Postdoctoral Position in Biophysics and Optical Spectroscopy

Budapest University of Technology and Economics, 1111 Budapest, Budafoki ut 8.

MTA-BME Lendület Magneto-optical Spectroscopy Research Group

A postdoctoral position is available in the Department of Physics at the Budapest University of Technology and Economics. Current projects include magneto-optical diagnosis of malaria, magnetoelectric metamaterials and magnetic nanoparticles for optical biosensor applications, structural study of proteins by polarized optical spectroscopy [1-4]. In case of malaria diagnosis, field studies in Gabon and Thailand are also planned. The position is funded by the Momentum Program of Hungarian Academy of Sciences for one year initially, with the possibility of renewal up to five years based on experimental progress.

Qualifications: A Ph.D. degree in physics, biology, medical sciences or any of the related areas is required. Preference will be given to applicants with a track record in biophysics and/or optics.

Application Instructions: Interested candidates should send a cover letter detailing research interests, technical expertise, publication list and CV with two references to Dr. I. Kézsmárki (kezsmark@dept.phy.bme.hu) and Dr. S. Bordács (bordacs.sandor@wigner.bme.hu) till the 15th of September, 2014.

[1] Á. Butykai et al. *Malaria pigment crystals as magnetic micro-rotors: key for high-sensitivity diagnosis* Scientific Reports **3**, 1431 (2013).

[2] Á. Orbán et al. *Evaluation of a Novel Magneto-Optical Method for the Detection of Malaria Parasites* PlosONE **9**, 96981 (2014).

[3] G. Ceolin et al. *Electrochemical template synthesis of protein-imprinted magnetic polymer microrods* Journal of Materials Science **48**, 5209 (2013).

[4] M. Pukáncsik et al. *Secondary structure prediction of protein constructs using random incremental truncation and vacuum-ultraviolet CD spectroscopy* http://xxx.lanl.gov/abs/1401.7362