**Looking for Informatics Scientists**

**(and Computer-oriented Environmental Scientists)**

**Interested in Exciting Sustainability Science Research**

Sussex Sustainability Research Programme (SSRP) at the University of Sussex, Brighton, UK

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| **Postdoctoral Research Fellowship: Global modelling of health risks associated with conventional and unconventional river pollution**  <http://www.sussex.ac.uk/about/jobs/research-fellow-geography-2049>  Applications are invited for a Research Fellowship in an interdisciplinary project to develop and apply a first version of a global model that estimates the number of people exposed to different types of health risks from river pollution. The model will be used to assess public health risks of growing river pollution in developing countries.  For this position, the University of Sussex is looking for a PhD with solid research experience in quantitative analysis (modelling, statistics, informatics, applied mathematics, other) and with training preferably in a health-related science. However, applicants with experience in environmentally-related and other relevant sciences are also welcome to apply. This is an exciting opportunity for an enthusiastic early career scientist. You will be based in the School of Global Studies and will interact with a community of dynamic young scientists working under the umbrella of the SSRP. |

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| **PhD Studentship: Computer modelling of new contaminants in river systems.**  <https://www.findaphd.com/search/ProjectDetails.aspx?PJID=86290&LID=1492>  Continental-scale modelling of water quality is a new branch of science which aims to provide a continental-scale overview of water pollution in rivers and the cause of this pollution. Although continental-scale models already cover “conventional pollutants” such as bacteria and organic wastes, they do not yet include pharmaceutical residues and other “new contaminants”. The presence in river water of pharmaceutical residues, including antibiotics, is of concern because it can contribute to the build-up of antibiotic-resistant bacteria in the aquatic environment and other risks. The main objectives of this PhD project are to extend an existing continental-scale water quality model, “WorldQual” to include key pharmaceutical chemical residues, and to use the extended model to estimate the current levels of these residues in world river systems. The selected PhD student will work closely with the WorldQual modelling team at the University of Kassel in Germany. |

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| **PhD Studentship: Computer modelling of greenhouse gas emissions from agriculture and land use change.**  <https://www.findaphd.com/search/ProjectDetails.aspx?PJID=86291&LID=1492>  A high priority for global climate protection is reducing greenhouse emissions from agriculture and land use change (accounting for around one-fifth of all greenhouse gas emissions). Hence, it is crucial to understand how different forms of sustainable and unsustainable agriculture influence the rate of emissions, and what can be done to reduce these emission rates. Computer models are indispensable for these studies because they make a link between agricultural processes and emission rates. The objective of this PhD project will be to implement and apply a greenhouse gas emissions model in an existing continental-scale land use model (LandSHIFT) and to investigate the uncertainties of the model. The selected PhD student will work closely with the LandSHIFT modelling team at the University of Kassel in Germany. |