

Supplement February 2015
Monthly Update for the Green Chemistry in Education Network Julie Haack, University of Oregon
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Dear Members of the Green Chemistry Community,

Thank you for your submissions. Please remember to send me your position announcements so that we can post them on the Green Chemistry Education Network website (<http://cmetim.ning.com/>).

You can invite others to join this list by forwarding this email with the following instructions: To subscribe, please send an email request to jhaack@uoregon.edu with the subject heading "subscribe green chemistry." As always, please let me know if you would like to be removed from the list.

Quick Summary - Open Positions

- **Deadline - February 25, 2015** - Doctoral student positions available - Lappeenranta University of Technology – Mikkeli, Finland
- Postdoctoral Fellow in Environmental Chemical Analysis with Yale's Center for Green Chemistry and Green Engineering
- Post-Doctoral position within the Sustainable Technology Division of the US EPA's Office of Research and Development in Cincinnati, Ohio
- **Deadline – February 18, 2015** - Project Manager supporting the CARE California Carpet Stewardship Program

1. Four Doctoral Student Positions Available - Lappeenranta University of Technology - Mikkeli, Finland

Lappeenranta University of Technology (LUT) is an agile, international science university – a pioneer in combining technology and business ever since 1969. Our strategic focus areas are green energy and technology, sustainable value creation and our role as an international hub of Russian relations. LUT's operation is solution-focused and characterized by "open your mind" thinking: crossing boundaries open-mindedly, together.

LUT's Laboratory of Green Chemistry is focused on minimizing the hazard and maximizing the efficiency of any chemical choice. One approach is also to find new solutions to prevent and decrease environmental pollution.

The Laboratory is located in Mikkeli, Finland and Head of the Laboratory is Prof. Mika Sillanpää. In the past, the laboratory has specialized in water analysis and water, wastewater and soil purification techniques in following research areas:

- Adsorption
- Advanced oxidation processes (AOPs)
- Analytics and online monitoring
- Electrochemical technologies and electrokinetics

We now have four (4) Doctoral Student positions available.

Doctoral students will be working in research projects where ion mobility spectrometry will be used for determining pollutants from water, electrochemical sludge treatment and utilization of waste for production of biofuels and water purifications materials/adsorbents.

A Doctoral Student should have MSc or MSc (Eng.) degrees (either in chemical engineering or chemistry is considered as an advantage), the ability to complete the doctoral degree in the target time and a postgraduate study and research plan which are approved at the beginning of the employment relationship (for the person appointed). In addition, the Doctoral Student has to get the postgraduate study right in Lappeenranta University of Technology at least within the one year of the beginning of the employment relationship.

The employment relationship is fixed-term. The aim for a Doctoral Student is to complete the doctoral degree in 4 years. The position will be available initially for one year and can be extended for another 3 years provided that the studies have progressed satisfactorily.

The salary will be determined according to the university salary system for teaching and research personnel, job demand levels 1-4 (1787.97 – 2452.20 EUR/month). In addition, the salary will include an individual pay component based on the performance and competence, amounting to a maximum of 46.3 % of the job-specific pay component.

Applicants should start their work regarding agreement with employer and work will be implemented in Mikkeli. Doctoral Students will be hired only that case that ongoing research project funding proposals will receive positive funding decisions.

For more details please contact Prof. Mika Sillanpää, e-mail: mika.sillanpaa@lut.fi, mobile phone +358 400 205 215.

Call for the position ends 2015-02-25. Applications with applicant's CV, transcript of records and a motivation letter should be send to Lappeenranta University of Technology, Records Services, P.O. Box 20, 53851 Lappeenranta, Finland or by email to asiakirjat@lut.fi. Application documents will not be returned to the sender.

2. Postdoctoral Fellow in Environmental Chemical Analysis

Yale's Center for Green Chemistry and Green Engineering (www.greenchemistry.yale.edu) has an immediate opening for a Postdoctoral Fellow. We are seeking a chemist, environmental scientist, or environmental engineer to characterize and quantify a variety of small molecules in both natural and engineered systems. The candidate will design, conduct, and oversee laboratory experiments involving the characterization and "deformulation" (e.g., separate, identify, and quantify components) of commercial formulations including the impact of solvent systems on aerosolization and partitioning between the bulk liquid and aerosols. Additional work will be related to the identification and quantification of carotenoids, and other non-fuel related products present in and derived from algal biomass. The candidate is expected to apply basic and advanced analytic techniques (LC-MS, GC-MS) and to develop new approaches and methods as needed. The candidate will also mentor graduate and undergraduate students involved in related projects. The position is for a one-year term with the possibility of a one-year extension. Applicants must hold a Ph.D. degree in an appropriate discipline with demonstrated experience in publishing as well as written and oral communication.

Interested individuals should send (1) a current resume; (2) a concise statement of research experience and interest (less than one page); and (3) the names, addresses, and email addresses of two references to Julie.Zimmerman@yale.edu.

3. Post-Doctoral position within the Sustainable Technology Division of the US EPA's Office of Research and Development in Cincinnati, Ohio

This research position is focused on computational approaches to Sustainable Molecular Design. The mentor for this project is Dr. Todd Martin (martin.todd@epa.gov).

<http://orise.orau.gov/science-education/internships-scholarships-fellowships/description.aspx?JobId=17057>

Sustainable Molecular Design
Research Participation Program
Office of Research and Development
National Risk Management Research Laboratory
U.S. Environmental Protection Agency?Cincinnati, OH
EPA-ORD/NRMRL-STD-2014-04

Project Description: A postdoctoral research project training opportunity is currently available at the U.S. Environmental Protection Agency's (EPA) National Risk Management Research Laboratory (NRMRL). The appointment will be served with the Sustainable Technology Division (STD) in Cincinnati, Ohio.

STD research staff focus on advancing the scientific understanding, development, and application of technologies to address a variety of areas related to sustainability, including systems analysis, environmental management, clean processes, green chemistry, and green engineering.

In order to develop sustainable molecular design principles, one must be able to evaluate the hazard of a chemical simply from its structure. This research project will focus on establishing relationships between the structure of a chemical, its efficacy, and its intrinsic hazard. This project, in collaboration with other EPA research, will develop a tool and guidance for sustainable molecular design that will preserve efficacy of function while reducing toxicity.

The participant will engage in a variety of tasks involved in the development of a sustainable molecular design tool and guidance. Specifically, the research participant will be involved in:

1. Analyzing and mining databases of in vivo and in vitro toxicity values for a variety of endpoints.
2. Developing Quantitative Structure Activity Relationship (QSAR) models for toxicity using a variety of methodologies.
3. Developing Java-based sustainable molecular design software.

Through this opportunity, the participant will learn to develop environmental software, to develop quantitative structure activity relationship models, and general concepts of toxicity and sustainability. S/he will be exposed to and interact with a large team of researchers from a variety of backgrounds across EPA and other government and non-government institutions. S/he may also have the opportunity to present research findings at conferences and will be encouraged to publish project-related findings in peer-reviewed scientific journals.

Qualifications: Applicants must have received a doctoral degree in environmental science, mathematics, computer science, toxicology, chemistry, chemical engineering, or a similar field

within five years of the desired starting date, or completion of all requirements for the degree should be expected prior to the starting date. Background in QSAR modeling, databases, and computer programming is desired.

The program is open to all qualified individuals without regard to race, sex, religion, color, age, physical or mental disability, national origin, or status as a Vietnam era or disabled veteran. U.S. citizenship or lawful permanent resident status is preferred (but a candidate also may hold an appropriate visa status; an H1B visa is not appropriate). Guidelines for non-U.S. citizens may be found at <http://orise.orau.gov/epa/applicants/immigration.htm>.

The appointment is full time for one year and may be renewed upon recommendation of EPA and contingent on the availability of funds. The participant will receive a monthly stipend. Funding may be made available to reimburse the participant's travel expenses to present the results of his/her research at scientific conferences. No funding will be made available to cover travel costs for pre-appointment visits, relocation costs, tuition and fees, or a participant's health insurance. The participant must show proof of health and medical insurance. The participant does not become an EPA employee.

Technical Questions: The mentor for this project is Dr. Todd Martin (martin.todd@epa.gov).

How to Apply: An application can be found at <http://orise.orau.gov/epa/applicants/application.htm>. Please reference Project # EPA-ORD/NRMRL-STD-2014-04 when calling or writing for information.

4. Project Manager supporting the CARE California Carpet Stewardship Program.

The Carpet America Recovery Effort (CARE) is seeking candidates to fill a new fulltime position supporting the CARE California Carpet Stewardship Program. This Project Manager will, under the direction of the Dr. Robert Peoples, Executive Director of CARE, manage the principal duties of the CARE California Carpet Stewardship program specified in the document, in order to meet the California Carpet Stewardship Regulations and the requirements of the Carpet Stewardship Plan. These responsibilities include assisting existing or potential carpet recyclers and/or processors with general manufacturing, communication and business issues; managing the existing Rural County Program and its expansion; participating in regular Agreed Upon Procedures (AUP) visits and reviews; developing Education, Communications and Outreach materials; verifying that facilities have all proper operating permits and contracts; and performing other duties as assigned by the CARE Executive Director including manufacturing, communication and business issues. A minimum of 5 years' experience in environmental/recycling fields, a Bachelor's degree in a related field, (engineering degree or equivalent work experience preferred), and a track record of successful project management and delivering results in the California regulatory environment. The employee will reside in California (location is open to discussion). It is expected the employee will travel across the whole state at times, with concentrated focus in the greater Los Angeles, San Francisco, and Sacramento areas in particular. To respond to this Request for Proposal, please submit your resume (focused on demonstrated accomplishments, maximum 4 pages), references (minimum of 4), and salary expectations by email to Bob Peoples, PhD, Executive Director of CARE. ***The deadline for this position opening is February 18, 2015 7:00 pm EST.***

Julie Haack

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