

**Overview of the PhD student activities in the Chemistry program in the field of Environmental Chemistry:
2015/16**

Student (given name and surname)	Miroslav Brumovský
Supervisor (given name and surname)	Luca Nizzetto, Ph.D.
Consultant (given name and surname)	prof. RNDr. Ivan Holoubek, CSc., prof. RNDr. Jana Klánová, Ph.D.
Beginning of the study (month/year)	July 2013
Form of study (delete where appropriate)	Present (internal)

Summary of yearly research results (15 lines maximum)

In the past year, the student has successfully produced two first-author papers focused on emerging marine contaminants based on results obtained in the campaigns conducted in 2014. One of them, entitled "Exploring the occurrence and distribution of contaminants of emerging concern through unmanned sampling from ships of opportunity in the North Sea", was already published in an impacted journal (Journal of Marine Systems). Findings from this articles were reported by a popular science blog in the USA. The second, entitled "Per- and polyfluoroalkyl substances in the Western Mediterranean Sea waters", was submitted to the impacted journal Chemosphere. The manuscript received an acceptance decision a few days ago. The student acted as corresponding author to this submission. He demonstrated great maturity while dealing with reviewer comments.

The student was involved in a follow-up study to his first paper in which ships of opportunity (e.g. ferries and container ships) equipped with remotely controlled automatic water samplers were used for the first time to monitor marine pollutions in the North sea. The student participated in preparing the campaign and is going to contribute to sample extraction and analysis using solid phase extraction and LC-MS. During this campaign, data on a number of emerging contaminants will be collected including current use pesticides, pharmaceuticals (with a special emphasis on antibiotics), personal care products and artificial sweeteners.

The student presented (as a platform presentation) his experience with the on-board extraction of marine water samples under a controlled atmosphere in a workshop organized by the NORMAN Network (network of reference laboratories and research centres for the monitoring of emerging contaminants) held in Oslo, Norway (March 2016).

Moreover, the student got two two-month mobility grants from the Norway and EEA grants to visit Norwegian University of Life Sciences and Norwegian Institute for Water Research, both internationally recognized institutes in the area of marine pollution research. The student also won the Dean's Award for the good representation of the Faculty abroad.

Internship abroad (place, start date, duration)

The student spent two months (August-September 2015) in Norway visiting the Norwegian University of Life Sciences and Norwegian Institute for Water Research where he learned more about unmanned sampling technologies and was working on writing papers.

Publication activities during Ph.D. studies

Number of peer-reviewed articles in impacted journals	1 accepted +1 submitted
Number of conference (oral/poster) presentations	2
Number of other publishing activities (books, book chapters, patents etc.)	0
Public lecture in English (delete where appropriate)	Yes (2x)

The most important results (5 maximum, show the impact factor of the journal):

1	Brumovský et al., Exploring the occurrence and distribution of contaminants of emerging concern through unmanned sampling from ships of opportunity in the North Sea, Journal of Marine Systems (IF 2.508), Available online 9 March 2016, ISSN 0924-7963, http://dx.doi.org/10.1016/j.jmarsys.2016.03.004 .
2	Grant NF-CZ07-INP-4-196-2015, Monitoring emerging marine contaminants on ships of opportunity, two-month mobility grant to visit the Norwegian University of Life Sciences and Norwegian Institute for Water Research (August-September 2015).
3	Grant EHP-CZ07-INP-3-195-2015, Emerging contaminants in marine waters, two-month mobility grant to visit the Norwegian University of Life Sciences and Norwegian Institute for Water Research (August-September 2016).
4	Oral presentation, Norman workshop “Trends and advancements in the sampling and preservation of samples for the identification of contaminants of emerging concern”, Oslo, Norway.
5	Dean’s Award for the good representation of the Faculty abroad.