



MSCA-Ribes - River flow regulation, fish Behaviour and Status

RESEARCH (/RESEARCH) - Work package: WP1 (</research/wp1>)

ESR02 - QUANTIFICATION OF LIGHT POLLUTION AS A MIGRATION BARRIER

<https://www.msca-ribes.eu/research/wp1>

Host Institution: IGB (<https://www.msca-ribes.eu/consortium/beneficiaries/igb>) - Leibniz Institute of Freshwater Ecology and Inland Fisheries

Location: Berlin (Germany)

Doctoral degree: PhD in Biology at the Freie Universität Berlin

Job description: The project will focus on modelling fish migration along rivers. The main objectives are to determine the effects of artificial light on fish migration, and to identify criteria for artificial light management to mitigate detrimental effects on fish. The ideal candidate has a solid understanding of ecological concepts, combining experience in spatial explicit approaches in environmental modelling (e.g. agent-based models) with an interest in confronting ecological theory and models with experimental data. During the secondment period the candidate will be trained on consideration of light pollution effects in environmental modelling, and on signal processing methods. On a later stage the candidate will be involved in a comparative study on interaction between artificial light, noise, and other environmental stressors.

Workplace: The candidate will be provided with the office space at IGB, which includes a personal computer, specialized software, access to library, internet and printers. For potential field works the candidate can use equipment of IGB for light-pollution measurements and river-ecological studies.

Secondment period (to be confirmed): Expected duration: **4 months**; Hosting institutions: SJE (SJE Ecohydraulic Engineering GmbH - Stuttgart, **Germany**), SOTON (University of Southampton - Southampton, **UK**)

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RECRUITMENT

Candidate requirements:

Degree: MSc in Biology/Environmental Engineering or other related degrees (available by the date of application)

Specific mandatory skills: Proficiency in English

Specific desirable skills:

- Experience in spatial explicit approaches in environmental modelling (e.g. agent-based modelling)
- Mathematical and programming background
- Background in (fish-)ecology and in ecological concepts

Specific requirements of the Doctoral School:

A thorough proficiency in English is necessary, i.e. level B2 or equivalent proof six years of English instruction at school (if the language level is not shown on the (school) certificate) IELTS 5.0. The related documentation should be already provided as an attachment to the RIBES application form. However, English proficiency will also be checked by the Selection committee during the interview.

Mobility rule:

Applicants must not have resided or carried out their main activity (work, studies, etc.) in Germany for more than 12 months in the 3 years immediately before the recruitment date. Compulsory national service, short stays such as holidays, and time spent as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account.

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The ESRs will be trained by international leaders in the interdisciplinary field of Ecohydraulics to find innovative solutions for freshwater fish protection and river continuity restoration in anthropogenically altered rivers.

The positions are offered full-time for 3 years (36-months)

Starting date is negotiable with the host institution in the second semester 2020 (from June to December 2020), also taking into account potential travel restrictions related to COVID-19. Enrolment in the Doctoral Schools is foreseen by December 2020.

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APPLICATION PROCEDURE

Deadline (first round): **May 31st, 2020**

Download the Call and the Application Form here: <https://www.msca-ribes.eu/research>

Contact person(s):

Franz Holker hoelker@igb-berlin.de



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