**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 (17β-estradiol, 17α-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 teamC. 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](https://www.google.cz/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjqnfav3abUAhVIIsAKHSmvDtsQFggyMAE&url=https%3A%2F%2Fcs.wikipedia.org%2Fwiki%2F%25C4%258Cesk%25C3%25A9_Bud%25C4%259Bjovice&usg=AFQjCNHN9ZCDT4nvWYZrbwrGlolw1Hmk1w&sig2=gVKjQiI2GlksQYggq_aaSA), 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 | 3 |
| 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: **PřF:C7023** Separation Methods, **PřF:Bi6882** Biomarkers and toxicity mechanisms, **PřF:C6860** 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 teamC. Wangmo, S. Jarque,L. Bláha, K. Hilscherová, M. Bittner |