

Graduate Research Assistantship in Integrated Sustainability Assessment of Forest Based Biofuels Supply Chain

Dear Colleagues and Students,

Please forward this Graduate Research Assistantship (GRA) opportunity to your colleagues and students who are interested to pursue graduate studies and research at the University of Maine, USA. This is open to those who are interested to pursue a PhD, preferably in Ecology and Environmental Science or PhD in Forest Resources. This GRA is only open to potential applicants who can obtain admission to the Graduate School of University of Maine, USA.

The applicant should be interested to pursue graduate studies related to environmental life cycle assessment, value/supply chain optimization, green forest products, sustainability assessment of forest based products, biofuels and bioenergy. The successful applicant should have an academic background in any of the following disciplines (i.e. industrial and systems engineering, industrial ecology/sustainable systems, computer science, chemical engineering, operations management/management science/information systems, applied mathematics, operations research, biophysical/environmental/resource/energy/ecological/computational economics, engineering systems, environmental engineering, mathematical/computational biology, bioinformatics) with good academic standing. He/she should have previous training and preferably have experience in database development, computational and systems modeling, system dynamics, agent based modeling, complexity science. He or she should develop passion in industrial ecology, life cycle assessment and integrated sustainability assessment.

A background in LCA, materials flow analysis (MFA), substance flow analysis (SFA), economic input-output analysis (IOA) or other industrial ecology methods is not required, but applicant should be willing to learn the concepts/principles to pursue the challenging research in sustainability science and engineering. Applicant should have strong analytical and database skills, knowledge of basic statistics and probability and be willing to learn new software packages (e.g. OPENLCA, CMLCA, STELLA, POWERSIM, Netlogo, Starlogo, MATLAB). It is also desirable that he/she has taken or will take a course in system dynamics, agent based modeling, genetic algorithm, evolutionary programming and other complexity science methods and tools.

He/she is passionate to pursue interdisciplinary, transdisciplinary and cross-disciplinary research projects and should be able to work alone or in team environment. This interdisciplinary research investigates the economic, social and environmental impacts of forest biorefinery (e.g. fuels, energy, power and other products). This research involves intensive data collection in close collaboration with industries, government agencies, and the other departments at the University of Maine. We are interested to investigate and understand the coupling of human and natural systems to solve our pressing societal concerns.

The successful applicant will also be involved in writing grant proposals and journal articles.

Further information regarding research interests or topics and admission information can be accessed at <http://forest.umaine.edu/faculty-staff/directory/anthony-halog/>

If you are not educated in English medium of instruction, in addition to Graduate Record Examination (GRE) results, you should also have TOEFL (Test of English as Foreign Language) or IELTS results for admission purposes.

If you think you have the right applications for this research assistantship, please submit an application letter addressing how you meet the qualifications and a detailed CV (including references) to Prof. Anthony Halog at anthony.halog@maine.edu. Please submit your application by May 15, 2011.

This research assistantship is contingent upon the approval of release of grant funds.