

Postdoctoral Fellowship in Hyperpolarized Magnetic Resonance At Vanderbilt University Medical Center (Nashville, TN, USA)

Prof. Ed Chekmenev from Vanderbilt Institute of Imaging Science (VUIIS) invites applications for a postdoctoral research fellowship in hyperpolarized magnetic resonance. We seek a motivated and ambitious scholar to conduct research on DOD/NIH funded projects to develop parahydrogen induced hyperpolarized NMR techniques and instrumentation in the areas of ^1H hyperpolarized propane gas for pulmonary imaging at 0.05 T and 0.35 T, and development of hyperpolarized contrast agents using SABRE technique (^{19}F , ^{15}N and ^{13}C) in the application for biomedically relevant molecules/imaging. The postdoctoral fellow is expected to contribute to various or some phases of the project: fundamental development of the hyperpolarized contrast agents, their production optimization, *in vivo* validation, and imaging. There is a tremendous opportunity to learn about new techniques and new (and frequently unique) instrumentation.

The successful candidate will work with an experienced and well-equipped group to further develop and translate custom hyperpolarized MR platforms broadly to applications in chemical, biological, or biomedical sciences. The fellow will be joining a hyperactive and highly collaborative (Duke University, USA; International Tomography Center (ITC), Russia; Southern Illinois University Carbondale, USA; University of Nottingham, UK; Harvard University; and other) research group with the opportunity to lead 3+ first-author publications and contribute to several other publications annually. An experimental background in physical chemistry, MR physics, or at the interface of the physical sciences, NMR and biomedicine as reflected in a recent PhD degree from a relevant area, is essential. An array of state-of-the-art facilities exists at VUIIS to complement these low field hyperpolarized studies, including clinical and preclinical MRI (ranging from 3 T to 15.2 T), PET, SPECT, ultrasound, X-ray, and optical imaging.

The initial appointment will be made for 1 year with starting date available immediately. The successful fellow is expected to be re-appointed for at least one more year, and possible re-appointment for additional years. The starting salary is \$48,500, with expected 2% annual increase. This position also provides health and retirement benefits as described in the postdoctoral fellow manual available at VUMC web site. Vanderbilt University Medical Center (VUMC) is located in Nashville, TN, which offers family-friendly environment, and excellent cost and quality of living.

Inquiries, or applications including a cover letter, curriculum vitae, and contact information for two or more potential references should be addressed to Prof. Ed Chekmenev (eduard.chekmenev@vanderbilt.edu). Inquiries during ENC meeting are strongly encouraged to allow for interviewing process on during ENC. During ENC, please, contact Ed Chekmenev via email (see above) or text messaging at 626-202-7756.