

3 year Post-doctoral Fellowship

Fluvial Geomorphology of the Baleh River, Sarawak

We are looking to appoint a skilled and motivated post-doctoral researcher to an exciting new project on the island of Borneo, Malaysia. The post-holder should have field experience of assessing river sediment loads, especially the fine fractions transported in suspension. The post is for 3 years, and is based at the University of Nottingham's Malaysia campus in Kuala Lumpur. The project is focussed on the Baleh River, which is situated within the headwaters of the Rajang Basin in the State of Sarawak, Malaysian Borneo.

The post-holder will be responsible for collecting field data needed to help understand **fine sediment loads and transport dynamics** in this large river. Their role will be to help assess how much fine sediment the river is carrying and the flow conditions that are most important for this transport. **We are seeking someone with field experience related to sediment transport monitoring** (installation of equipment, calibration, direct sampling); skills in any other aspects of fluvial geomorphology and/or hydraulic modelling would be advantageous but are not essential. The work will feed into a larger project that aims to identify critical, habitat-forming processes in the river and, in turn, identify functionally important flows.

The post holder should be prepared to help develop and maintain a project web site, help with fieldwork planning and budgeting, and support PhD and Masters students. The project involves fieldwork in remote areas, and periods away from campus during field campaigns.

Project details

Sarawak Energy Berhad (SEB) has plans to develop a hydroelectric project in the upper reaches of the Baleh River. The Baleh is a headwater tributary of the Rajang, one of the main rivers on Borneo. SEB is guided by the International Hydropower Association's *Hydropower Sustainability Assessment Protocol*, and as part of this the company is undertaking work to assess the environmental impacts of proposed dam schemes and identify appropriate mitigation wherever possible. This project forms part of their work under the *Hydropower Sustainability Assessment Protocol* and will develop a scientific understanding of key habitat-forming processes in the Baleh River prior to dam construction. This understanding can then be used to underpin evidence-based decisions about appropriate regulated flow regimes – i.e. to identify regimes that do not compromise important habitat-forming processes.

The overall aim of this project is to identify a set of flows that drive geomorphic processes and thermal dynamics in the river and which are therefore important for shaping habitat conditions. This is a high impact research project, the first of its kind in Malaysia, and represents a collaboration between academics and Sarawak Energy Berhad. The work will focus on a 25-km reach immediately downstream from the proposed dam site.

The post and application procedure

The Post-doctoral Fellow will focus on understanding fine sediment dynamics in the river, assessing suspended sediment loads and developing fine sediment budgets for study sites. The work will involve installation of monitoring equipment, field data collection and data analysis. He/she is expected to take a lead role in preparing papers for publication. He/she will work as part of a team of four researchers on the project, and will be supervised by academics at University of Nottingham Malaysia (Prof Chris Gibbins) and from the Fluvial Dynamic Research Group (RIUS) at the University of Lleida, Spain (Drs Ramon J Batalla and Damia Vericat).

The Post-Doctoral Fellow will be based in the School of Environmental and Geographical Sciences at University of Nottingham's Malaysia (UNM) campus, on the outskirts of Kuala Lumpur <https://www.nottingham.edu.my/EGS/index.aspx>. Salary is RM 8000 (Malaysian Ringgit) per month; this is a generous salary which sits within the range of that given to Assistant Professors at UNM. You will benefit from private medical insurance while employed on the project.

Contact Prof. Chris Gibbins christopher.gibbins@Nottingham.edu.my for an informal discussion about the project.

To apply, please send a CV and letter; the letter should outline your relevant skills, experience, and your motivation for applying. ***The post will remain open until an appointment is made***, so please submit an application at your earliest convenience.