# Overview of the PhD student activities in the Chemistry program in the field of Environmental Chemistry: 2016/17

Student (given name and surname)	Chimi Wangmo
Supervisor (given name and surname)	Michal Bittner, Ph.D.
Consultant (given name and surname)	
Beginning of the study (month/year)	November, 2015
Form of study (delete where appropriate)	Present (internal)

### Summary of yearly research results (15 lines maximum)

- Preliminary results of the novel benchtop device based on reverse osmosis (RO) process to increase the concentration of the estrogenic compounds (17 $\beta$ -estradiol, 17 $\alpha$ -ethinyl estradiol, estrone and estriol) in spiked tap water was obtained.
- Submitted a paper: "C. Wangmo, E. Rozmánková, M. Bittner "Determination of estrogens in water using novel reverse osmosis enrichment method with subsequent in vitro analysis "for poster presentation at CEMEPE and SECOTOX Conference 2017 as well as for journal publication.
- Prepared review that will be sent to Environmental Science Processes and Impacts (ESPI) journal: In vitro assessment of sex steroids and related compounds in water and sediments Critical review" by author team C. Wangmo, S. Jarque, L. Bláha, K. Hilscherová, M. Bittner
- Conference platform presentation (by M. Bittner): M. Bittner, O. Škorvan, C. Wangmo: Vývoj experimentálního zařízení pro koncentraci solutů tlakovými membránovými procesy, at Inovativní Sanační Technologie ve Výzkumu a Praxi IX 2016, Třebíč, 12-13 October 2016
- Conference platform presentation (by M. Bittner): C. Wangmo, E. Rozmánková, A. Otoupalíková, M. Bittner: In vitro a instrumentální stanovení estrogenů ve vodném vzorku zakoncentrovaném pomocí reverzní osmózy, at. MEMPUR, 30.5.-1.6.2017, Pardubice

## Internship abroad (place, start date, duration)

International Summer School 2016, Faculty of Fisheries and Protection of Waters, University of South Bohemia in České Budějovice, Vodnany 27.06.2016 to 22.07.2016, One Month

#### Publication activities during Ph.D. studies

Number of peer-reviewed articles in impacted journals	
Number of conference (oral/poster) presentations	
Number of other publishing activities (books, book chapters, patents etc.)	

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

1	Completed courses: <b>PřF:C7023</b> Separation Methods, <b>PřF:Bi6882</b> Biomarkers and toxicity mechanisms, <b>PřF:C6860</b> Modern Methods of Pollutant Analysis	
2	Planned poster presentation on the topic: "Determinations of estrogens in water using novel reverse osmosis enrichment method with subsequent in vitro analysis" with E. Rozmánková, and M. Bittner at CEMEPE and SECOTOX Conference 2017, Thessaloniki, June 25 to 30, 2017	
3	Poster presentation on the topic: "Determinations of estrogens in water using novel reverse osmosis enrichment method with subsequent in vitro analysis" with E. Rozmánková, and M. Bittner at XD107 Chemistry Seminar, May 2017	
4	Prepared review that will be sent to Environmental Science - Processes and Impacts (ESPI) journal: In vitro assessment of sex steroids and related compounds in water and sediments – Critical review" by author team C. Wangmo, S. Jarque, L. Bláha, K. Hilscherová, M. Bittner	