







The Singapore-ETH Center for Global Environmental Sustainability is opening a position for a

Senior Researcher in Landscape Architecture and Planning

The position is offered within the context of the international joint project Future Cities Laboratory (FCL), which the Swiss Federal Institute of Technology Zurich (ETH) branch in Singapore (SEC) and the National University of Singapore (NUS) will run conjointly. The position is part of the pilot interdisciplinary module entitled "Landscape and Ecology" running under the Research Stream Urban Design Strategies and Resources of the SEC/FCL program in Singapore. The research deals with advanced landscape architectural modeling and simulation, urban hydrology, watershed modeling and hydrological ecosystem services. The case study is located along the Ciliwung River catchment at the periphery of Jakarta Indonesia.

The successful candidate will join a newly formed interdisciplinary research team, within which he or she will (i) supervise three PhD students developing landscape architectural strategies in urban riparian settings, visualizing landscape-water interaction scenarios using advanced 3D modeling techniques linked to GIS representation of numerical hydrologic simulations and quantifying and valuing hydrological ecosystem services, (ii) integrate their research in the research done by the rest of the research team working in watershed modeling, urban hydrology and water quality modeling, and (iii) coordinate the overall research project including data management and deliverables. The Senior Researcher will carry out research and also do some teaching in 3D GIS landscape modeling and visualizing techniques. Accordingly, the candidate will have a PhD degree with strong post-doctoral experience in 3D GIS pertaining to landscape topological modeling and visualizing. Sound knowledge about ecology, more particularly ecosystems services and hydrology as well as landscape architecture and planning is expected. Knowledge about statistical methods and GIS programming with multivariable datasets and 3D landscape modeling and visualizing programs is preferred.

We are looking for someone that is highly motivated and already experienced in scientific research, with specific interests in the topic and with the appropriate background and level of publication. The candidate must have a strong sense of personal initiative, be comfortable with both team and independent work, and show proven organizational and oral/written communication skills. Prior experience in multidisciplinary projects is certainly an asset. Former experience in graduate/postgraduate student supervision is welcome. Skills at programming and software applications used in landscape modeling and visualizing in combination with 3D GIS are absolutely necessary. Excellent command of both written and spoken English is essential. The position is open to all qualified candidates. The application deadline is May 31st 2011. Each candidate is asked to submit an electronic application with 2 pdf files at the address featured below. The first pdf includes a motivation letter, CV, PhD and Masters certificates and academic transcripts, the second pdf is a copy of the PhD dissertation and relevant papers thereof. In addition we require 2 confidential letters of recommendation to be submitted directly as pdf to the same address. The selected candidate will be enrolled as SEC/FCL Senior Researcher over a period of 4 years. Work will be based at the SEC in Singapore with possible venues to Zurich throughout the entire contract period. Research will be done with a vibrant research team in Singapore, working on a complex interdisciplinary project, exploring burning questions of river basin modeling and urban landscape design and development interactions in Jakarta. Interviews can be conducted either in Singapore or Zürich. The position will start on 1.09.2011 or flexibly thereafter.

Electronic application & questions to ETH Professor Christophe Girot: <u>ila@arch.ethz.ch</u> (maximum attachments 10 MB)