CV Samo Lasic

Name: Samo Lasič
Citizenship: Slovene
Date of birth: October 28, 1977

Current appointment

CR Development, AB

Academic background

2007 – 2009 Postdoctoral researcher with prof. dr. Daniel Topgaard, Physical Chemistry, Lund University, Sweden.

2006 PhD in Physics entitled "Translational dynamics of granular matter studied by NMR" under supervision of prof. dr. Gorazd Planinšič at Faculty for mathematics and physics, University of Ljubljana

2001 MSc in Physics, "Didactical treatment of weighted torsion pendulum with transition to chaos" under supervision of prof. dr. Gorazd Planinšič, Faculty for Mathematics and Physics, University of Ljubljana, Slovenia

Working experience

2014 – now Vinnova (Marie-Curie) fellow - visiting reasercher at the The Danish Research Centre for Magnetic Resonance (DRCMR)

2016 – now Chief scientific officer at CR Development

2009 – now Key account manager and project manager for OncoPulse at CR Development, NMR expert at CR Competence.

2002 – now Member of the "Laboratory for New Experimental Techniques" at Josef Stefan Institute in Ljubljana, Slovenia. Development of novel diffusion NMR techniques within the research group led by prof. dr. Janez Stepišnik

2006 - now Editorial board of the national journal "Fizika v šoli" for the elementary and high school physics teachers

2001 – 2007 Assistant professor for physics at Faculty for Mathematics and Physics, University of Ljubljana, Slovenia

2001 – 2007 Leading workshops within the program for high school in-service teachers training at Faculty for Mathematics and Physics, University of Ljubljana, Slovenia

2002 – 2007 Collaboration with a science center "Hiša eksperimentov" in Ljubljana, Slovenia

2005 Collaboration in organizing the international GIREP seminar in Ljubljana

2005 Collaboration in coordinating the activities within the Slovenian celebration of the World Year of physics 2005.

2002 – 2004 Collaboration on the project "Supercomet" for presenting the phenomenon of superconductivity at the high school level.

2000 -2001 Teaching physics at the Bežigrad high school, Ljubljana, Slovenia.

Tutoring experience

Undergraduate student

2006. Katrca Mivšek Tišler (main supervisor: Bojan Golli, assistant supervisor: Samo Lasic)

PhD student

2012-2016. Stefanie Eriksson (main supervisor: Daniel Topgaard, assistant supervisors: Olle Söderman and Samo Lasic)

List of publications (international):

[1] Lasič S, Geyser model with real-time data collection, *Eur. J. Phys.*, 2006, 27, (4), 995–1005.

[2] Stepišnik J, Lasič S, Mohorič A, Serša I, Sepe A, Spectral characterization of diffusion in porous media by the modulated gradient spin echo with CPMG sequence., *J. Magn. Reson.*, 2006, 182, (2), 195–199.

[3] Lasič S, Stepišnik J, Mohorič A, Displacement power spectrum measurement by CPMG in constant gradient., *J. Magn. Reson.*, 2006, 182, (2), 208–214.

[4] Lasič S, Stepišnik J, Mohorič A, Serša I, Planinšič G, Autocorrelation spectra of an air-fluidized granular system measured by NMR, *Europhys. Lett.*, 2006, 75, (6), 887–893.

[5] Stepišnik J, Lasič S, Mohorič A, Serša I, Sepe A, Velocity autocorrelation spectra of fluid in porous media measured by the CPMG sequence and constant magnetic field gradient., *Magn. Reson. Imaging*, 2007, 25, (4), 517–520.

[6] Lasič S, Åslund I, Topgaard D, Magnetic Resonance Spectral Characterization of Diffusion with Chemical Shift Resolution, *J. Magn. Reson.*, 2009, 199, (2), 166–172.

[7] Lasič S, Åslund I, Oppel C, Topgaard D, Söderman O, Gradzielski M, Investigations of vesicle gels by pulsed and modulated gradient NMR diffusion techniques, *Soft Matter*, 2011, 7, (8), 3947 – 3955.

[8] Lasič S, Nilsson M, Lätt J, Ståhlberg F, Topgaard D, Apparent exchange rate mapping with diffusion MRI, *Magn. Reson. Med.*, 2011, 66, (2), 356–365.

[9] Nilsson M, Lätt J, van Westen D, Brockstedt S, Lasič S, Ståhlberg F, Topgaard D, Noninvasive mapping of water diffusional exchange in the human brain using filter-exchange imaging., *Magn. Reson. Med.*, 2013, 69, (6), 1572–80.

[10] Eriksson S, Lasič S, Topgaard D, Isotropic diffusion weighting in PGSE NMR by magic-angle spinning of the *q*-vector., *J. Magn. Reson.*, 2013, 226, 13–8.

[11] Lasič S, Szczepankiewicz F, Eriksson S, Nilsson M, Topgaard D, Microanisotropy imaging: quantification of microscopic diffusion anisotropy and orientational order parameter by diffusion MRI with magic-angle spinning of the q-vector, *Front. Phys.*, 2014, 2, (11), 1–14.

[12] Szczepankiewicz F, Lasič S, van Westen D, Sundgren PC, Englund E, Westin C-F, Ståhlberg F, Lätt J, Topgaard D, Nilsson M, Quantification of microscopic diffusion anisotropy disentangles effects of orientation dispersion from microstructure: applications in healthy volunteers and in brain tumors., *Neuroimage*, 2015, 104, 241–52.

[13] Eriksson S, Lasič S, Nilsson M, Westin C-F, Topgaard D, NMR diffusion-encoding with axial symmetry and variable anisotropy: Distinguishing between prolate and oblate microscopic diffusion tensors with unknown orientation distribution, *J. Chem. Phys.*, 2015, 142, 104201.

[14] Ristič T, Lasič S, Kosalec I, Bračič M, Fras-Zemljič L, The effect of chitosan nanoparticles onto Lactobacillus cells, *React. Funct. Polym.*, 2015, 97, 56–62.

[15] Lasič S, Oredsson S, Partridge SC, Saal LH, Topgaard D, Nilsson M, Bryskhe K, Apparent exchange rate for breast cancer characterization, *NMR Biomed.*, 2016, 29, (5), 631–9.

[16] Ahlgren A, Knutsson L, Wirestam R, Nilsson M, Ståhlberg F, Topgaard D, Lasič S, Quantification of microcirculatory parameters by joint analysis of flow-compensated and non-flow-compensated intravoxel incoherent motion (IVIM) data, *NMR Biomed.*, 2016, 29, (5), 640–649.

List of publications (national):

1. Lasič, S. "Kotaljenje svinčnika.", *Fizika v šoli*, **1999**, *5*, 72.
2. Lasič, S. "Poskusi, podprti z meritvami v realnem času.", *Fizika v šoli,* **2003,** *9*, 37
3. Bregar, B. L. ; Lasič, S. ; Vidic, L. ; Planinšič, G. ; Sladič, M. ; Herman, M. ; Hočevar, B. ; Zupan, F. ; Peterlin, J. ; Gornik, L. ; Žumer, F. ; Rogelj, B. ; Sopar, M. , "Znanstveno popotovanje: Vesela šola.", *Pisani list*, **2003**, *55*, 29
4. Lasič, S. ; Pisk, M. ; Kecman, S., Kostanjšek, G., Šenk, K. ;Žumer, F. ; Domanjko, V. ; Hočevar, B. ; Peterlin, J. ; Lenar, B. B. ; Rogelj, B. ; Stopar, M. "Znanstveno popotovanje : Vesela šola." *PIL plus*, **2003**, *31*., 19
5. Lasič, S. "Eureka! Za učitelje.", *Fizika v šoli*, **2003**, *9*, 114
6. Lasič, S."Poskusi s kondenzatorji.", *Fizika v šoli*, **2004**,*10*, 6
7. Lasič, S. ; Potočnik, A., "Tretji in četrti člen verige eksperimentov.", *Presek* **2005**, *32*, 11
8. Kos, M. ; Kos, B. ; Planinšič, G. ; Vidic, L. ; Jerman, R. ; Lasič, S. ; Mumalo, O. "Visoka znanost.", Ustanova Hiša eksperimentov, Ljubljana 2005.