea). *Geo-Marine Letters* 32, 123-137. doi:10.1007/s00367-011-0266-7
- Houziaux J-S, Fettweis M, Francken F, Van Lancker V. 2011. Historical (1900) seafloor composition in the Belgian-Dutch part of the North Sea: A reconstruction based on calibrated visual sediment descriptions. *Continental Shelf Research* 31, 1043-1056. doi:10.1016/j.csr.2011.03.010
- Baeye M, Fettweis M, Voulgaris G, Van Lancker V. 2011. Sediment mobility in response to tidal and wind-driven flows along the Belgian inner shelf, southern North Sea. *Ocean Dynamics* 61, 611-622. doi:10.1007/s10236-010-0370-7.
- Fettweis M, Nechad B. 2011. Evaluation of in situ and remote sensing sampling methods for SPM concentrations on the Belgian continental shelf (southern North Sea). *Ocean Dynamics* 61, 157-171. doi:10.1007/s10236-010-0310-6
- Fettweis M, Baeye M, Francken F, Lauwaert B, Van den Eynde D, Van Lancker V, Martens C, Michielsen T. 2011. Monitoring the effects of disposal of fine sediments from maintenance dredging on suspended particulate matter concentration in the Belgian nearshore area (southern North Sea). *Marine Pollution Bulletin* 62, 258-269. doi:10.1016/j.marpolbul.2010.11.002
- Van den Eynde D, Giardino A, Portilla J, Fettweis M, Francken F, Monbaliu J. 2010. Modelling the effects of sand extraction on the sediment transport due to tides on the Kwinte Bank. *Journal of Coastal Research* SI51, 106-116. doi: 10.2112/SI51-010.1
- Fettweis M, Francken F, Van den Eynde D, Verwaest T, Janssens J, Van Lancker V. 2010. Storm influence on SPM concentrations in a coastal turbidity maximum area (southern North Sea) with high anthropogenic impact. *Continental Shelf Research* 30, 1417-1427. doi:10.1016/j.csr.2010.05.001.
- Fettweis M, Houziaux J-S, Du Four I, Van Lancker V, Baeteman C, Mathys M, Van den Eynde D, Francken F, Wartel S. 2009. Long-term influence of maritime access works on the distribution of cohesive sediment: Analysis of historical and recent data from the Belgian nearshore area (southern North Sea). *Geo-Marine Letters* 29, 321-330. doi: 10.1007/s00367-009-0161-7
- Fettweis M. 2008. Uncertainty of excess density and settling velocity of mud flocs derived from in situ measurements. *Estuarine Coastal and Shelf Science* 78, 428-436. doi: 10.1016/j.ecss.2008.01.007
- Fettweis M, Nechad B, Van den Eynde D. 2007. An estimate of the suspended particulate matter (SPM) transport in the southern North Sea using SeaWiFS images, in-situ measurements and numerical model results. *Continental Shelf Research* 27, 1568-1583. doi: 10.1016/j.csr.2007.01.017
- Van den Eynde D, Nechad B, Fettweis M, Francken F. 2007. SPM dynamics in the southern North Sea derived from SeaWifs imagery, in situ measurements and numerical modelling. In: *Estuarine and Coastal Fine Sediment Dynamics* (Maa J, Sanford L, Schoelhammer D, eds.). *Proc Marine Science* 8, 282-302.
- Fettweis M, Francken F, Pison V, Van den Eynde D. 2006. Suspended particulate matter dynamics and aggregate sizes in a high turbidity area. *Marine Geology* 235, 63-74. doi: 10.1016/j.margeo.2006.10.005
- Van den Eynde D, Fettweis M. 2006. Modelling of fine-grained sediment transport and dredged material on the Belgian Continental Shelf. *Journal of Coastal Research* SI39, 1564-1569.

- Ysebaert T, Fettweis M, Meire P, Sas M. 2005. Benthic variability in intertidal soft-sediments in the mesohaline part of the Schelde estuary. *Hydrobiologia* 540, 197-216. doi: 10.1007/s10750-004-7144-5
- Fettweis M, Van den Eynde D. 2003. The mud deposits and the high turbidity maximum in the Belgian-Dutch coastal zone, southern Bight of the North Sea. *Continental Shelf Research* 23, 669-691. doi: 10.1016/S0278-4343(03)00027
- Fettweis M, Sas M. 1999. On the sedimentation of mud in access channels of the harbour of Antwerp. *PIANC Bulletin* 101, 53-59.
- Fettweis M, Sas M, Monbaliu J. 1998. Seasonal variation of cohesive sediment concentration in the Scheldt estuary, Belgium. *Estuarine, Coastal and Shelf Science* 47, 21-36.
- Yu CS, Fettweis M, Hermans I, Berlamont J. 1989. Tidal flow simulation in the English Channel and southern North Sea. *Advances in Water Resources* 12, 194-203.

Papers (peer reviewed national)

- Fettweis M, Ysebaert T, Sas M, Meire P. 2000 Sedimentologische en biologische processen en de erosiegevoeligheid van cohesieve sedimenten op enkele slikken in de Beneden Zeeschelde. *Water @wel*3(2), 1-9.
- Fettweis M, Sas M, Van Erdeghem D. 1997. Het hydrologisch en hydrodynamisch numeriek model van het IJzerbekken. *Water* 97, 255-262.
- Fettweis M, Sas M, Monbaliu J, Taverniers E. 1997. Langdurige meting van slibconcentratie, saliniteit en temperatuur te Prosperpolder (beneden Zeeschelde). *Water* 92, 15-26.
- Fettweis M, Sas M. 1996. Sedimenttransportmodellen en integraal waterbeheer: Toepassingen op het Scheldeëstuarium. *Water* 90, 249-256.
- Fettweis M, Sas M. 1994. De complexe stroming in de toegangseul naar de Zandvliet- en Berendrechtssluis: Inzicht via metingen en modellering. *Water* 77, 109-116.
- Fettweis M, Sas M, Meyvis L. 1994. Analyse van stroom- en sedimentmetingen ter hoogte van de Drempel van Zandvliet, Schelde. *Water* 76, 88-99.

Chapter in books

- Van den Eynde D, Fettweis M. 2012. Towards the application of an operational sediment transport model for the optimisation of dredging works in the Belgian coastal zone (southern North Sea). *Proceedings 6th EuroGOOS Conference*,
- Degraer S, Brabant R, Coates D, Courtens W, Derweduwven J, Di Marcantonio M, Fettweis M, Francken F, Haelters J, Hostens K, Houthave R, Kerckhof F, Melotte J, Onkelinx T, Reubens B, Sas M, Stienen EWM, Vandendriesche S Van den Eynde D, Van de walle M, Vanermen N, Vanhulle A, Van Lancker V, Verstraete H, Vincx M, Jacques TG. 2010. Executive summary. In: *Offshore wind farms in the Belgian part of the North Sea, early environmental impact assessment and spatio-temporal variability* (Degraer S, Brabant R, Rumes B, eds.). Royal Belgian Institute of Natural Sciences, Management Unit of the North Sea Mathematical Models. 1-8.
- Van den Eynde D, Brabant R, Fettweis M, Francken F, Van Lancker V, Sas M, Melotte J. 2010. Monitoring of hydrodynamics and morphological changes at the C-Power and Belwind offshore windfarm sites – A synthesis. In: *Offshore wind farms in the Belgian part of the North Sea, early environmental impact assessment and spatio-temporal variability* (Degraer S, Brabant R, Rumes B, eds.). Royal Belgian Institute of Natural Sciences, Management Unit of the North Sea Mathematical Models. 19-36.
- Van Lancker V, Deleu S, Bellec V, Du Four I, Schelfaut K, Verfaillie E, Fettweis M, Van den Eynde D, Francken F, Monbaliu J, Giardino A, Portilla J, Lanckneus J, Moerkerke G, Degraer S. 2007. MAREBASSE: Bridging gaps with other disciplines and end-users. In: *Science and sustainable management of the North Sea: Belgian case studies* (Calewaert J-B, Maes F, eds.). Academia Press. 83-136.
- Nechad, B., D. Van den Eynde, M. Fettweis & F. Francken, 2003. Suspended Particulate Matter Mapping from Multitemporal SeaWifs imagery over the Southern North Sea – the SEBAB Project. In: *Analysis of Multi-Temporal Remote Sensing Images. Proceedings MULTITEMP 2003 Workshop, Ispra, Italië, 16-18 juli 2003*, P. Smits & L. Bruzzone (eds.), 357-367.
- Fettweis M, Sas M, Pathirana KPP, Jabbari E, Yu CS. 1993. Suspended sediment transport modelling in the Scheldt Estuary: Comparison of different models. *Advances in Hydro-Science and Engineering, Vol. I*, 1705-1710.
- Yu CS, Fettweis M, Rosso M, Berlamont J. 1990. A 2D model with changing land-water boundaries. *Computational Methods in Surface Hydrology* (Gambolati G et al., eds.), Computational Mechanics Publications and Springer-Verlag, 101-106.

- Fettweis M, Yu CS. 1990. Numerical experiments of convection - diffusion dominated flow problems and open boundary condition in finite difference models. *Ocean Wave Mechanics, Computational Fluid Dynamics and Mathematical Modelling*. Computational Mechanics Publications, 409-416.
- Yu CS, Fettweis M, Berlamont J, Decroo D, Blomme E. 1988. Tidal currents along the west Belgian coast. *Computer Modelling in Ocean Engineering* (Schrefler & Zienkiewicz eds.), Balkema, Rotterdam, 245-250.
- Yu CS, Fettweis M, Berlamont J. 1988. A 2D model for tidal flow computations. *Developments in Water Science*, 35 (Celia MA et al. eds.). Elsevier and Computational Mechanics Publications, 281-288.
- Yu CS, Fettweis M, De Bruyn R, Berlamont J. 1988. A 2D model for steady and unsteady flows. *Computer Methods and Water Resources*, 2, Computational Hydraulics (Ouazar D et al., eds.), Computational Mechanics Publications and Springer-Verlag, 402-414.

Conference abstracts, posters and other short communications (last 3 years)

- Baeye M, Fettweis M, Francken F, Van den Eynde D, Van Lancker V. 2013. Conceptual model of object burial in turbid waters on a sandy seabed. 4th Int Conf on Marine and River Dune Dynamic, 15-16 April, Brugge (Belgium).
- Fettweis M, Lee BJ, Baeye M, Van den Eynde D, Chen P, Yu JCS. 2013. Biological effects on flocculation and deposition of fine-grained sediments in a coastal turbidity maximum. ASLO 2013 Aquatic Sciences Meeting. February 17-22, New Orleans (USA).
- Backers J, Hyndrickx K, Naudts L, Fettweis M, Baeye M, Francken F, Van den Eynde D, Van Lancker V. 2013. The coastal observatory near MOW1: Technical aspects. VLIZ Young Scientists' Day, February 15, Brugge (Belgium).
- Francken F, Baeye M, Fettweis M, Van den Eynde D, Van Lancker V, Backers J, Hyndrickx K, Naudts L. 2013. A large synoptic dataset of coastal observations. VLIZ Young Scientists' Day, February 15, Brugge (Belgium).
- Baeye M, Fettweis M. 2013. Fine-grained sediment dynamics in response to tidal and wind-driven flows in the mouth of the Scheldt estuary. Ems-Scheldt Workshop, 14-15 February, Delmenhorst (Germany).
- Fettweis M. 2012. Validation of sediment transport models using in situ and remote sensing data. MUMM workshop on validation, December 13, Brussels (Belgium)
- Fettweis M, Lee BJ, Toorman E, Francken F, Van den Eynde D. 2012. Flocculation in a eutrophic coastal turbidity maximum zone. *Particles in Europe*, October 17-19, Barcelona (Spain).
- Van Lancker V, Baeye M, Degraer S, Fettweis M, Francken F, Houziaux J-S, Legrand S, Rabaut M, Van den Eynde D. 2012. Sediment dynamics as a proxy for soft substrata habitat distributions, Belgian part of the North Sea. 4th Int. Geologica Belgica Meeting, September 11-14, Brussels (Belgium).
- Fettweis M, Baeye M, Francken F, Houziaux J-S, Lee BJ, Van den Eynde D, Van Lancker V. 2012. Recent anoxic cohesive sediment deposits in the Belgian near-shore area: sedimentological context and anthropogenic impact. 4th Int. Geologica Belgica Meeting, September 11-14, Brussels (Belgium).
- Martens C, Fettweis M. 2012. Optimalisatie van de efficiëntie van de baggerstortplaatsen – sedimentbeheer in de Noordzee. 9^{de} Waterforum: De verdoken schakel in het waterbeleid. Sediment samen aanpakken biedt vele kansen. 1 Juni, Brussel.
- Fettweis M, Monbaliu J, Nechad B, Baeye M, Van den Eynde D. 2012. Weather and climate related spatial variability of high turbidity areas in the North Sea and the English Channel. Int. Liège Coll. on Ocean Dynamics, May 7-11, Liège (Belgium).
- Fettweis M, Vanhellemont Q., Francken F. Very high SPM concentrations in the southern Bight of the North Sea detected from space. VLIZ Young Scientists' Day, February 24, Brugge (Belgium).
- Lee BJ, Fettweis M, Toorman EA. 2012. Heterogeneous flocculation combining the biological and mineralogical populations in a marine and coastal environment: Literature study for a conceptual model. VLIZ Young Scientists' Day, February 24, Brugge (Belgium).
- Van den Eynde D, Fettweis M. 2012. Towards an operational sediment transport model for optimizing dredging works in the Belgian Coastal Zone. VLIZ Young Scientists' Day, February 24, Brugge (Belgium).
- Van Hoey G, Derweduwen J, Devriese L, Fettweis M, Hostens K, Martens C, Robbens J, Van Lancker V. 2012. Dredged material disposal: Does it substantially affect the ecosystem? VLIZ Young Scientists' Day, February 24, Brugge (Belgium).
- Maebe S, Fettweis M. 2011. Initial Assessment of the Belgian Part of the North Sea (State 2010). MFSD workshop, December 7, Brussels (Belgium).
- Lee BJ, Toorman E, Fettweis M, Wang J, Bi Q. 2011. 1-Dimensional Vertical Simulation of Bimodal Flocculation Dynamics in a Turbulent Flow Field of a Coastal Zone. 5th Int. Conf. on Advanced Computational Methods in Engineering (ACOMEN 2011), November 14-17, Liège (Belgium).

- Legrand S, Baeye M, Fettweis M, Van Lancker V. 2011. Towards the emergence of dedicated and specific operational oceanographic downstream services: the example of buried objects retrieval. The Future of Operational Oceanography, October 25-27, Hamburg (Germany).
- Chen P, Yu JCS, Fettweis M. 2011. Numerical simulation of flocculation behaviours influenced by different metrological conditions in coastal seas. INTERCOH, October 18-21, Shanghai (China).
- Fettweis M, Baeye M, Francken F, Monbaliu J, Nechad B, Van den Eynde D, Van Lancker V. 2011. Wind induced spatial variability of high turbidity areas in the southern North Sea. INTERCOH, October 18-21, Shanghai (China).
- Lee BJ, Fettweis M, Toorman E, Wang J. 2011. Multimodal particle size distribution in a coastal zone. INTERCOH, October 18-21, Shanghai (China).
- Van Lancker V, Baeye M, Du Four I, Degraer S, Fettweis M, Francken F, Houziaux J-S, Luyten P, Van den Eynde D, Devolder M, De Cauwer K, Monbaliu J, Toorman E, Portilla J, Ullman A, Muñoz ML, Fernandez L, Komijani H, Verwaest T, Delgado R, De Schutter J, Janssens J, Levy Y, Vanlede J, Vincx M, Rabaut M, Vandenberghe N, Zeelmaeker E. 2011. Towards more sustainable exploitation of economic activities in the EEZ. Workshop "Mariene aggregaatextractie: noden, richtlijnen en toekomstperspectieven", October 17, Bredene (Belgium).
- Van Lancker V, van den Eynde D, Fettweis M, Francken F, Fernández L, Komijani H, Monbaliu J. 2011. Natural variability assessment in support of environmental monitoring, a sediment transport modelling approach. Studiedag "Mariene aggregaatextractie: noden, richtlijnen en toekomstperspectieven. October 17, Bredene (Belgium).
- Van den Eynde D, Fettweis M, Legrand S. 2011. Application of an operational sediment transport model for the optimisation of dredging works in the Belgian coastal zone (southern North Sea). 6th EuroGOOS Conference – Sustainable Operational Oceanography, October 4-6, Sopot (Poland).
- Baeye M, Fettweis M, Legrand S, Van Lancker V, Dupont Y. 2011. Bottom mine burial in the coastal turbidity maximum area off the Belgian Coast. Int. Conf. of the NATO Naval Mine Warfare Centre Of Excellence, June 21-23, Oostende (Belgium).
- Fettweis M. 2011. Fine-grained sediment transport in response to tidal and wind-driven flows in the Belgian coastal area (southern North Sea). Lecture at National Cheng Kung University, Tainan Hydraulics Laboratory, May 23, Tainan (Taiwan).
- Fettweis M. 2011. Settling and transport of cohesive particles in coastal areas. Lecture at National Sun Yat-Sen University, Dept. of Marine Environment and Engineering. May 19, Kaohsiung (Taiwan).
- Rodriguez-Palma O, Fettweis M, Rabaut M, Van Lancker V, Degraer S. 2011. The role of suspended particulate matter in the distribution and structure of macrobenthic communities in the Belgian part of the North Sea. VLIZ Young Scientists' Day, February 25, Brugge (Belgium).
- Lee BJ, Fettweis M, Toorman EA, Wang J. 2011. Multimodality of a particle size distribution of marine suspended sediments: Significance and application. VLIZ Young Scientists' Day, February 25, Brugge (Belgium).
- Fettweis M, Baeye M, Lee BJ, Van den Eynde D, Francken F, Van Lancker V. 2011. Hydro-meteo influences on suspended particle size distribution. VLIZ Young Scientists' Day, February 25, Brugge (Belgium).
- Chen P, Fettweis M, Maggi F, Yu J. 2010. Numerical simulation of flocculation behaviours during storm events along Belgian coastal waters. Particles in Europe, November 15-17, Villefranche (France).
- Fettweis M, Baeye M, Van den Eynde D, Francken F, Van Lancker V. 2010. Floc dynamics during storm events in a coastal turbidity maximum area. Particles in Europe, November 15-17, Villefranche (France).
- Van Lancker V, Degraer S, Fettweis M, Francken F, Van den Eynde D. 2010. Werken met de natuur: noodzaak of utopie? Natuurpunt - Symposium Kappa-Plan . October 1, Bredene (Belgium).
- Fettweis M, Van den Eynde D, Francken F, Van Lancker V. 2010. SPM dynamics measured with an automated tripod in the Belgian nearshore area: natural dynamics and anthropogenic effects. Liège Colloquium on Ocean Dynamics, April 26-30, Liège (Belgium).
- Baeye M, Fettweis M, Van Lancker V, Francken F. 2010. Fluid mud dynamics derived from ADV altimetry, Belgian Coastal Zone. Liège Colloquium on Ocean Dynamics, April 26-30, Liège (Belgium).
- Fettweis M, Nechad B, Van Lancker V, Van den Eynde D. 2010. Evaluation of in situ and remote sensing sampling methods of SPM concentration. AGU Ocean Science Meeting, February 22-26, Portland (USA).
- Chen P, Yu J, Fettweis M, Van den Eynde D, Maggi F. 2010. Flocculation in a nutrient-rich coastal area (southern North Sea): Measurements and modelling. AGU Ocean Science Meeting, February 22-26, Portland (USA).

Scientific reports (last 3 years)

- Fettweis M, Baeye M, Francken F, Lee BJ, Nechad B, Van den Eynde D, Van Lancker V. 2013. MOMO activiteitsrapport (1 juli 2012 – 31 december 2012). BMM-rapport MOMO/6/MF/201301/NL/AR/2, 37pp + app.
- Fettweis M, Baeye M, Lee BJ, Francken F, Van den Eynde D, Van Lancker V. 2012. MOMO activiteitsrapport (1 januari 2012 - 30 juni 2012). BMM-rapport MOMO/6/MF/201207/NL/AR/1, 27pp + app.
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