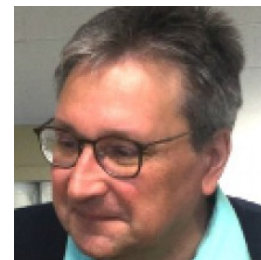


Marc Elskens  
Chemistry  
Archaeology, Environmental changes & Geo-Chemistry  
Archaeology, Environmental changes & Geo-Chemistry  
Chemistry  
Archaeology, Environmental changes & Geo-Chemistry  
Interdisciplinary Historical Food Studies



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## Expertise

### Research competence

Dr. ir. Marc Elskens is an environmental chemist with expertise in the domain of transformations, transport and fate of chemicals in water; water resources and quality; chemical risk assessment and stable isotope modelling. His research approach is based on the development and application of chemometric methods to environmental analysis and data mining. The past few years he became involved in the development of ERE/DRE-dual CALUX Bioassays System for the assessment of estrogen- and dioxin-like persistent organic pollutants in several matrices including food contact materials, human fluids and environmental samples.

### Projects

#### Assessment of water quality in urban waters

This research aims at investigating in which ways urban water systems satisfy to EU regulations, regarding Environmental Quality Standards (EQS) for a variety of contaminants (N, P, inorganic & organic micro-pollutants). Alteration of the ecological and chemical status is a motivation for reassessing management options for both runoff and waste waters in urban environment as well as to implement mitigating strategy. Funding for this research is provided by Brussels Institute for Research and Innovation (INNOVIRIS) in the framework of ANTICIPATE and EXPLORE projects

**Measuring and modelling trace metals/radionuclides in aquatic systems.** Metals/radionuclides pollution in surface waters from point and non-point sources is a widespread problem worldwide. This research aims at modelling metals fate and transport in streams and watersheds. It builds on existing transport models in aquatic systems. Funding for this research is provided by the Belgian Federal Science Policy Office (BELSPO) and by SKC PhD fellowships

**Applications of  $^{15}\text{N}$ ,  $^{13}\text{C}$  and  $^{30}\text{Si}$  tracers in isotope flux experiments.** Acquisition of techniques and development of expertise for automated analysis of stable C & N isotope composition of plankton and suspended organic matter, as well as and implementation of numerical tools for assessing organic carbon export flux. Development of compartmental model analysis for data mining. Funding for this research is provided by the Research Foundation Flanders (FWO) and by the Belgian Federal Science Policy Office (BELSPO)

#### Migration of chemicals from packaging and food contact material

The safety of food contact materials must be evaluated as chemicals (inorganic and/or organic micro-pollutants) can migrate from packaging into food. Accordingly, the materials must be manufactured in compliance with EU regulations, so that any potential transfer to foods does not raise safety concerns. Funding for this research is provided by the Federal Public Service Health, Food chain safety and Environment (FOD) and/or by the Research Foundation Flanders (FWO).

#### Measurement Science in Chemistry

The Measurement Science in Chemistry consortium, involving 9 EU-universities (<http://www.msc-euromaster.eu/webapp/website/website.html?id=252>) organises each year a unique International Summer School on Analytical Science, Metrology and Accreditation. The school has shown to attract a variety of people, ranging from master to doctoral students, but also people, who already are employed in a laboratory. It was initiated in 2008 by the European Commission Joint Research Centre, in view of the importance of quality assured analytical measurement data for many European policies. Typically, some 40-people come together for a two-week intensive school to learn about how to obtain quality in chemical or bio-analytical measurements by understanding and practicing how to apply the international standard (ISO/IEC-17025) and of the role of metrology and accreditation. Funding for this summer school is provided by registration fees

#### Keywords and disciplines

Analytical and Environmental Chemistry, Biogeochemistry, Chemometric, Applied Statistic, Water Quality, Risk Assessment

## Employment

### Chemistry

Vrije Universiteit Brussel  
Brussels, Belgium  
15 Mar 2024 → 30 Sep 2027

### **Archaeology, Environmental changes &Geo-Chemistry**

Vrije Universiteit Brussel

Brussels, Belgium

15 Mar 2024 → 30 Sep 2027

### **Archaeology, Environmental changes &Geo-Chemistry**

Vrije Universiteit Brussel

Brussels, Belgium

1 Jan 2024 → 30 Sep 2027

### **Chemistry**

Vrije Universiteit Brussel

Brussels, Belgium

1 Jan 2023 → 30 Sep 2027

### **Archaeology, Environmental changes &Geo-Chemistry**

Vrije Universiteit Brussel

Brussels, Belgium

1 Jan 2023 → present

### **Interdisciplinary Historical Food Studies**

Vrije Universiteit Brussel

Brussels, Belgium

29 Mar 2021 → present

### **Guest Professor**

KU Leuven

Leuven, Belgium

1 Oct 2006 → present

## **Research outputs**

### **Time evolution of estrogen contamination in the Scheldt estuary**

Jia, Y., Jian, X., Gao, W., Li, G., Leermakers, M., Elskens, M., Baeyens, W. & Gao, Y., 20 Dec 2024, In: Science of the Total Environment. 957, p. 1-9 9 p., 177432.

### **Assessment of receptor-mediated activity (AhR and ER $\alpha$ ), mutagenicity, and teratogenicity of metal shredder wastes in Wallonia, Belgium**

Matranxhi, B., Mertens, B., Anthonissen, R., Maes, J., Ny, A., De Witte, P., Brouhon, J. M., De Bast, B. & Elskens, M., 3 Sep 2024, In: Environmental Science and Pollution Research. 31, 43, p. 55263-55279 17 p.

### **Level of BPA contamination in resin composites determines BPA release**

De Nys, S., Turkalj, M., Duca, R. C., Covaci, A., Elskens, M., Godderis, L., Vanoirbeek, J., Van Meerbeek, B. & Van Landuyt, K. L., Jul 2024, In: Dental Materials. 40, 7, p. 1025-1030 6 p.

### **Impact of inorganic and organic pollutants from a Belgian wastewater treatment plant on adjacent surface and groundwaters**

Luo, M., Su, Y., Vandeputte, D., Jia, Y., Li, G., Baeyens, W., Huysmans, M., Elskens, M. & Gao, Y., 30 Dec 2023, In: Frontiers of Environmental Science & Engineering. 18, 4, 16 p., 46.

### **Prediction and assessment of xenoestrogens mixture effects using the in vitro ER $\alpha$ -CALUX assay**

Elskens, M., Boonen, I. & Eisenreich, S., 8 Dec 2023, In: Frontiers in toxicology. 5, 2023, p. 1-8 8 p., 1252847.

#### **Degradation products of resin-based materials detected in saliva in vivo**

Vervliet, P., De Nys, S., Duca, R. C., Boonen, I., Godderis, L., Elskens, M., Van Landuyt, K. L. & Covaci, A., Dec 2023, In: *Clinical Oral Investigations*. 27, 12, p. 7189-7198 10 p.

#### **Renewable and safer bisphenol A substitutes enabled by selective zeolite alkylation**

Trullemans, L., Koelewijn, S-F., Boonen, I., Cooreman, E., Hendrickx, T., Preegel, G., Van Aelst, J., Witters, H., Elskens, M., Van Puyvelde, P., Dusselier, M. & Sels, B. F., 28 Aug 2023, In: *Nature sustainability*. 6, 12, p. 1693-1704 12 p.

#### **Dynamics of estrogenic activity in an urban river receiving wastewater effluents: effect-based measurements with CALUX**

Elskens, M., Van Langenhove, K., Brion, N., Carbonel, V. & Eisenreich, S., 23 May 2023, In: *Water Emerging Contaminants & Nanoplastics*. 2, 2, p. 9-25 16 p., 9.

#### **Baseline concentrations, spatial distribution and origin of trace elements in marine surface sediments of the northern Antarctic Peninsula**

Delhaye, L. J., Elskens, M., Ricaurte-Villota, C., Cerpa, L. & Kochzius, M., Feb 2023, In: *Marine Pollution Bulletin*. 187, 9 p., 114501.

#### **Estrogenic activity and ecological risk of steroids, bisphenol A and phthalates after secondary and tertiary sewage treatment processes**

Guo, W., Li, J., Luo, M., Yu, X., Elskens, M., Baeyens, W. & Gao, Y., 1 May 2022, In: *Water Research*. 214, p. 1-12 12 p., 118189.

#### **Naturally occurring potentially toxic elements in groundwater from the volcanic landscape around Mount Meru, Arusha, Tanzania and their potential health hazard**

Tomašek, I., Mouri, H., Dille, A., Bennett, G., Bhattacharya, P., Brion, N., Elskens, M., Fontijn, K., Gao, Y., Gevera, P. K., Ijumulana, J., Kisaka, M., Leermakers, M., Shemsanga, C., Walraevens, K., Wragg, J. & Kervyn, M., 10 Feb 2022, In: *Science of the Total Environment*. 807, Part 1, 150487.

#### **Bisphenol A release from short-term degraded resin-based dental materials**

De Nys, S., Duca, R. C., Vervliet, P., Covaci, A., Boonen, I., Elskens, M., Vanoirbeek, J., Godderis, L., Van Meerbeek, B. & Van Landuyt, K. L., 3 Jan 2022, In: *Journal of Dentistry*. 116, 5 p., 103894.

#### **Identification of chemicals leaching from dental resin-based materials after in vitro chemical and salivary degradation**

Vervliet, P., De Nys, S., Duca, R. C., Boonen, I., Godderis, L., Elskens, M., Van Landuyt, K. L. & Covaci, A., Jan 2022, In: *Dental Materials*. 38, 1, p. 19-32 14 p.

#### **Development of Diffusive Gradients in Thin-Films (DGT) for the measurements of gold, silver and platinum in aquatic systems**

Jia, Y., Gao, Y., Elskens, M. & Brion, N., 2022.

#### **Simultaneous measurements of metals and PAHs using diffusive gradients in thin films (DGT) with an environmentally friendly binding layer**

Jia, Y., Gao, Y. & Elskens, M., 2022. 1 p.

#### **Assessing the estrogenic activity of chemicals present in resin based dental composites and in leachates of commercially available composites using the ER $\alpha$ -CALUX bioassay**

Boonen, I., De Nys, S., Vervliet, P., Covaci, A., Van Landuyt, K. L., Duca, R. C., Godderis, L., Denison, M. S. & Elskens, M., Dec 2021, In: *Dental Materials*. 37, 12, p. 1834-1844 11 p.

#### **Long-term elution of bisphenol A from dental composites**

De Nys, S., Putzeys, E., Duca, R. C., Vervliet, P., Covaci, A., Boonen, I., Elskens, M., Vanoirbeek, J., Godderis, L., Van Meerbeek, B. & Van Landuyt, K. L., Oct 2021, In: *Dental Materials*. 37, 10, p. 1561-1568 8 p.

**Development of an environmentally friendly and low-cost leaching procedure for the recovery of gold in sewage sludge**  
El Yazidi, S., Brion, N. & Elskens, M., 1 Sep 2021, 85 p.

**Metal recovery for Brussels-North (Aquiris) wastewater treatment plant**  
Kapongo, D. F., Brion, N. & Elskens, M., 1 Sep 2021, 55 p.

**Patterns and dynamics of microplastics in the Zenne River upstream and downstream Brussels, Belgium**  
Kazalyiev, M., Brion, N. & Elskens, M., 1 Sep 2021, 54 p.

**Development of a simulated lung fluid leaching method to assess the release of potentially toxic elements from volcanic ash**  
TOMAŠEK, I., Damby, D. E., Stewart, C., Horwell, C. J., Plumlee, G., Ottley, C. J., Delmelle, P., Morman, S., El Yazidi, S., Claeys, P., Kervyn, M., Elskens, M. & Leermakers, M., Sep 2021, In: *Chemosphere*. 278, 130303.

**Revisiting metric sex estimation of burnt human remains via supervised learning using a reference collection of modern identified cremated individuals (Knoxville, USA)**  
Hlad, M., Veselka, B., Steadman, D. W., Herregods, B., Elskens, M., Annaert, R., Boudin, M., Capuzzo, G., Dalle, S., Mulder, G. D., Sabaux, C., Salesse, K., Sengeløv, A., Stamatiki, E., Vercauteren, M., Warmenbol, E., Tys, D. & Snoeck, C., Aug 2021, In: *American Journal of Physical Anthropology*. 175, 4, p. 777-793 17 p.

**Bisphenol A as degradation product of monomers used in resin-based dental materials**  
De Nys, S., Duca, R. C., Vervliet, P., Covaci, A., Boonen, I., Elskens, M., Vanoirbeek, J., Godderis, L., Van Meerbeek, B. & Van Landuyt, K. L., Jun 2021, In: *Dental Materials*. 37, 6, p. 1020-1029 10 p.

**Assessing the biological reactivity of organic compounds on volcanic ash: implications for human health hazard**  
Tomasek, I., Damby, D. E., Andronico, D., Baxter, P., Boonen, I., Claeys, P., Denison, M., Horwell, C. J., Kervyn, M., Kueppers, U., Romanias, M. & Elskens, M., 8 Apr 2021, In: *Bulletin of Volcanology*. 83, 5, 11 p., 30.

**Evaluation of the dioxin-like toxicity in soil samples from Thua Thien Hue province using the AhR-CALUX bioassay - An update of Agent Orange contamination in Vietnam**  
My, T. T. A., Dat, N. D., Van Langenhove, K., Denison, M. S., Long, H. T. & Elskens, M., 1 Apr 2021, In: *Ecotoxicology and Environmental Safety*. 212, 8 p., 111971.

**Nitrate Supply Routes and Impact of Internal Cycling in the North Atlantic Ocean Inferred From Nitrate Isotopic Composition**  
Deman, F., Fonseca-Batista, D., Roukaerts, A., Garcia-Ibanez, M., Le Roy, E., Thilakarathne, E. P. D. N., Elskens, M., Dehairs, F. & Fripiat, F., Apr 2021, In: *Global Biogeochemical Cycles*. 35, 4, e2020GB006887.

**Assessment of hazards and risks associated with dietary exposure to mineral oil for the Belgian population**  
Mertens, B., Van Heyst, A., Demaegdt, H., Boonen, I., Van Den Houwe, K., Gosciny, S., Elskens, M. & Van Hoeck, E., Mar 2021, In: *Food and Chemical Toxicology*. 149, 112034.

**Skin  $\delta^{13}C$  and  $\delta^{15}N$  reveal spatial and temporal patterns of habitat and resource use by free-ranging odontocetes from the southwestern Atlantic Ocean**  
Troina, G. C., Botta, S., Dehairs, F., Couto Di Tullio, J., Elskens, M. & Secchi, E. R., Dec 2020, In: *Marine Biology*. 167, 12, p. 167-187 19 p., 186.

**Unravelling phosphate adsorption on hydrous ferric oxide surfaces at the molecular level**  
Weng, Y., Vekeman, J., Zhang, H., Chou, L., Elskens, M. & Tielens, F., Dec 2020, In: *Chemosphere*. 261, 9 p., 127776.

**Assessing the receptor-mediated activity of PAHs using AhR-, ER $\alpha$ - and PPAR $\gamma$ - CALUX bioassays**  
Boonen, I., Van Heyst, A., Van Langenhove, K., Van Hoeck, E., Mertens, B., Denison, M. S., Elskens, M. & Demaegdt, H., Nov 2020, In: *Food and Chemical Toxicology*. 145, 10 p., 111602.

**Human phase I in vitro liver metabolism of two bisphenolic diglycidyl ethers BADGE and BFDGE**

Vervliet, P., de Nys, S., Duca, R. C., Boonen, I., Godderis, L., Elskens, M., van Landuyt, K. L. & Covaci, A., 1 Oct 2020, In: *Toxicology Letters*. 332, p. 7-13 7 p.

**Influence of seawater ions on phosphate adsorption at the surface of hydrous ferric oxide (HFO)**

Zhang, H., Elskens, M., Chen, G., Snoeck, C. & Chou, L., 15 Jun 2020, In: *Science of the Total Environment*. 721, 137826.

**Zooplankton-based delta C-13 and delta N-15 isoscapes from the outer continental shelf and slope in the subtropical western South Atlantic**

Cibele Troina, G., Dehairs, F., Botta, S., Couto Di Tullio, J., Elskens, M. & Secchi, E. R., May 2020, In: *Deep-Sea Research Part I*. 159, 14 p., 103235.

**Assessment of the possible human health hazard associated with exposure to naturally occurring potentially toxic elements in groundwater on the flanks of Meru volcano, Arusha, Tanzania**

Tomasek, I., Mouri, H., Wragg, J., Bennett, G., Ijumulana, J., Bhattacharya, P., Fontijn, K., Kisaka, M. J., Shemsanga, C., Walraevens, K., Claeys, P., Elskens, M., Gao, Y., Leermakers, M. & Kervyn, M., 2020, *AGU Fall Meeting 2020 Abstract: GH018: You Are Where You Live: Advances in Linking Geochemical Environments and Human Health I*. American Geophysical Union, p. 1-1 1 p.

**The bioanalytical screening of deleterious organic compounds on volcanic ash: a pilot study using the AhR-CALUX assay**

Tomasek, I., Damby, D. E., Romanias, M., Horwell, C. J., Baxter, P., Kueppers, U., Andronico, D., Boonen, I., Kervyn, M., Claeys, P., Denison, M. & Elskens, M., 2020, *AGU Fall Meeting 2020 Abstract: GH005: Earth System Interactions and Implications for Geohealth I*. p. 1-1 1 p.

**Dietary exposure of the Belgian population to mineral oil**

Van Heyst, A., Goscinny, S., Bel, S., Vandevijvere, S., Mertens, B., Elskens, M. & Van Hoeck, E., 7 Nov 2019, In: *Food Additives and Contaminants: Part A*. 37, 2, p. 267-279 13 p.

**CHARACTERIZING METAL CONTENT AND EXTRACTION POTENTIAL IN DOMESTIC SLUDGE – THE SUBLIMUS PROJECT**

Brion, N., Nicolay, X., Decock, R., Bruylants, G., Claeys, P. & Elskens, M., 7 Oct 2019.

**Assessing the endocrine activity of PAHs using the DRE-, ERE- and PPAR $\gamma$  CALUX bioassays**

Boonen, I., Van Heyst, A., Van Langenhove, K., Van Hoeck, E., Mertens, B., Elskens, M. & Demaegdt, H., 16 Sep 2019.

**In situ measurement of estrogenic activity in various aquatic systems using organic diffusive gradients in thin-film coupled with ERE-CALUX bioassay**

Guo, W., Van Langenhove, K., Vandermarken, T., Denison, M. S., Elskens, M., Baeyens, W. & Gao, Y., Jun 2019, In: *Environment International*. 127, p. 13-20 8 p.

**Investigating the in vitro metabolism of the dental resin monomers BisGMA, BisPMA, TCD-DI-HEA and UDMA using human liver microsomes and quadrupole time of flight mass spectrometry**

Vervliet, P., Den Plas, J. V., De Nys, S., Duca, R. C., Boonen, I., Elskens, M., Van Landuyt, K. L. & Covaci, A., 15 May 2019, In: *Toxicology*. 420, p. 1-10 10 p.

**Assessment of estrogenic compounds in paperboard for dry food packaging with the ERE-CALUX bioassay**

Vandermarken, T., Boonen, I., Gryspeirt, C., Croes, K., Van Den Houwe, K., Denison, M., Gao, Y., Van Hoeck, E. & Elskens, M., 1 Apr 2019, In: *Chemosphere*. 221, p. 99-106 8 p.

**Occurrence of organochlorine pesticides and polychlorinated biphenyls in sediment and fish in Cau Hai lagoon of Central Vietnam: Human health risk assessment**

Tran, T. A. M., Malarvannan, G., Hoang, T. L., Nguyen, V. H., Covaci, A. & Elskens, M., Apr 2019, In: *Marine Pollution Bulletin*. 141, p. 521-528 8 p.

**Evidence of high N<sub>2</sub> fixation rates in the temperate northeast Atlantic**

Fonseca-Batista, D., Li, X., Riou, V., Deman, F., Fripiat, F., Brion, N., Elskens, M., Chou, L. & Dehairs, F., 13 Mar 2019, In: *Biogeosciences*. 16, 5, p. 999-1017 19 p.

**Phosphate adsorption on hydrous ferric oxide (HFO) at different salinities and pHs**

Zhang, H., Elskens, M., Chou, L. & Chen, G., 11 Mar 2019, In: *Chemosphere*. 225, p. 352-359 8 p.

**Development of DGT passive sampler for the assessment of polycyclic aromatic hydrocarbons (PAHs) in water using AhR-CALUX as detection method**

Zhang, X., Elskens, M., Zhuang, H. & Gao, Y., 2019.

**Qualitative analysis of dental material ingredients, composite resins and sealants using liquid chromatography coupled to quadrupole time of flight mass spectrometry**

Vervliet, P., de Nys, S., Boonen, I., Duca, R. C., Elskens, M., van Landuyt, K. L. & Covaci, A., 16 Nov 2018, In: *Journal of Chromatography A*. 1576, p. 90-100 11 p.

**Metals and arsenic in sediment and fish from Cau Hai lagoon in Vietnam: Ecological and human health risks**

Tran, T. A. M., Leermakers, M., Hoang, T. L., Nguyen, V. H. & Elskens, M., Nov 2018, In: *Chemosphere*. 210, p. 175-182 8 p.

**Analysis of mineral oil in food: Results of a Belgian market survey**

Van Heyst, A., Vanlancker, M., Vercammen, J., Van Den Houwe, K., Mertens, B., Elskens, M. & Van Hoeck, E., 3 Oct 2018, In: *Food Additives and Contaminants: Part A*. 35, 10, p. 2062-2075 14 p.

**Estrogenic activity in dry food simulants: chemical migration from paperboard packaging**

Vandermarken, T., Boonen, I., Gryspeirt, C., Van Den Houwe, K., Denison, M., Goeyens, L., Van Hoeck, E. & Elskens, M., 26 Aug 2018, *Organohalogen Compounds Database*. 2018 ed. 4 p.

**Bioanalytical tools for environmental pollutants in urban areas - Dynamics of estrogenic activity in an urban European river receiving wastewater effluent - Presentation @ Confucius workshop VUB**

Elskens, M., Brion, N., Eisenreich, S. J., Vandermarken, T. & Van Langenhove, K., 27 Jun 2018, (Unpublished).

**Endocrine activity in an urban river system and the biodegradation of estrogen-like endocrine disrupting chemicals through a bio-analytical approach using DRE- and ERE-CALUX bioassays**

Vandermarken, T., Van Langenhove, K., Boonen, I., Servais, P., Garcia-Armisen, T., Brion, N., Denison, M. S., Goeyens, L. & Elskens, M., Jun 2018, In: *Chemosphere*. 201, p. 540-549 10 p.

**A novel high sensitivity UPLC-MS/MS method for the evaluation of bisphenol A leaching from dental materials**

De Nys, S., Putzeys, E., Vervliet, P., Covaci, A., Boonen, I., Elskens, M., Vanoirbeek, J., Godderis, L., Van Meerbeek, B., Van Landuyt, K. L. & Duca, R. C., 3 May 2018, In: *Scientific Reports - Nature*. 8, 1, p. 6981 7 p., 6981.

**Dynamics of estrogenic activity in an urban European river receiving wastewater effluent - Presentation @ ICEPRAR 2018**

Elskens, M., Brion, N., Eisenreich, S. J., Vandermarken, T. & Van Langenhove, K., 19 Apr 2018, (Unpublished).

**Novel passive sampling for steroid hormones in aquatic environments using DGT and the ERE-CALUX bioassay - Abstract @ ChemCYS 2018**

Guo, W., Van Langenhove, K., Elskens, M., Baeyens, W. & Gao, Y., 21 Feb 2018, *ChemCYS 2018 - Abstract conference book*. p. 59-59 1 p.

**Novel passive sampling for steroid hormones in aquatic environments using DGT and the ERE-CALUX bioassay - Poster @ ChemCYS 2018**

Guo, W., Van Langenhove, K., Elskens, M., Baeyens, W. & Gao, Y., 21 Feb 2018.

**Estrogenic activity of monomers and initiators used in resin based dental composites**

Boonen, I., Vandermarken, T., De Nys, S., Vervliet, P., Covaci, A., Van Landuyt, K. L., Denison, M. & Elskens, M., 2018, *Organohalogen Compounds Database*. 4 p.

**Influence of discharge and temperature on the transport of tracer pollutants along an urban river (Zenne, Belgium)**  
Brion, N., Carbonnel, V., Verbanck, M. A., Elskens, M. & Claeys, P., 2018, *Online proceedings of the third international conference on Integrative science and sustainable development of rivers: B2 - City and disruption* . 3 p.

**Poster: Estrogenic activity in dry food simulants: chemical migration from paperboard packaging**  
Vandermarken, T., Boonen, I., Gyspeirt, C., Van Den Houwe, K., Denison, M. S., Goeyens, L., Van Hoeck, E. & Elskens, M., 2018.

**Estrogenic Activity Measurements in Water Using Diffusive Gradients in Thin-Film Coupled with an Estrogen Bioassay**  
Guo, W., Van Langenhove, K., Denison, M. S., Baeyens, W., Elskens, M. & Gao, Y., 20 Nov 2017, In: *Analytical Chemistry*. 89, 24, p. 13357-13364 8 p.

**Development of DGT sampler for monitoring estrogenic activity in water with ERE-CALUX bioassay - Poster @ DGT 2017**  
Guo, W., Van Langenhove, K., Elskens, M. & Gao, Y., 6 Sep 2017, p. 50. 1 p.

**Novel method optimization for estrogenic activity assessment of steroid hormones in water using DGT and the ERE-CALUX bioassay.**  
Guo, W., Van Langenhove, K., Elskens, M. & Gao, Y., 11 May 2017, *SETAC Brussels Abstract Book: Environmental quality through transdisciplinary collaboration*. p. 308 1 p.

**Novel method optimization for estrogenic activity assessment of steroid hormones in water using DGT and the ERE-CALUX bioassay - Poster @ SETAC 2017 Brussels**  
Guo, W., Van Langenhove, K., Elskens, M. & Gao, Y., 11 May 2017.

**Source determination of endocrine activity in the Zenne River, Brussels. Combining flux modelling with in vitro endocrine activity measurements.**  
Swartz, E., Van Langenhove, K., Brion, N., Eisenreich, S. J. & Elskens, M., 11 May 2017, *SETAC Brussels Abstract Book: Environmental quality through transdisciplinary collaboration*. p. 131 1 p.

**Source determination of endocrine activity in the Zenne River, Brussels. Combining flux modelling with in vitro endocrine activity measurements - Poster @ SETAC 2017 Brussels**  
Swartz, E., Van Langenhove, K., Brion, N., Eisenreich, S. J. & Elskens, M., 11 May 2017.

**Final Report (3 years) PRFB/Anticipate Innoviris - PRFB 31/2014: Endocrine disrupting chemicals in hospital effluent waters from the Brussels region and its impact on bacterial biodiversity**  
Van Langenhove, K., Reyens, T., Van Loco, J., Servais, P. & Elskens, M., 1 May 2017, INNOVIRIS. 26 p.

**In vitro endocrine activity screening of waste and river waters from the brussels Region, Belgium using the BG1Luc4E2 CALUX Bioassay - Presentation @ Anticipate Symposium 2017**  
Van Langenhove, K., Reyens, T., Servais, P., Van Loco, J. & Elskens, M., 30 Mar 2017.

**A discontinuous finite element suspended sediment transport model for water quality assessments in river networks**  
Fiengo Perez, F., Sweeck, L., Elskens, M. & Bauwens, W., 15 Feb 2017, In: *Hydrological Processes*. 31, 9, p. 1804-1816 13 p.

**Genetic diversity of the giant tiger prawn *Penaeus monodon* in relation to trace metal pollution at the Tanzanian coast**  
Rumisha, C. C., Leermakers, M., Elskens, M., Mdegela, R. H., Gwakisa, P. & Kochzius, M., 30 Jan 2017, In: *Marine Pollution Bulletin*. 114, 2, p. 759-767 9 p.

**Towards impact based monitoring of estrogenic endocrine disrupting chemicals (eEDC). eEDC sources and behaviour in the Zenne river, Brussels**  
Swartz, E., Van Langenhove, K., Brion, N., Eisenreich, S. J. & Elskens, M., 30 Jan 2017, *Abstract proceedings 11th Annual Meeting Danish Water Forum*. Flindt Jorgensen, L., Mosloff Larsen, T. & Kaare Jensen, B. (eds.). 11 ed. Denmark, p. 35 1 p.

**Towards impact based monitoring of Estrogenic Endocrine Disrupting Chemicals (eEDC). eEDC sources and behaviour in the Zenne river, Brussels - Presentation @ DWF 2017**

Swartz, E., Van Langenhove, K., Brion, N., Eisenreich, S. J. & Elskens, M., 30 Jan 2017.

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**Environmental and biological controls on oxygen and carbon isotopes in the aragonitic bivalve *Saxidomus giganteus*: Implications for paleoclimatic studies**

Gillikin, D., De Ridder, F., Keppens, E., Elskens, M. & Baeyens, W., 2005, In: *Palaeogeography, Palaeoclimatology, Palaeoecology*. 128, 1-2, p. 70-85 16 p.

**Fluxes and major transport routes of Arsenic in the Scheldt estuary**

De Gieter, M., Elskens, M. & Baeyens, W., 2005, In: *Marine Chemistry*. 95, 1-2, p. 15-30 16 p.

**Lead and cadmium levels of umbilical blood in low and high exposure areas of Flanders, Belgium, assessed with HR-ICP-MS**

Schroijen, C., Elskens, M., Bruckers, L., Koppen, G., Schoeters, G., Nelen, V., Van Larebeke, N. & Baeyens, W., 2005, *Colloquium Spectroscopicum Internationale XXXIV - Antwerpen*.

**Model selection through a statistical analysis of the minimum of a Weighted Least Squares cost function**

Elskens, M., Pintelon, R., Schoukens, J., Baeyens, W., De Ridder, F. & De Brauwere, A., 2005, In: *Chemometrics and Intelligent Laboratory Systems*. 76, p. 163-173 11 p.

**Overview of trace metal contamination in the Scheldt estuary and effect of regulatory measures**

Baeyens, W., Leermakers, M., De Gieter, M., Nguyen, H. L., Parmentier, K. & Elskens, M., 2005, In: *Hydrobiologia*. 540, p. 141-154 14 p.

**Refined parameter and uncertainty estimation when both variables are subject to error. Case study: Estimation of Si consumption and regeneration rates in a marine environment**

Debrauwere, A., De Ridder, F., Elskens, M., Schoukens, J., Pintelon, R. & Baeyens, W., 2005, In: *Journal of Marine Systems*. 55, 3-4, p. 205-221 17 p.

**Reliability of N flux rates estimated from <sup>15</sup>N enrichment and dilution experiments in aquatic systems**

Elskens, M., Baeyens, W., Brion, N., De Galan, S., Goeyens, L. & Debrauwere, A., 2005, In: *Global Biogeochemical Cycle*. 19, doi: 10.1029/

**Validation of a dynamic ammonium extraction technique for the determination of <sup>15</sup>N at enriched abundances**

Diaconu, C., Brion, N., Elskens, M. & Baeyens, W., 2005, In: *Analytica Chimica Acta*. 554, p. 113-122 10 p.

**Refined Estimate of Total Variation Enables a More Accurate Parameter and Uncertainty Estimation**

De Brauwere, A., De Ridder, F., Elskens, M., Schoukens, J., Pintelon, R. & Baeyens, W., 13 Dec 2004, *2004 AGU Fall Meeting, San Francisco, 13-17 December 2004*.

**A survey of 3 PCB and dioxin contamination episodes. From contamination of food items to body burdens.**

De Bont, R., Elskens, M., Baeyens, W., Hens, L. & Van Larebeke, N., 2004, In: *Annual review of nutrition*. CRC Press, p. 301-342 42 p.

**Production and dissolution of biosilica, and changing microphytoplankton dominance in the Bay of Brest (France)**

Beucher, C., Tréguer, P. & Elskens, M., 2004, In: *Unknown Journal*.

**Regional variation of spring N-uptake and new production in the Southern Ocean**

Savoye, N., Dehairs, F., Elskens, M., Cardinal, D., Kopczynska, E. E., Trull, T. W., Wright, S., Baeyens, W. & Griffiths, F. B., 2004, In: *Geophysical Research Letters*. 31

**Spatial and temporal trends in nutrient concentrations in the Belgian Continental area of the North Sea during the period 1993-2000**

De Galan, S., Elskens, M., Goeyens, L., Pollentier, A., Brion, N. & Baeyens, W., 2004, In: *Estuarine, Coastal and Shelf Science*. 61, p. 517-528 12 p.

**The North Sea: source or sink for nitrogen and phosphorus to the Atlantic Ocean?**

Brion, N., Baeyens, W., De Galan, S., Elskens, M. & Laane, W. P. M., 2004, In: *Biogeochemistry*. 68, p. 277-296 20 p.

**Zonal variation of spring N-uptake and new production in the Southern Ocean**

Savoie, N., Dehairs, F., Elskens, M., Kopczynska, E. E. & Baeyens, W., 2004, In: *Geophysical Research Letters*.

**The role of oxidative stress on the effect of 1,4,7,10,13,16-hexathiacyclooctadecane on copper and zinc toxicity in HepG2 cells. Human & Experimental toxicology**

Smet, P., Elskens, M., Bolle, F., Dierickx, P., Human, N. V. (ed.) & Toxicology, E. (ed.), 1 Oct 2003, In: *Unknown Journal*. 22, p. 89-93 5 p.

**An integrated approach to assess carbon dynamics in the Southern Ocean**

Dehairs, F., Lancelot, C., André, L. & Elskens, M., 2003, Belgian Scientific Research Programme on the Antarctic Phase 4, Vol 1 : Marine biota and Global change.

**Bioconcentration and biomagnification of mercury and methylmercury in North Sea and Scheldt estuary fish**

Baeyens, W., Leermakers, M., Brion, N., De Gieter, M., Elskens, M. & Goeyens, L., 2003, In: *Archives of Environmental Contamination and Toxicology*. 4, 45, p. 498-508 11 p.

**Estimation of the minimum detectable value for the determination of PCBs in fatty food samples by GC-ECD: a curvilinear calibration case**

Van Loco, J. & Elskens, M., 2003, In: *Unknown Journal*.

**Kinetics of N-Utilization By Natural Phytoplankton Assemblages During Upwelling Events At The NW Iberian Shelf**

Brion, N., Elskens, M., Dehairs, F. & Baeyens, W., 2003, *Geophysical Research Abstracts*. Vol. 5. p. 1885 1 p.

**the role of oxidative stress on the effect of 1,4,7,10,13,16-hexathiacyclooctadecane on copper and zinc toxicity in HepG2 cells**

Smet, P. W. & Elskens, M., 2003, In: *Unknown Journal*.

**Linearity of calibration curves: use and misuse of the correlation coefficient**

Van Loco, J., Elskens, M., Croux, C. & Beernaert, H., 10 Aug 2002, In: *Accreditation and Quality Assurance*. 7, p. 281-285 5 p.

**N uptake conditions during summer in the Subantarctic and Polar Frontal Zones of the Australian sector of the Southern Ocean**

Elskens, M., Baeyens, W. & Dehairs, F., 2002, In: *Journal of Geophysical Research: Oceans*. 107, C11

**New production of the NW Iberian shelf during the upwelling season over the period 1982–1999**

Alvarez-Salgado, X. A. & Elskens, M., 2002, In: *Unknown Journal*.

**PCBs in North Sea Fish: Is there a health risk?**

Baeyens, W., Leermakers, M., De Gieter, M. & Elskens, M., 2002, In: *Organohalogen Compounds*. 55, p. 315-318 4 p.

**Pelagic production at the Celtic Sea shelf break**

Joint, I., Dehairs, F. & Elskens, M., 2001, In: *Deep-Sea Research Part II. Topical Studies in Oceanography*. 48, p. 3049-3081

**Phytoplankton and microzooplankton variability between the Subtropical and Polar Fronts south of Australia: Thriving under regenerative and new production in late summer**

Kopczynska, E. E., Dehairs, F. & Elskens, M., 2001, In: *Journal of Geophysical Research: Oceans*. 106, p. 31.597-31.609

**Supply and demand of nutrients and dissolved organic matter at and across the NW European shelf break in relation to hydrography and biogeochemical activity**

Hydes, D. J. & Elskens, M., 2001, In: Unknown Journal.

**Export production in the Bay of Biscay as estimated from barium - barite in settling material: a comparison with new production.**

Dehairs, F., Fagel, N., Elskens, M. & Goeyens, L., 2000, In: Deep-Sea Research Part I. 47, p. 583-601 19 p.

**Interactions between ammonium, nitrate and urea uptake at the Iberian Margin**

Brion, N., Elskens, M. & Baeyens, W., 2000, *32d Liège Colloquium on Ocean Hydrodynamics*.

**Nutrient depletions in the Ross Sea and their relation with pigment stocks**

Goeyens, L., Elskens, M., Catalano, G., Hecq, J. H. & Goffart, A., 2000, In: Unknown Journal.

**Uptake conditions during summer in the Subantarctic region of the Southern Ocean**

Elskens, M. & Dehairs, F., 2000, *The Southern Ocean: Climatic changes and the cycle of carbon, International JGOFS Symposium, 9-13 July 2000, Brest-France.*

**Thiram and dimethyldithiocarbamic acid interconversion in *Saccharomyces cerevisiae*: a possible metabolic pathway under the control of the glutathione redox cycle**

Elskens, M. T. & Penninckx, M. J., Jul 1997, In: Applied and Environmental Microbiology. 63, 7, p. 2857-2862 6 p.

**The impact of the Scheldt input on the trace metal distribution in the Belgian coastal area (results of 1981-1983 and 1995-1996)**

Baeyens, W., Elskens, M., Van Ryssen, R. & Leermakers, M., 1 Jan 1997, In: Hydrobiologia. 366, 1-3, p. 91-108 18 p.

**In vitro inactivation of yeast glutathione reductase by tetramethylthiuram disulphide**

Elskens, M. T. & Penninckx, M. J., 1 Aug 1995, In: European Journal of Biochemistry. 231, 3, p. 667-672 6 p.

**Geochemistry of mercury in an intertidal flat of the Scheldt estuary**

Leermakers, M., Elskens, M., Panutrakul, S., Monteny, F. & Baeyens, W., 1 Jun 1993, In: Netherlands Journal of Aquatic Ecology. 27, 2-4, p. 267-277 11 p.

**Metabolism and functions of glutathione in micro-organisms**

Penninckx, M. J. & Elskens, M. T., 1993, In: Advances in Microbial Physiology. 34, p. 239-301 63 p.

**Geochemical processes in muddy and sandy tidal flat sediments**

Baeyens, W., Panutrakul, S., Elskens, M., Leermakers, M., Navez, J. & Monteny, F., 1 Sep 1991, In: Geo-Marine Letters. 11, 3-4, p. 188-193 6 p.

**Microbial activity in sandy and muddy estuarine sediments**

Elskens, M., Leermakers, M., Panutrakul, S., Monteny, F. & Baeyens, W., 1 Sep 1991, In: Geo-Marine Letters. 11, 3-4, p. 194-198 5 p.

**Glutathione as an endogenous sulphur source in the yeast *Saccharomyces cerevisiae***

Elskens, M. T., Jaspers, C. J. & Penninckx, M. J., 1991, In: J Gen Microbiol. 137, 3, p. 637-644 8 p.

## Activities

**Integrating groundwater flux measurements in groundwater modelling of drought adaptation impacts**

Lara Speijer (Speaker), Mateusz Zawadzki (Contributor), Delphine Vandeputte (Contributor), Yiqi Su (Contributor), Mingyue Luo (Contributor), Yue Gao (Contributor), Marc Elskens (Contributor), Pascal Verhoest (Contributor), Jo Renate Bauwens (Contributor), Tom Coussement (Contributor), Frank Elsen (Contributor), Birte Raes (Contributor), Steven

Eisenreich (Contributor), Goedele Verreydt (Contributor), Jef Dams (Contributor) & Marijke Huysmans (Contributor)  
7 Dec 2023

**Integrating groundwater flux measurements in groundwater modelling of drought adaptation impacts**

Lara Speijer (Speaker), Mateusz Zawadzki (Contributor), Delphine Vandeputte (Contributor), Yiqi Su (Contributor), Yue Gao (Contributor), Marc Elskens (Contributor), Pascal Verhoest (Contributor), Jo Renate Bauwens (Contributor), Tom Coussement (Contributor), Frank Elsen (Contributor), Birte Raes (Contributor), Steven Eisenreich (Contributor), Goedele Verreydt (Contributor), Jef Dams (Contributor) & Marijke Huysmans (Contributor)  
10 Nov 2023

**Assessing the role of pH in soil for trace metal uptake by agricultural crops**

Delphine Vandeputte (Speaker), Sybrien Lievens (Contributor), Mateusz Zawadzki (Contributor), Mingyue Luo (Contributor), Marijke Huysmans (Contributor), Marc Elskens (Contributor) & Yue Gao (Contributor)  
10 Oct 2023 → 13 Oct 2023

**Integrating groundwater flux measurements in groundwater modelling of drought adaptation impacts: case study on sub-irrigation of treated wastewater in Kinrooi (Belgium)**

Lara Speijer (Speaker), Mateusz Zawadzki (Contributor), Delphine Vandeputte (Contributor), Yiqi Su (Contributor), Mingyue Luo (Contributor), Yue Gao (Contributor), Marc Elskens (Contributor), Pascal Verhoest (Contributor), Jo Renate Bauwens (Contributor), Tom Coussement (Contributor), Frank Elsen (Contributor), Birte Raes (Contributor), Steven Eisenreich (Contributor), Goedele Verreydt (Contributor), Jef Dams (Contributor) & Marijke Huysmans (Contributor)  
11 Sep 2023 → 15 Sep 2023

**Assessing the AhR-mediated activity of Polycyclic Aromatic Hydrocarbons (PAHs) and their Methylated Derivatives using AhR-CALUX Bioassay**

Yiqi Su (Speaker), Besarta Matranxhi (Contributor), Yuwei Jia (Contributor), Yue Gao (Contributor) & Marc Elskens (Contributor)  
10 Sep 2023 → 14 Sep 2023

**Optimization and implementation of the CALUX bioassay for the determination of endocrine active substances present in dental materials and food (Event)**

Luc Leyns (Jury), Imke Boonen (Presenter) & Marc Elskens (Supervisor)  
1 Dec 2022

**Reuse of treated wastewater for irrigation and groundwater recharge: effects on groundwater levels and quality**

Mateusz Zawadzki (Speaker), Lara Speijer (Contributor), Delphine Vandeputte (Contributor), Yiqi Su (Contributor), Mingyue Luo (Contributor), Yue Gao (Contributor), Marc Elskens (Contributor), Jo Renate Bauwens (Contributor), Pascal Verhoest (Contributor), Tom Coussement (Contributor), Frank Elsen (Contributor), Birte Raes (Contributor), Dries De Bièvre (Contributor), Steven Eisenreich (Contributor) & Marijke Huysmans (Contributor)  
20 Oct 2022

**Re-use of treated wastewater for irrigation and groundwater recharge: feasibility and effects on groundwater quantity at the experimental site in Kinrooi, Belgium.**

Mateusz Zawadzki (Speaker), Lara Speijer (Contributor), Delphine Vandeputte (Contributor), Yiqi Su (Contributor), Mingyue Luo (Contributor), Yue Gao (Contributor), Marc Elskens (Contributor), Jo Renate Bauwens (Contributor), Pascal Verhoest (Contributor), Steven Eisenreich (Contributor), Tom Coussement (Contributor), Frank Elsen (Contributor), Birte Raes (Contributor) & Marijke Huysmans (Contributor)  
27 May 2022

**Re-use of treated wastewater for irrigation and groundwater recharge: environmental impact assessment based on tracer method at the experimental site in Kinrooi, Belgium**

Lara Speijer (Speaker), Delphine Vandeputte (Contributor), Mateusz Zawadzki (Contributor), Yiqi Su (Contributor), Mingyue Luo (Contributor), Yue Gao (Contributor), Marc Elskens (Contributor), Pascal Verhoest (Contributor), Jo Renate Bauwens (Contributor), Tom Coussement (Contributor), Frank Elsen (Contributor), Birte Raes (Contributor), Steven Eisenreich (Contributor) & Marijke Huysmans (Contributor)  
23 May 2022 → 27 May 2022



**Endocrine Disruptors Workshop**

Marc Elskens (Speaker)  
22 Jun 2021

**Solange Grimal**

Marc Elskens (Host)  
Jun 2021 → Oct 2021

**International Summer School on Analytical Chemistry, Metrology and Accreditation**

Marc Elskens (Speaker)  
Jul 2020

**Development of DGT passive sampler for the assessment of polycyclic aromatic hydrocarbons (PAHs) in water using AhR-CALUX as detection method**

Xiaohan Zhang (Speaker), Yue Gao (Contributor), Michael S. Denison (Contributor) & Marc Elskens (Contributor)  
19 Feb 2020 → 21 Feb 2020

**Hang Hoang Ti My**

Marc Elskens (Host)  
Oct 2019 → Nov 2019

**Development of DGT passive sampler for the assessment of polycyclic aromatic hydrocarbons (PAHs) in water using AhR-CALUX as detection method**

Xiaohan Zhang (Presenter), Marc Elskens (Contributor), Michael S. Denison (Contributor), huisheng zhuang (Contributor) & Yue Gao (Contributor)  
18 Sep 2019 → 20 Sep 2019

**International Summer School on Analytical Chemistry, Metrology and Accreditation**

Marc Elskens (Chair)  
Jul 2019

**Cooperation program between VUB, UGent and Hué University. Preservation of the coastal ecosystem and natural resources in Cau Hai lagoon under the effects of development activities**

Marc Elskens (Lecturer)  
9 Apr 2019 → 17 Apr 2019

**TriboREMEDY meeting: H2020-FETOPEN-2018-2019-2020-01**

Marc Elskens (Member of programme committee)  
28 Mar 2019 → 30 Mar 2019

**Education agreement with Sichuan University. Subject 2 + 3 years master's degree programs in Chemistry**

Marc Elskens (Presenter)  
13 Oct 2018 → 18 Oct 2018

**Strategy of Sustainable Development of China: Environmental Aspects**

Yue Gao (Organiser), Xinning Song (Organiser), Philippe Claeys (Chair) & Marc Elskens (Chair)  
27 Jun 2018

**Influence of discharge and temperature on the transport of tracer pollutants along an urban river (Zenne, Belgium)**

Natacha Brion (Speaker), Vincent Carbonnel (Contributor), Michel A. Verbanck (Contributor), Marc Elskens (Contributor) & Philippe Claeys (Contributor)  
5 Jun 2018

**Development and implementation of the ERE-CALUX bioassay: Assessment of estrogens in the environment and in food packaging materials (Event)**

Luc Leyns (Jury), Tara Vandermarken (Presenter) & Marc Elskens (Supervisor)

29 May 2018

**AMGC Field sampling @ Aquiris on May 9th, 2018**

Kersten Van Langenhove (Participant) & Marc Elskens (Supervisor)  
9 May 2018

**ICEPRAR 2018**

Marc Elskens (Participant)  
18 Apr 2018 → 20 Apr 2018

**ICEPRAR 2018**

Marc Elskens (Invited speaker)  
18 Apr 2018 → 20 Apr 2018

**Mineral oil research in Belgium: Results of the market survey**

Annelies Van Heyst (Invited speaker), Els Van Hoeck (Contributor), Joeri Vercammen (Contributor), Mathias Vanlancker (Contributor) & Marc Elskens (Contributor)  
29 Mar 2018

**Diana Di Nitto**

Marc Elskens (Host)  
2018 → 2019

**Frits Heinrich**

Marc Elskens (Host)  
2018 → 2020

**Evidence of high N<sub>2</sub> fixation rates in productive waters of the temperate Northeast Atlantic**

Debany Fonseca-Batista (Speaker), Florian Deman (Contributor), Xuefeng Li (Contributor), Natacha Brion (Contributor), Marc Elskens (Contributor), Virginie Riou (Contributor), Lei Chou (Contributor), François Fripiat (Contributor), Sarthou Geraldine (Contributor), Julie Laroche (Contributor), Planquette H el ene (Contributor) & Frank Dehairs (Contributor)  
18 Dec 2017 → 19 Dec 2017

**Maria Grazia Bonelli**

Niels De Winter (Host), Imke Boonen (Host), Kersten Van Langenhove (Host) & Marc Elskens (Host)  
30 Nov 2017

**The isotopic niche of odontocetes in the southwestern Atlantic Ocean and its relation to environmental isotopic patterns**

Genyffer Cibele Troina (Speaker), Silvina Botta (Contributor), Marc Elskens (Contributor), Frank Dehairs (Contributor) & Eduardo R. Secchi (Contributor)  
23 Oct 2017 → 27 Oct 2017

**Adam Sajn og**

Marc Elskens (Host)  
2 Oct 2017 → 2 Dec 2017

**Cooperation program between VUB, UGent and Hu e University. Preservation of the coastal ecosystem and natural resources in Cau Hai lagoon under the effects of development activities"**

Marc Elskens (Lecturer)  
24 Sep 2017 → 23 Oct 2017

**AMGC Field sampling @ Aquiris using novel o-DGT equipment**

Kersten Van Langenhove (Participant), Wei Guo (Participant), Camille Gaulier (Participant), Yue Gao (Supervisor) & Marc Elskens (Supervisor)  
18 Sep 2017 → 22 Sep 2017

**International Summer School on Analytical Chemistry, Metrology and Accreditation**

Marc Elskens (Chair)

9 Jul 2017 → 22 Jul 2017

**Assessing cetaceans' intra and interspecific trophic interactions and niche width using  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  from basal sources to top predators**

Genyffer Cibele Troina (Speaker), Silvina Botta (Contributor), Marc Elskens (Contributor), Frank Dehairs (Contributor) & Eduardo R. Secchi (Contributor)

19 Jun 2017 → 23 Jun 2017

**the EGU General Assembly 2017**

Marc Elskens (Participant)

21 Apr 2017

**Anna Zawrotniak**

Kersten Van Langenhove (Supervisor) & Marc Elskens (Host)

13 Feb 2017 → 30 Jun 2017

**Monika Bryczkowska**

Kersten Van Langenhove (Supervisor) & Marc Elskens (Host)

13 Feb 2017 → 30 Jun 2017

**Natalia de Souza Pelinson**

Kersten Van Langenhove (Supervisor) & Marc Elskens (Host)

13 Feb 2017 → 30 Jun 2017

**My Tran Ti Ai**

Marc Elskens (Host)

1 Sep 2016 → 5 Oct 2017

**International Summer School on Analytical Chemistry, Metrology and Accreditation**

Marc Elskens (Chair)

10 Jul 2016 → 23 Jul 2016

**Master of Sciences in Chemistry**

Marc Elskens (Contributor)

Mar 2016

**CONSEIL REGIONAL NORD – PAS DE CALAIS Direction de la Recherche, Enseignement Supérieur, Santé et Technologies de l'Information et de la Communication Service Recherche et Technologies (External organisation)**

Marc Elskens (Reviewer)

21 Jan 2016

**International Summer School on Analytical Science, Metrology and Accreditation**

Marc Elskens (Speaker)

12 Jul 2015 → 25 Jul 2015

**Comprehensive chemical analyses of Environmental pollutants benefit from combined chemical and bio-analytical approaches**

Marc Elskens (Speaker)

Mar 2015

**CONSEIL REGIONAL NORD – PAS DE CALAIS Direction de la Recherche, Enseignement Supérieur, Santé et Technologies de l'Information et de la Communication Service Recherche et Technologies (External organisation)**

Marc Elskens (Reviewer)  
7 Jan 2015

**Belgian committee of UNESCO-International Hydrological Programme (External organisation)**  
Marc Elskens (Member)  
2015 → 2017

**International Summer School on Analytical Chemistry, Metrology and Accreditation**  
Marc Elskens (Speaker)  
27 Jul 2014 → 9 Aug 2014

**Eurachem Workshop: Quality in Analytical Measurements**  
Marc Elskens (Participant)  
19 May 2014 → 21 May 2014

**Gianni Sulas**  
Kersten Van Langenhove (Supervisor) & Marc Elskens (Host)  
7 Apr 2014 → 28 Nov 2014

**The CALUX bioassay: PCDD/F and PCB analysis in sludge and sediment samples and methodological optimization (Event)**  
Luc Leyns (Jury), Kersten Van Langenhove (Presenter) & Marc Elskens (Supervisor)  
27 Feb 2014

**FOD Volksgezondheid, Veiligheid van de Voedselketen en Leefmilieu / SPF Santé publique, Sécurité de la Chaîne alimentaire et Environnement (External organisation)**  
Marc Elskens (Member)  
2014 → 2017

**International Summer School on Analytical Science, Metrology and Accreditation**  
Marc Elskens (Speaker)  
1 Jul 2013 → 14 Jul 2013

**Consortium of Measurement Science in Chemistry, Euromaster MSC (External organisation)**  
Marc Elskens (Member)  
2013 → 2017

**Training School on Geotraces data quality control**  
Marc Elskens (Chair)  
10 Apr 2012 → 12 Apr 2012

**31st International Symposium on Halogenated Persistent Organic Pollutants**  
Marc Elskens (Chair)  
21 Aug 2011 → 25 Aug 2011

**Tracer and Timescale Methods for Understanding Complex Geophysical and Environmental Processes**  
Marc Elskens (Speaker)  
16 Aug 2011 → 19 Aug 2011

**Accumulation of trace elements in mussels, fish and marine mammals from the Black Sea (Event)**  
Luc Leyns (Jury), Dorina Bolba (Presenter), Marc Elskens (Supervisor) & Martine Leermakers (Supervisor)  
18 Mar 2011

**European Union Reference Laboratory, Fribourg, Germany (External organisation)**  
Marc Elskens (Contributor)

12 Dec 2010 → 15 Dec 2010

**Scientific Institute of Public Health, Brussels (External organisation)**

Marc Elskens (Member)

2010 → 2018

## Press/Media

**Free Brussels Journal METRO covers our SUBLIMUS project**

Philippe Claeys, Marc Elskens & Natacha Brion

20/09/19

1 item of Media coverage

**High levels of oestrogen found in the Zenne**

Tara Vandermarken, Natacha Brion, Kersten Van Langenhove & Marc Elskens

16/10/18

1 Media contribution

**La Dernière Heure, VRT-NEWS, RTBF, Les Échos, Bruzz, Daily Science etc. highlighted our SUBLIMUS project**

Natacha Brion, Philippe Claeys & Marc Elskens

24/10/19 → 16/08/21

15 items of Media coverage

## Awards

**EU601: triboREMEDY: The triboreactor as breakthrough remediation strategy for safeguarding human and environmental health.**

Elskens, M.

European Commission: €365,418.75

1/03/19 → 31/05/23

## Projects

**FWOAL408: A multi-proxy approach to study biogeochemical cycling of carbon and nitrogen in tropical and temperate estuaries**

Elskens, M., Brion, N., Bouillon, S. & Dehairs, F.

1/01/07 → 31/12/10

**FVO28: Berekening en ontwikkeling van indicatoren voor biociden.**

Elskens, M.

1/12/06 → 30/04/08

**OZR3094: Bilateral Cooperation ikv common doctoral project: Bench Fee for Joint PhD VUB-ULB, Zhang Hailong**

Elskens, M.

7/02/17 → 31/12/20

**OZR3335: Bilateral cooperation within the framework of a joint doctoral project: benchfee for joint PhD VUB - ULiège DEMAN FLORIAN**

Elskens, M.

21/09/18 → 20/09/22

**BRGIMP19: BRIDGE 2019: SUBLIMUS – Becoming modern green urban alchemists: Gold and silver mining from Brussels urban sewage**

Elskens, M., Claeys, P. & Brion, N.

1/03/19 → 30/06/22

**FWOKN299: Closing the gap on endocrine disrupting chemicals, a novel passive sampling technique supported by discrete and continuously sampled waters**

Elskens, M. & Claeys, P.

1/01/18 → 31/12/21

**OZR3252: Cofinancing OZR FWO Hercules MZW equipment: A walk on the wild side of stable isotope biogeochemistry...**

Claeys, P., Elskens, M., Olde Venterink, H., Nys, K., Tys, D., Kervyn De Meerendre, M., Huybrechts, P., Van Griensven, A., Huysmans, M., Thiery, W. & Snoeck, C.

1/05/18 → 30/04/23

**CONO519: Conference-Summer School (July 2016): Summer School on Analytical Chemistry, Metrology and Accreditation**

Elskens, M.

22/09/15 → 31/12/16

**BRGEOZ224: Development and validation of the passive samplers Diffusive Gradients in Thin Films (DGT) as monitoring tools to study metal dynamics and sediment - water interactions in a complex river system such as the Zenne River.**

Elskens, M.

1/01/13 → 31/12/14

**FOD74: ENDFOODTOX : screening de perturbateurs endocriniens potentiels liés à l'alimentation, évaluation de leur activité oestro/androgénique et de l'exposition alimentaire de la population belge.**

Elskens, M., PICRON, J., VAN HOECK, E., DE LUCA, D., BLAUDE, M. N., VANHEE, C. & DE RIDDER, K.

1/01/19 → 31/10/21

**BRGEOZ244: Endocrine disrupting chemicals in hospital effluent waters from the Brussels region and its impact on bacterial biodiversity.**

Elskens, M., Servais, P. & Van Langenhove, K.

1/02/14 → 28/02/17

**OZR4161: Extension of the PhD trajectory due to Covid-19 (BOF Budget)**

Eeltink, S., Elskens, M., Versées, W., Mattelaer, A., Oberthur, S., Wambacq, P., Lambert, B., Claeys, P., Keulen, S., Anckaert, E., Mast, J., Tompa, P., Coene, G., Hubin, A., Leermakers, M. & Gao, Y.

15/08/23 → 30/11/24

**HERC46: FWO Hercules MZW: A walk on the wild side of stable isotope biogeochemistry**

Claeys, P., Elskens, M., Olde Venterink, H., Nys, K., Tys, D., Kervyn De Meerendre, M., Huybrechts, P., Van Griensven, A., Huysmans, M., Thiery, W. & Snoeck, C.

1/05/18 → 30/04/22

**BRGEOZ146: GESZ: Towards the "good ecological status" in river Zenne: re-evaluating Brussels' wastewater management.**

Brion, N., Bauwens, W., Chen, M., Elskens, M., Baeyens, W., Van Griensven, A., Leta, O. T., Shrestha, N. K., Servais, P., Verbanck, M. & Van Langenhove, K.

1/05/09 → 30/04/14

**IRP25: GROW: Re-use of treated wastewater for irrigation, groundwater recharge and drinking water: environmental impacts and public perception**

Huysmans, M., Bauwens, J. R., Verhoest, P., Elskens, M. & Gao, Y.

1/11/24 → 31/10/29

**CONI519: INSCHRIJVINGEN: Zomerschool (juli 2016)**

Elskens, M.

22/09/15 → 31/12/16

**HERC65: Inside-Out - The X-Ray approach**

Snoeck, C., Goderis, S., Veselka, B., Olde Venterink, H., Kervyn De Meerendre, M., Lambert, B., Elskens, M., Vandam, R., Van den Brande, N., Tielens, F., Nys, K., Zekollari, H., Hauffman, T., Peeters, E., Claeys, P., Gao, Y., Rahier, H., Meulebroeck, W., Provyn, S., Leermakers, M., Thiery, W. & Devos, Y.

1/05/24 → 30/04/28

**CONO361: Internationale workshop/School over tracer- en tijdsschaalmethoden voor complexe geofysische- en milieuprocessen.(Louvain-la-Neuve van 16/8/2011 tot 19/08/2011)**

Elskens, M.

1/08/11 → 19/11/11

**FWOAL272: Koolstofexport en heterotrofe afbraak van planktondetritrus in de oceaan.**

Elskens, M., Baeyens, W., Savoye, N. & Dehairs, F.

1/01/04 → 31/12/07

**FOD15: Migratie van minerale olie uit kartonnen verpakkingen voor levensmiddelen: Identificatie van de gevaren en evaluatie van de blootstelling van de Belgische bevolking.**

Elskens, M.

1/10/15 → 13/01/19

**OZRSRF15: Modern chemometric data analysis for Earth and Environmental Science problems - SRF mandate**

Elskens, M.

1/10/13 → 30/09/18

**BRGEOZ262: OSIRIS - Tracing Metropolitan Brussels water routes**

Claeys, P., Elskens, M., Brion, N. & Verbanck, M.

1/10/14 → 30/09/16

**BRGEOZ262B: OSIRIS - Tracing Metropolitan Brussels water routes**

Claeys, P., Elskens, M. & Brion, N.

1/10/16 → 30/09/18

**BRGEOZ417: Prospective Research: Plastic City: Prospecting the plastic environmental debt in the Brussels Region – present status and future projections**

Elskens, M. & Brion, N.

1/09/22 → 1/10/25

**GOA53: Proxies and Numerical Tools for Assessing Organic Carbon Export Flux and Deep Ocean Processing.**

Elskens, M., Baeyens, W., Bouillon, S., Brion, N. & Dehairs, F.

1/01/07 → 31/12/11

**FVO40: Quantification des composés dioxiniques présents dans des engrais, des amendements du sol et dans les boues d'épuration destinées à être valorisées sur les sols agricoles.**

Elskens, M., Goeyens, L., Kerkhofs, P. & Van Langenhove, K.

13/09/10 → ...

**FWOAL811: Release of Bisphenol A and other endocrine disruptors from synthetic resin based dental filling materials**

Elskens, M.

1/01/16 → 31/12/19

**FWOAL860: Rethinking Roman Nutrition. Assessing the nutritional biochemistry and stable isotope chemistry of archaeobotanical cereals and pulses from Roman Egypt.**

Erdkamp, P. & Elskens, M.

1/01/18 → 31/12/20

**IRP17: Re-use of treated wastewater for irrigation and groundwater recharge: environmental impacts and public perception**

Huysmans, M., Bauwens, J. R., Verhoest, P., Elskens, M. & Gao, Y.  
1/11/19 → 30/11/25

**FVO37: Risk-evaluation for the Belgian citizens of aluminium in food**

Elskens, M., Leermakers, M., Bolle, F. & Van Loco, J.  
1/03/10 → 13/08/12

**HERC55: Shooting stars and blasting dinosaurs: boosting ICP-MS capabilities across various research domains.**

Goderis, S., Olde Venterink, H., Tielens, F., Snoeck, C., Terryn, H., Nys, K., Leermakers, M., Claeys, P., Elskens, M., Kervyn De Meerendre, M., Lambert, B., Peeters, E., Hauffman, T., Rahier, H., Gao, Y., Meulebroeck, W. & Wouters, B.  
1/05/22 → 30/04/26

**VLIR296: South Initiative (SI) : Tracing the status and impacts of terrestrial contamination in the coastal environments of Tanzania.**

Brion, N., Elskens, M. & Baeyens, W.  
1/09/14 → 31/08/16

**SRP68: SRP-Onderzoekszwaartepunt: Earth: from Accretion to Anthropocene: Documenting 4.5 Billion Years of Global Changes**

Claeys, P., Goderis, S., Snoeck, C., Elskens, M., Gao, Y., Kervyn De Meerendre, M. & Huybrechts, P.  
1/11/22 → 31/10/27

**FOD33: Stikstof-oxide en stikstofcyclus in de Antarctisch met Zeeijs bedekte zone OCeANIC**

Elskens, M., Dehairs, F. & Dehairs, F.  
1/10/16 → 30/09/20

**SRP2: Strategic Research Programme: Tracing and Modelling of Past & Present Global Changes**

Claeys, P., Elskens, M., Huybrechts, P., Gao, Y., Kervyn De Meerendre, M., Claeys, P., Baeyens, W. & Dehairs, F.  
1/11/12 → 31/10/24

**FVO46: Studie van de eventuele migratierisico's van materialen die in contact komen met levensmiddelen voor kinderen jonger dan 3 jaar (ALTPOLYCARB)**

Elskens, M., Van Langenhove, K. & Vandermarken, T.  
1/11/12 → 31/10/15

**FOD78: Terbeschikking stelling van expertise en infrastructuur in kader van doctoraal onderzoek :“Migratie van minerale olie uit kartonnen verpakkingen voor levensmiddelen : identificatie van de gevaren en evaluatie van de blootstelling van de Belgische bevolking.**

Elskens, M.  
1/10/18 → 30/09/19

**ANI66: Test project BIOMONITORING in the framework of the program Research and Development for the Integrated Storage project cat. A**

Elskens, M. & Leermakers, M.  
18/03/10 → 17/03/13

**FWOAL623: The biological carbon pump and role of diazotrophs in open ocean carbon export**

Dehairs, F. & Elskens, M.  
1/01/12 → 31/12/15

**OZR1832: Trace metal speciation in aquatic systems through voltammetric techniques.**

Elskens, M.  
1/01/09 → 31/12/09



**EU601: triboREMEDY: The triboreactor as breakthrough remediation strategy for safeguarding human and environmental health.**

Elskens, M.  
European Commission  
1/03/19 → 31/05/23

**OZR3416: triboREMEDY: The triboreactor as breakthrough remediation strategy for safeguarding human and environmental health (OZR EU Bonus)**

Elskens, M.  
1/03/19 → 28/02/23

## **Student theses**

**OPTIMISING THE USE OF SYNTHETIC ION EXCHANGE RESIN TO EXTRACT GOLD FROM WASTEWATER TREATMENT PLANT RESIDUES**

Author: Liu, J., Brion, N., Jia, Y. & Elskens, M., 2024  
Supervisor: Brion, N. (Promotor), Jia, Y. (Advisor) & Elskens, M. (Promotor)

**Testing and optimizing methods for the sampling and determination of microplastics in Brussels waterways**

Author: Van Campenhout, K., Brion, N. & Elskens, M., 2023  
Supervisor: Brion, N. (Promotor) & Elskens, M. (Promotor)

**Predicting global and local reactivity descriptors, the neural network approach**

Author: Jacobs, M., De Vleeschouwer, F., Vermeersch, L., Geerlings, P. & Elskens, M., Sep 2022

**Guiding Brussels toward the circular city of tomorrow: groundwork for a green and sustainable gold recovery approach on urban wastewater through biosorption**

Author: Dervishi, M., Elskens, M., Brion, N. & Nicolay, X., 2022  
Supervisor: Elskens, M. (Promotor), Brion, N. (Co-promotor) & Nicolay, X. (External person) (Advisor)

**Development of an environmentally friendly and low-cost leaching procedure for the recovery of gold in sewage sludge**

Author: El Yazidi, S., Elskens, M. & Brion, N., 2021  
Supervisor: Elskens, M. (Promotor) & Brion, N. (Promotor)

**Metal recovery for Brussels-North (Aquiris) wastewater treatment plant**

Author: Kapongo, D. F., Brion, N. & Elskens, M., 2021  
Supervisor: Brion, N. (Co-promotor) & Elskens, M. (Promotor)

**Patterns and dynamics of microplastics in the Zenne River upstream and downstream Brussels, Belgium**

Author: Kazalyiev, M., Brion, N. & Elskens, M., 2021  
Supervisor: Brion, N. (Promotor) & Elskens, M. (Promotor)

**Chemical and toxicological assessment of e-cigarette liquids.**

Author: Barhdadi, S., Vanhaecke, T., Rogiers, V., Eric, D., Visser, W., Covaci, A., Van Eeckhaut, A., Elskens, M. & De Paepe, K., 29 Sep 2020  
Supervisor: Vanhaecke, T. (Promotor), Rogiers, V. (Promotor), Deconinck, E. (External person) (Promotor), Visser, W. (External person) (Jury), Covaci, A. (External person) (Jury), Van Eeckhaut, A. (Jury), Elskens, M. (Jury) & De Paepe, K. (Jury)

**Quantification and identification of microplastics in the Zenne river upstream and downstream from Brussels, Belgium**

Author: Knops, L. A. L., Elskens, M. & Brion, N., 2020  
Supervisor: Elskens, M. (Promotor) & Brion, N. (Co-promotor)

**CALUX Bioassay for the estimation of B[a]P, 7-methylbenzo[a]pyrene, anthracene and liquid paraffin activity**

Author: Du, H., Van Langenhove, K., Elskens, M. & Gao, Y., 2018

Supervisor: Van Langenhove, K. (Promotor) & Gao, Y. (Promotor)

**PCDD/Fs and dl-PCBs in environmental samples originating from industries, wastewater treatment plants and rivers in Ethiopia– CALUX bioassay.**

Author: Debebe, S. B., Van Langenhove, K. & Elskens, M., 2018

Supervisor: Elskens, M. (Promotor) & Van Langenhove, K. (Advisor)

**Modulation de l'activité transcriptionnelle de récepteurs nucléaires par des produits de migration de matériaux en plastique destinés aux jeunes enfants.**

Author: Simon, C., Bourguignon, J., Brion, F., Elskens, M., Muller, M., Parent, A., Robbens, J., Charlier, C., Demaegdt, H. & Scippo, M., 17 Jan 2017

**Degradation of estrogenic endocrine disruptors by laccases: from estrogenicity monitoring methods to reactor design**

Author: Blavier, J., Debaste, F. & Elskens, M., 5 Dec 2016

**A little matters. eEDC activity, sources and loadings in the Zenne River, Brussels.**

Author: Swartz, E., Elskens, M., Eisenreich, S. J., Brion, N. & Van Langenhove, K., 1 Sep 2016

Supervisor: Elskens, M. (Promotor), Eisenreich, S. (Co-promotor), Brion, N. (Advisor) & Van Langenhove, K. (Advisor)

**Investigation of the behaviour of the endocrine disrupting chemicals in the Zenne River based on the analysis of the endocrine activity of river and sediment samples using a reporter gene assay for estrogenicity**

Author: Genáhl, D., Van Griensven, A., Elskens, M., Van Langenhove, K., Bauwens, W., Eisenreich, S. J. & Lubbad, I., 1 Sep 2016

Supervisor: Van Langenhove, K. (Advisor)

**Determination of PCDD/Fs and dl-PCBs in sediment from the Cau Hai Lagoon (Vietnam) and wood ash from domestic heating systems (Belgium)**

Author: Boonen, I., Elskens, M., Croes, K., Vandermarken, T., Van Langenhove, K. & Leyns, L., 1 Jul 2016

Supervisor: Vandermarken, T. (Advisor), Croes, K. (Co-promotor), Elskens, M. (Promotor), Van Langenhove, K. (Jury) & Leyns, L. (Jury)

**Investigating natural and xenohormones: estrogenicity of pure compounds and mixtures**

Author: Gossiaux, F., Elskens, M., Vandermarken, T., Van Langenhove, K. & Ballet, S., 1 Jul 2016

Supervisor: Vandermarken, T. (Advisor), Elskens, M. (Promotor), Van Langenhove, K. (Jury) & Ballet, S. (Jury)

**Understanding the electronic and structural effects in homogenous and heterogenous catalysis: a conceptual and computational quantum chemical approach**

Author: Skara, G., Elskens, M., De Proft, F. & Geerlings, P., Mar 2016

**Assessments of the potential trace metal contamination of vegetables and the corresponding under root soil in Addis Ababa, Ethiopia and potential health risks**

Author: Tekle, S. G., Elskens, M. & Eisenreich, S. J., 2016

**Hair as a non-invasive matrix for assessment of human exposure to selected flame retardants and future potential in biomonitoring**

Author: Kucharska, A., Covaci, A. & Elskens, M., 2016

**Ouvrages d'assainissement des eaux et qualité du milieu récepteur en zone urbaine. Cas de rejets dans La Marque à Villeneuve d'Ascq**

Author: Ivanovsky, A., Elskens, M. & Billon, G., 2016

**Development of DGT for assessment of micro-organic pollutants in water using in vitro CALUX analyses**

Author: Meert, S., Gao, Y., Van Langenhove, K., Elskens, M., Leermakers, M. & Vandermarken, T., 11 Sep 2015

Supervisor: Gao, Y. (Promotor) & Van Langenhove, K. (Co-promotor)

**Elaboration d'un pilote de filtration horizontale pour la potabilisation de l'eau dans les pays en voie de développement. Aspects bio-physico-chimiques**

Author: Foto, E., Elskens, M. & Wartel, M., 2015

**Speleothems as tools to reconstruct paleoclimates in temperate (Belgium) and semi-arid (Socotra, Yemen) regions during the Mid- to Late Holocene**

Author: Van Rampelbergh, M., Claeys, P., Keppens, E., Elskens, M., Huybrechts, P., Dehairs, F., Vonhof, H. & Fagel, N., 7 Nov 2014

Supervisor: Claeys, P. (Promotor), Verheyden, S. (Advisor), Keppens, E. (Co-promotor), Fagel, N. (External person) (Jury), Huybrechts, P. (Jury), Vonhof, H. (External person) (Jury), Dehairs, F. (Jury) & Elskens, M. (Jury)

**Modelling the dispersion of radionuclides in river systems. Study of the Molve Nete-Grote Nete River**

Author: Fiengo Perez, F., Bauwens, W., Elskens, M. & Sweeck, L., 17 Sep 2014

Supervisor: Bauwens, W. (Promotor), Elskens, M. (Promotor) & Sweeck, L. (External person) (Promotor)

**Modelling the dispersion of radionuclides in river systems. Study of the Molve Nete-Grote Nete River.**

Author: Fiengo Perez, F., Bauwens, W., Elskens, M., Sweeck, L. & Pyl, L., Jun 2014

Supervisor: Pyl, L. (Jury)

**Etude de la contamination des eaux et sédiments par les pesticides**

Author: El-Osmani, R., Elskens, M. & Ouddane, B., 2014

**Evaluation of green algae deployment for organic pollutant removal in urban wastewater through ERE-CALUX potency assessment**

Author: Sulas, G., Pistocchi, R., Brion, N., Elskens, M. & Van Langenhove, K., 2014

Supervisor: Pistocchi, R. (External person) (Promotor), Brion, N. (Co-promotor), Elskens, M. (Co-promotor) & Van Langenhove, K. (Advisor)

**In vitro analysis of the potential endocrine disrupting effects of Bisphenol A and Bisphenol S on human cells**

Author: Chapmbeng, L., Leyns, L., Elskens, M. & Pauwels, A., 2014

Supervisor: Pauwels, A. (Advisor) & Van Langenhove, K. (Advisor)

**In vitro screening to assess the safety of paper and board food contact materials**

Author: Gryspeirt, C., Vandermarken, T., Elskens, M. & Van Langenhove, K., 2014

Supervisor: Vandermarken, T. (Promotor)

**Multireceptor analysis of EDCs: Estrogenic activity and androgenic cell line development**

Author: Van Groeninge, N., Elskens, M., Denison, M. S., Van Langenhove, K. & Vandermarken, T., 2014

Supervisor: Elskens, M. (Promotor), Denison, M. S. (External person) (Promotor), Van Langenhove, K. (Co-promotor) & Vandermarken, T. (Advisor)

**Development and application of the ceramic passive sampler in combination with the CALUX bioassay as a technique for long-term monitoring of PCDD/Fs and dioxin-like PCBs in aquatic systems**

Author: Amr, A., Elskens, M. & Baeyens, W., 1 Mar 2013

Supervisor: Elskens, M. (Promotor) & Baeyens, W. (Promotor)

**Biogeochemistry of Micro-pollutants in Sediments of Mtoni estuary, Tanzania**

Author: Mihale, M., Mihale, M., Baeyens, W., Tungaraza, C., Elskens, M., Leermakers, M. & Van Langenhove, K., Mar 2013

Supervisor: Baeyens, W. (Promotor) & Tungaraza, C. (External person) (Co-promotor)

**Importance of combined sewer overflow events on the dynamics of organic matter, nitrogen and phosphorus in a small urban river (Zenne River, Brussels)**

Author: Nguyen, T. T. T., Elskens, M. & Brion, N., 2013

Supervisor: Elskens, M. (Promotor) & Brion, N. (Co-promotor)

**Modelling the fate and transport of trace metals in Zenne basin using OpenMI**

Author: Punzal, C. J., Bauwens, W. & Elskens, M., 2013

**Water Quality assessment: Analysis of Dioxins in the Zenne River Using passive Sampler and CALUX Bioassay**

Author: Zaidi, L., Elskens, M. & Van Langenhove, K., 2013

Supervisor: Elskens, M. (Promotor) & Van Langenhove, K. (Advisor)

**Non-cancerous health risk assessment of toxic metals due to consumption of vegetables irrigated with polluted river waters in Addis Ababa, Ethiopia**

Author: Wossen Tafere, A., Elskens, M., Leermakers, M. & Le Xuan, Q., 9 Sep 2011

Supervisor: Elskens, M. (Promotor), Leermakers, M. (Co-promotor) & Le Xuan, X. (Jury)

**Modelling the dispersion of radionuclides and trace metals in the Molve Nete River basin**

Author: Tran Thi Ngoc, L., Bauwens, W. & Elskens, M., 30 Jun 2011

Supervisor: Bauwens, W. (Promotor) & Elskens, M. (Promotor)

**Speciation study of trace metals in the Zenne and Deule rivers**

Author: Vandermarken, T., Elskens, M. & Magnier, A., 2 Jul 2010

Supervisor: Elskens, M. (Promotor) & Magnier, A. (Advisor)

**Water Quality Assessment: Determining Dioxin Potency by Means of the CALUX Bioassay**

Author: Keupers, I., Elskens, M., Baston, D. S. & Van Langenhove, K., 2010

Supervisor: Elskens, M. (Promotor), Baston, D. S. (Co-promotor) & Van Langenhove, K. (Advisor)

**Optimization and validation of the CALUX bioassay for analysis of PCDD/Fs and dioxin-like PCBs in deposition material.**

Author: Van Langenhove, K., Elskens, M., Baeyens, W. & Croes, K., 3 Jul 2009

Supervisor: Elskens, M. (Promotor), Baeyens, W. (Promotor) & Croes, K. (Advisor)

**Impact of extensive shrimp farming on a tropical river ecosystem (Bac Lieu Province - Vietnam)**

Author: Tran, Q. B., Dehairs, F., Brion, N., Koedam, N., Elskens, M., Laus, G., Bouillon, S., De Brabandere, L. & Chou, L., 2008

Supervisor: Dehairs, F. (Promotor), Brion, N. (Jury), Koedam, N. (Jury), Elskens, M. (Jury), Laus, G. (Jury), Bouillon, S. (Jury), De Brabandere, L. (External person) (Jury) & Chou, L. (External person) (Jury)