Prof. Robert Hołyst group [http://soft.ichf.edu.pl/Dep3.html](http://soft.ichf.edu.pl/Dep3.html) seeks candidates for the following positions:

- **Ph.D. students** net salary ~ 800 Euro (3000 PLN) + social and health insurance till January 2013.

  for research within the following TEAM (2009-2013) project:

  **From nano to macroscale: motion of proteins, protein charge ladders and nanoparticles in complex liquids and diffusion limited reactions in crowded environment**

Nano-science is a quickly developing field with potentially far reaching technological applications. Still, it is quite rare for scientific (fundamental) research to demonstrate a clear cascade of phenomenology from the nanoscale to the macroscale. The project aims at the experimental determination of the viscosity, diffusion and electrophoretic mobility in complex liquids (polymer or surfactant solutions) as one traverse from nano- to macro-scale (e.g. J.Phys.Chem B **110**, 25593-25597, (2006), NanoLetters **11**, 2157-2163,(2011)) It also concerns the determination of reaction constants for biochemical reactions involving proteins and DNA in the environment crowded by polymers and surfactants.

**Requirements**

- Ph.D. Students: Masters degree in Science (chemistry, physics, biophysics or biochemistry) obtained before October 1st 2011
- **The most important requirement** for these positions is **outstanding motivation**.
- Working knowledge of fluorescence correlation spectroscopy, capillary electrophoresis, dynamical light scattering, rheology of polymer solutions, biochemical assays or theoretical modeling of biochemical reactions is an asset.

**Questions and Applications** (including a motivation statement, 1 recommendation letter and CV) should be addressed to Prof. Robert Holyst, and sent by email to: robert.holyst@gmail.com before 5th October 2011

soft.ichf.edu.pl/holyst.html