

JOB DESCRIPTION

Job Title : **Resilience and adaptation to hydrological change in the Upper Rhine (Vosges, Jura and Black Forest) – synthesis and evaluation of low flow & droughts**

Job Summary :

- The aims of this postdoctoral position are to evaluate the resilience and possibilities of adaptation to low flows and droughts in the mountainous Upper Rhine basin including the French Vosges, German Black Forest and French and Swiss Jura. Research is based on the identification and evaluation of past and possible future trends of low flows and droughts. Both historical and present-day stakeholder evidence as well as future climatic and anthropogenic projections are to be integrated in the analysis. The position is part of a newly established Hydrosystems Research Group at the LIVE Institute, Faculty of Geography and Spatial Planning.

Job Description :

- Multi-catchment synthesis and evaluation of past trends as well as possible future evolution of low flow and droughts in medium mountain regions. Catchments to be selected from the Vosges and Jura (France and Switzerland) as well as Black Forest (Germany).
- Analysis of recurrence and duration of low flows and droughts as well as mapping of their spatial distribution at catchment and sub-catchment scale.
- Research focused on impacts of climate change (meteorological and hydrological extremes, changes in water and air temperature and groundwater levels) as well as anthropogenic pressures (water abstraction, dams, flow regulation, impermeability, land use change).
- Fostering an interdisciplinary approach at the cross-roads between hydrology, climatology, geomorphology, ecology, agronomy, soil science, history, sociology and political sciences. New research contacts may need to be established.
- Hydrological prognostics for both sides of the Rhine based on climatological and, hydrological data as well as historical chronicles and stakeholder witnesses on low flow and droughts.
- Evaluation of adaptation and resilience to droughts and low flows and suggestions for improvements based on optimal ecological discharge and the European Water Framework Directive as well as Water Scarcity and Drought Policy.
- Co-organization of a workshop

Your profile:

- Doctoral degree in Hydrology, Geography, History, Environmental Sciences or Ecology
- Experience in transboundary research projects
- Publications in international journals
- Highly motivated, ability to work both independently and in a team
- Strong skills in drought analysis and search in historical archives
- Fluency in English, French and German
- Full Driving License

We offer:

- Integration into the interdisciplinary Hydrosystems Working Group of the LIVE Institute at the Faculty of Geography and Planning
- Excellent library and archive facilities and possibilities of collaboration with other institutes
- Technical support through water clusters and observatories of the region of Alsace.
- Excellent links with national and international research networks
- An international city in a vibrant region with a high quality of life and cultural environment (proximity to Germany and Switzerland)
- Beneficial transboundary tax and insurance offers
- Interesting career and training opportunities
- Remuneration: MCF 3 echelon (Maitre de conference, equivalent lecturer, 3rd scale)

Supervisor : Prof. Carmen de Jong

Research Institute : LIVE (Image Ville Environnement / Imagery, City and Environment)

Director : Dominique Badariotti

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Main research field :

Geography / History / Environmental science / Engineering / Information science / Sociology

JOB DETAIL

Type of contract : Temporary

Status : Full-time

Company / Institute : Université de Strasbourg

Country : France

City : Strasbourg

Postal Code : 67000

Street : 4 rue Blaise Pascal

APPLICATION DETAILS (mandatory)

Envisaged job starting date : 01/07/2016

Application deadline : 15/04/2016

Application e-mail : carmen.dejong@live-cnrs.unistra.f