The Leibniz Institute of Ecological Urban and Regional Development e.V. in Dresden advertises the following positions at the earliest possible date:

**5 Postdoc Research Associates – Sustainable and Ecological Development of Cities and Regions**

TV-L E-13 (40 hours per week; fixed-term work contract for two years; with a possibility of extension by another year, duration of employment according to the German Wissenschaftszeitvertragsgesetz)

in the following research areas (1 position in each field):

* **Landscape Change and Management (FB L)**
* **Resource Efficiency of Settlement Structures (FB E)**
* **Environmental Risks in Urban and Regional Development (FB R)**
* **Monitoring of Settlement and Open Space Development (FB M)**
* **Environmental, Urban and Regional Economics (FB S)**

**The Leibniz Institute of Ecological Urban and Regional Development (IOER)**is a member of the Leibniz Association and with 120 employees one of the largest spatial development research institutes in Germany. It carries out interdisciplinary research into issues of sustainable spatial development from an ecological perspective across all spatial scales. This involves the comprehensive analysis of current trends and dynamics, the assessment of impacts, and the investigation of responses in terms of societal behavior and policy. The IOER addresses a wide array of questions of regional, urban and landscape development, as well as planning. Of central importance to its research work is the review and further development of the policies, strategies, instruments, methods and tools needed for policy implementation.

**Position Description**  
We are seeking postdoc **research associates** to work within the framework of the IOER research program. Successful postdoc applicants will help to further our various scientific interests and in particular, strengthen the institute´s international research on sustainable and ecological urban and regional development. Academic publications are expected as a major outcome. Furthermore, the tasks of the postdoc associates will include project acquisition and collaboration with PhD candidates of the Dresden Leibniz Graduate School (DLGS).

**Expected skills and competences**  
Candidates must have an excellent doctoral degree (summa / magna cum laude or equivalent) awarded not longer than 3 years ago. They will possess international research experience and can point to a successful publication history, in particular in refereed journals. We appreciate good contacts to international research networks and experiences in the acquisition of third-party funding. Also essential are good team skills, the ability to work on your own initiative, good presentational skills and fluency in both spoken and written English.

**Follow the above link "more information" for details on the various fields of research, expected experience/knowledge as well as potential disciplines for each of the five research areas.**

Women are particularly encouraged to apply. Applications from suitably qualified disabled persons will be given special consideration.

**Application**  
Please submit your complete application documents by **27th of February 2015** (covering letter, motivation letter [2 pages maximum], curriculum vitae with list of publications and project history, copies of diplomas, certificates or references from employers) in German or English using the keyword ***"Postdocs" and the respective research area (“FB L, E, R, M or S“)***to the following address**:**

Leibniz-Institut für ökologische Raumentwicklung e.V.,  
Personalbüro  
Kennwort: Postdocs FBx\*   
Weberplatz 1  
01217 Dresden (Germany)

*\* please  FB L, FB E, FB R, FB M or FB S*

**Detailed information on Postdoc positions**

**Landscape Change and Management (FB L)**

**Fields of research**

* All research topics related to Landscape Change and Management, in particular:
  + landscape planning
  + landscape change
  + international aspects of impact mitigation regulation / biodiversity offsets

**Expected experience/knowledge**

* A post-doc expert is sought to summarize, interpret and publish research findings on the effectiveness of landscape planning and on European developments in mitigation regulation/biodiversity offsets

**Potential disciplines**

* Landscape planning, landscape ecology

**Resource Efficiency of Settlement Structures (FB E)**

**Fields of research**

* Analysis of settlement structures, in particular rural developments and urbanization processes around the world, urban-rural symbiosis, approaches to settlement- and infrastructure costs, urban density between the (conflicting) aims of efficiency and quality

**Expected experience/knowledge**

* Experience in spatial methods to analyse settlement structure and valuation methods such as MFA,LCA and LCC

**Potential disciplines**

* Regional/urban planning, infrastructure planning/engineering, life sciences, geography, environmental auditing

**Environmental Risks in Urban and Regional Development (FB R)**

**Thematic orientation**  
  
**Fields of research**

* Spatial analys of specific environmental risks (summer heat, heavy rain, flooding etc.) and its consequences especially for urban areas
* Investigation of vulnerability of key sectors and types of land use under the impact of climate change
* Analysis of vulnerability parameters for buildings, urban areas, infrastructures and types of land use
* Development of methods and concepts for foresighted adaptation to climate change impacts, especially for urban fields of action

**Expected experience/knowledge**

* Methods of vulnerability and risk analysis
* Climate change and other environmental impacts
* Basic knowledge in spatial planning

**Potential disciplines**

* Engineering or natural sciences related to the described thematic orientation

**Monitoring of Settlement and Open Space Development (FB M)**

**Fields of research**

* Empirical analysis, evaluation, and modelling of settlement development
* Data acquisition, analysis, processing and visualization of spatio-temporal information
* Cutting edge methods and ideas in geospatial modelling, complexity, visualization and computation

**Expected experience/knowledge**

* GIScience, geoinformatics, geovisualization/-simulation/-computation
* Advanced spatial analysis and visualization e.g. spatio-temporal modelling  monitoring and simulation: agent-based modelling, cellular automata, data quality issues, data fusion
* Applications in urban studies, geodemographics, accuracy and uncertainty of geocomputational models

**Potential disciplines**

* Geographical information science, urban and regional science, mathematics, informatics, physics

**Environmental, Urban and Regional Economics (FB S)**

**Possible fields of research**

* Economic impact assessment
* Regional economic modelling
* Optimal environmental policy instruments
* Regional economic aspects of climate change adaptation
* Environmental commons (ecosystem services, biodiversity)

**Expected experience/knowledge**

* Cost-benefit analysis
* Spatial econometrics
* Numerical simulations
* Environmental and regional policy instruments

**Potential disciplines**

* Regional and urban economics
* Environmental economics and planning
* Public economics