**Postdoc/engineer**

**Exa-scalable visual analysis for life & materials sciences**

**Project description**
*(see also http://exaviz.simlab.ibpc.fr)*

We are seeking a highly motivated candidate to design and implement a next generation visualization platform for analysis of large-scale molecular simulations. In particular, we target two grand challenge applications: modeling a complete influenza virus and analyzing extensive simulations of the GLIC receptor that we recently published in Nature and PNAS, two leading journals. Project foundations were previously established, providing a well defined framework to get started (FvNano). Using visual analytics approaches and high performance interactive graphics, you will implement readily usable state-of-art tools scaling up to the next generation of simulations. This position is a unique training opportunity in a multi-disciplinary environment in collaboration with four leading teams in France and two international partners in the U.K. and in Germany.

**Research facilities**

The host laboratory participates in Equipex and Labex excellence in science programs. As part of the CACSIQUE Equipex, the candidate will be involved in building a large high-resolution display wall to boost the ExaViz project and will have access to a state-of-art VR CAVE with 2-user adaptive stereoscopy for immersion.

**About the host institute**

The “Institut de Biologie Physico-Chimique” was created in 1930 by the Foundation Edmond de Rothschild. It is associated with the CNRS (Centre National de la Recherche Scientifique), a leading international scientific institution offering an exceptional environment to scientists early in their career, with a dynamic international exposure animated by regular seminars and meetings.

**Qualification and experience**

A PhD or engineer degree in relevant fields (Computer Science, Chemistry/Bioinformatics,...) and at least one publication in a peer reviewed journal or at a leading conference are required. The successful applicant should have a strong background in software development (visualization & graphics, shader programming, virtual reality, real time applications) and be proficient with latest hardware technologies. An extensive expertise in computer simulations, in particular molecular dynamics is highly desirable. The candidate should also be familiar with at least one modern programming language. Evidence of the ability to undertake internationally competitive research generating high quality publications is essential, as are good communication and organisational skills.

**Closing date: 28 February 2013**

Interested candidates should send a CV and a statement of research interests, including the names of three referees with contact information, as PDF document to baaden@ibpc.fr.

**When?**
24 months starting ASAP

**Where?**
Laboratoire de Biochimie Théorique, Paris, France

**Salary:**
starting 2500 €/month (before tax)

**Team Leader:**
Marc Baaden

**Websites:**
http://www.baaden.ibpc.fr
http://exaviz.simlab.ibpc.fr

**Funding is available immediately.**