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The **Department of Polymer Chemistry and Materials** at the Adolphe Merkle Institute (AMI) of the University of Fribourg Switzerland has several open positions for

## **for Ph.D. Students in Polymer Science and Engineering**

AMI was established in 2007 as a largely privately funded center of competence associated with the University of Fribourg, focused on research in the field of soft nanomaterials science and technology. With the objective to stimulate innovation, AMI aims to combine fundamental and application-oriented research within an interdisciplinary setting.

Associated with the University of Fribourg's Faculty of Science, AMI will eventually be comprised of four research groups with complementary expertise and interest in strategic areas of soft nanoscience: soft matter physics, polymer chemistry and materials, both of which are already in place, biomaterials and surface science, which are expected to be established in the next few years. With a fantastic location and world-class research facilities, AMI is a desirable destination for Master and PhD Students, Postdocs and other researchers. Currently, already over 40 researchers from over 15 different countries call AMI their home.

AMIs laboratories are currently located in an outstanding facility in Marly. The new lab features world-class polymer synthesis, processing, and characterization facilities, which are complemented by other labs at AMI (e.g. the soft matter characterization facilities of the colloid physics group), the Fribourg Center for Nanomaterials (e.g. the electron microscopy facility) and other units of the faculty of natural sciences (e.g. the NMR and mass spectroscopy facilities in chemistry).

Several positions for Ph.D. students are currently open. We seek outstanding candidates with background in organic/polymer chemistry and materials/polymer science and engineering. The candidates will participate in interdisciplinary experimental research programs that target the design, synthesis, processing, investigation and application of new functional polymer systems, in particular materials with stimuli-responsive mechanical and optical properties.

### **Illustrative References:**

Polymer Nanocomposites with Microcrystalline Cellulose *Biomacromolecules* **2009**, *10*, 712.

Stimuli-responsive polymer nanocomposites inspired by the sea cucumber dermis *Science* **2008**, *319*, 1370.

Influence of Temperature on Low-Power Upconversion in Rubbery Polymer Blends *J. Am. Chem. Soc.* **2009**, *131*, 12007.

Oligo(*p*-phenylene vinylene)s as a "New" Class of Piezochromic Fluorophores *Adv. Mater.* **2008**, *20*, 119.

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