

COMMENTARY

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# News from the SETAC Europe Student Advisory Council (April 2013) - the 3rd Young Environmental Scientists (YES) meeting at the Jagiellonian University, Poland

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## Abstract

This article reports on the 3rd Young Environmental Scientists Meeting that was hosted from 11 to 13 February 2013 by the Institute of Environmental Sciences at the Jagiellonian University in Kraków, Poland. This student-only meeting under the theme of 'interdisciplinary discourse on current environmental challenges' was again organized by the Student Advisory Council of the Society of Environmental Toxicology and Chemistry Europe. An abstract book of the meeting is freely available as supplemental material of this article.

The Young Environmental Scientists (YES) Meetings are unique, student-only conferences aimed to help overcome some of the major issues young researchers have to cope with: receiving travel funding for scientific conferences, presenting research findings, and starting to build a scientific network. The 3rd YES Meeting (<http://www.sac-online.eu/yes2013/>) took place from 11 to 13 February 2013 and was hosted by the Institute of Environmental Sciences at the Jagiellonian University in Kraków, Poland. This meeting was organized jointly by the Society of Environmental Toxicology and Chemistry (SETAC) Europe Student Advisory Council (SAC; chaired by Jochen Zubrod), the Local Organizing Committee (chaired by Dragan Jevtić), and the Scientific Committee (chaired by Michael Melato and Markus Brinkmann), with the aim of achieving a fruitful meeting on a high scientific level.

As with the two previous meetings in Landau [1] and Aachen [2], both in Germany, one of the main goals of the 3rd YES Meeting was to invite students from all over the world based solely on the scientific quality of their submitted abstracts and not on their geographical or

financial limitations. To achieve this goal, participation in the YES Meeting was again free of charge and all student presenters received travel grants. This was only possible due to the remarkable financial support by our sponsors: SETAC (Europe, World, North America, and German Language Branch), universities (Institute of the Environmental Sciences of the Jagiellonian University and University of Koblenz-Landau), companies (BASF, Bayer CropScience, Dr. Knoell Consult, Evonik, Kawaska, Syngenta, and Waters), and a private sponsor (Mirco Bundschuh).

We received more than 145 abstracts in the fields of aquatic and terrestrial ecotoxicology, environmental risk assessment, effects and exposure modeling, environmental chemistry, life cycle assessment, nanoparticles, as well as omics and biomarkers from all over the world. After a thorough peer review by the Scientific Committee, 96 students from 27 countries were invited to give either one of 44 platform presentations (Table 1) and/or present a poster (all abstracts can be found in the program and abstract book published as Additional file 1 of this article; Figure 1). These contributions covered a wide array of topics and were generally of a very high scientific quality, which was judged by the participants and the senior scientists on site. This ensured the

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**Table 1 Platform presentations given in one of the eight sessions during the 3rd YES Meeting (Krakow, Poland)**

Session	Chairs	Authors	Presentation
Aquatic ecotoxicology	D. Englert, T. Floehr, V. Knežević, J. Zubrod	Schmidt et al., Galway-Mayo Institute of Technology, Ireland	Evaluation of effects of the pharmaceuticals diclofenac and gemfibrozil on marine mussels ( <i>Mytilus</i> spp.). Evidence for chronic sublethal effects on stress-response proteins
		Englert et al., University of Koblenz-Landau, Germany	Varying wastewater dilution in receiving streams - implications for stream ecosystem structure and function
		Dimitrov et al., Wageningen University, The Netherlands	Effects of the fungicide tebuconazole on fungal and bacterial communities in the sediment of outdoor freshwater microcosms
		Rico et al., Wageningen University, The Netherlands	Direct and indirect effects of the antibiotic enrofloxacin on tropical freshwater microcosms
		Peric et al., University of Barcelona, Spain	Aquatic and cellular toxicity of ionic liquids and their potential biodegradability in water
		Biermans et al., Belgian Centre for Nuclear Research, Belgium	Biological effects induced in <i>Arabidopsis thaliana</i> after aquatic exposure to radioactive contaminants
		Knežević et al., University of Novi Sad, Serbia	Sensitivity and recovery potential of <i>Lemna minor</i> after exposure to herbicide mixtures
		Wolf et al., Goethe University Frankfurt, Germany	When predictions go wrong: mixture toxicity of a repellent and a pyrethroid on aquatic invertebrates
		Tassou and Schulz, University of Koblenz-Landau, Germany	Environmentally-relevant tebufenozide concentrations affect reproduction in the freshwater midge <i>Chironomus riparius</i> in a chronic toxicity test
		Di Paolo et al., Swiss Centre for Applied Ecotoxicology Eawag-EPFL, Switzerland	Can the sensitivity and predictive potential of zebrafish early life stage (ELS) tests be improved by additional endpoints and chemical analysis?
Ecological risk assessment and remediation techniques	M. Melato and J. Zubrod	Vignet et al., IFREMER, France	Long-term effects of an early and continuous exposure to PAHs on zebrafish behavioral responses
		Le Bihanic et al., University of Bordeaux, France	Comparative effects of three PAH fractions from light and heavy crude oils and from a PAH-contaminated sediment on <i>Oryzias latipes</i> Japanese medaka early life stages
		Nyblom et al., University of Eastern Finland, Finland	Responses of <i>Lumbriculus variegatus</i> to activated carbon amendments
		Bluhm et al., RWTH Aachen University	Potential biofuels in an ecotoxicological investigation
		Diepens et al., Wageningen University, The Netherlands	Optimizing sediment conditions for macrophyte testing in the context of prospective risk assessment
Effects and exposure modeling	Jevtić and E. Zimmer	Peters et al., University of Koblenz-Landau, Germany	Effects of anthropogenic pollutants on ecosystem functions in freshwater bodies - a review
		Daniels et al., RWTH Aachen University, Germany	Comparison of mechanistic models and standardized regression analyses to describe toxic effects in ecotoxicology
		Qiu et al., Leiden University, The Netherlands	Predicting copper toxicity in different ecotypes of earthworms based on biotic ligand model concept
		Zimmer et al., Vrije Universiteit Amsterdam, The Netherlands	Interaction between food and toxicant leads to hormesis in the pond snail <i>Lymnaea stagnalis</i>
Environmental chemistry	M. Brinkmann and C. Schür	Bui et al., RWTH Aachen University, Germany	Food dependent life cycle parameters of <i>Nitocra spinipes</i> - implications to extrapolate effects to population level
		Poma et al., IRSA-CNR Water Research Institute, Italy	Novel brominated flame retardants (NBFRS) contamination in sediments from Lake Maggiore basin
		Muetting and Lydy, Southern Illinois University, USA	Fate of a transgenic insecticidal protein, a pyrethroid insecticide, and neonicotinoid insecticides within a maize agricultural ecosystem
		Schür et al., RWTH Aachen University, Germany	Kinetics for membrane dialysis extraction of pyrene, phenanthrene and chrysene from n-hexane and cow milk
		Vierke et al., German Federal Environment Agency, Germany	Fate of short chain perfluorinated carboxylic and sulfonic acids in a water-saturated sediment column investigated under near-natural conditions

**Table 1 Platform presentations given in one of the eight sessions during the 3rd YES Meeting (Krakow, Poland)**  
 (Continued)

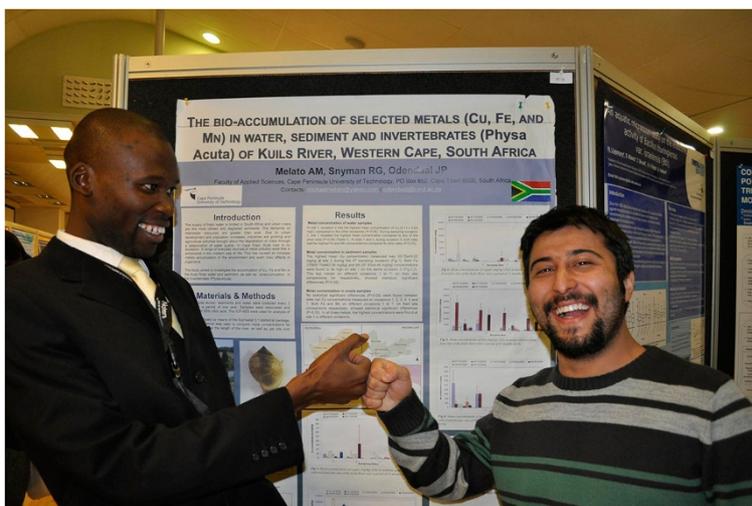
		Ochiai et al., Ehime University, Japan	Transfer and distribution of hydroxylated polychlorinated biphenyls (OH-PCBs) in the brain of finless porpoises ( <i>Neophocaena phocaenoides</i> )
		Kurtz et al., University of Koblenz-Landau, Germany	Effects of olive oil production wastewater on soil arthropods in two different cultivation scenarios in Israel and Palestine
		Cesar et al., Fluminense Federal University Niterói, Brazil	Distribution of mercury, copper and zinc in soils and fluvial sediments from an abandoned gold mining area in southern Minas Gerais state, Brazil
		Torres, Eawag, Swiss Federal Institute of Aquatic Science and Technology, Switzerland	Simplify your sediment pore water analysis
Life Cycle Assessment	Due to withdrawals included in terrestrial ecotoxicology session	Rieckhof and Günther, TU Dresden, Germany	Carbon footprint for the joint production of a wood-based product and its by-product - a case study
Nanoparticles	D. Kaiser and M. Weil	Stevenson et al., Ecology, Evolution and Marine Biology, University of California, USA	The effect of titanium dioxide nanoparticles on freshwater organisms
		Ribas et al., Federal University of Paraná, Brazil	Toxic effects of lead and nanoparticles mixed in anterior kidney cell cultures from freshwater fish
		Seitz et al., University of Koblenz-Landau	Product and size specific ecotoxicity of titanium dioxide nanoparticles to <i>Daphnia magna</i>
		Ramskov et al., Roskilde University, Denmark	Nanoparticle shape affects bioaccumulation and toxicity in a deposit-feeding snail
		Walter et al., ECT Oekotoxikologie GmbH, Germany	Acute and chronic effects of magnetite-based nanocomposites on invertebrates ( <i>Hyalella azteca</i> and <i>Chironomus riparius</i> ) and zebrafish embryos ( <i>Danio rerio</i> )
		Burkart et al., TU Dresden, Germany	A novel method for the determination of effects of nanomaterials on organisms related to wastewater treatment plants
		Waalewijn-Kool et al., VU University, The Netherlands	The effect of pH on the toxicity of ZnO nanoparticles to <i>Folsomia candida</i> in amended field soil
		Sovová et al., Institute of Chemical Technology, Prague, Czech Republic	Natural and artificial organic substances alter algal toxicity of nano CeO <sub>2</sub>
Omics and biomarkers	M. Brinkmann and E. Brockmeier	Brockmeier et al., University of Florida, USA	Evaluating the impacts of androgen exposure on eastern mosquitofish ( <i>Gambusia holbrooki</i> ) global hepatic gene expression patterns using a custom microarray
		Rock et al., Helmholtz Zentrum München, Germany	Catecholamines and other biomarkers in stressed and non-stressed amphipods
		Ogunkeyede et al., University of Nottingham, UK	The characterisation of crude oil and oil contaminated soil from the Niger Delta by catalytic hydrolysis
		Mikowska and Świergosz-Kowalewska, Jagiellonian University, Poland	Molecular biomarkers as indicators of bank vole populations' response to metal pollution
Terrestrial ecotoxicology	H. Azarbard and D. Chmowska	Musso et al., University of Aveiro, Portugal	Invasive vs. native grasses in Cerrado (Brazilian savanna): physiological and morphological responses to a mosaic of environmental conditions
		Pariyar and Burkhardt, University of Bonn, Germany	Effects of aerosol particles on crop plants
		Srečković et al., University of Novi Sad	Extremely low frequency (50 Hz) electromagnetic field exposure alters nutritive stress response in <i>Eisenia fetida</i> (Lumbricidae)



**Figure 1** The entire program and abstract book is published as Additional file 1 to this article.

compliance with both the meeting's and SETAC's mottoes of 'interdisciplinary discourse on current environmental challenges' and 'environmental quality through science'. Participants used the time after the talks and during the poster social for engaging in discussions and to get to know each other (Figure 2).

Students also participated in a soft-skills training in scientific networking organized by Valery Forbes of the University of Nebraska-Lincoln. During her highly interactive workshop 'Being remembered for the right reasons,' the participants learned how to approach senior scientists and the basics of scientific small talk. The



**Figure 2** Successful networking during the poster social (photograph taken by Zmnako Awrahman).

overwhelmingly positive feedback by the workshop participants clearly indicates that the soft-skills course was an effective learning tool. Three career talks - given by Sue Martina Starke (UBA - German Federal Environment Agency), Matthias Bergtold (BASF, Germany), and Alistair Boxall (University of York, UK) - provided the participants with helpful insights such as necessary skills and qualifications as well as opportunities and challenges of careers in government, business, and academia, the three sectors represented by SETAC. As a supplement to the career talks, two of our partners (BASF and UBA) additionally presented their company/institution in the job corner. The participants used this opportunity to get in contact with these potential future employers.

From the feedback of the senior scientists on site as well as the participants - results from an online questionnaire were positive in all assessed categories - we believe that the 3rd YES Meeting was again a unique opportunity for the participants to become familiar with routines associated with a scientific career and a good starting point to build a wide scientific network. We thus want to thank all of our supporters and hope that in 2015 we can report in this journal about the 4th YES Meeting.

## Additional file

**Additional file 1: The 3rd Young Environmental Scientists Meeting February 2013, Krakow, Poland.** Program and abstract book.

### Competing interests

The authors declare that they have no competing interests.

### Authors' contributions

JPZ, DMJ, AMM, DE, MW, EKB, TF, VK, AA, and MB are members of the SAC or its North American counterpart (NASAC) and the Scientific Committee of the meeting and have essentially participated in the organization and conduct of the meeting. All authors have read and approved the final manuscript.

### Acknowledgments

The SAC is indebted to all sponsors, the Local Organizing and the Scientific Committee, the meeting participants, Sue Martina, Alistair, Matthias, and especially Valery as well as all other persons and institutions that supported the organization and conduct of the meeting. Furthermore, we thank ESEU for providing this platform.

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Received: 22 May 2013 Accepted: 27 May 2013  
Published: 28 June 2013

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doi:10.1186/2190-4715-25-16

**Cite this article as:** Zubrod et al.: News from the SETAC Europe Student Advisory Council (April 2013) - the 3rd Young Environmental Scientists (YES) meeting at the Jagiellonian University, Poland. *Environmental Sciences Europe* 2013 **25**:16.

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