

Saint Petersburg State University  
V.A. Fock Institute of Physics

**International Symposium and Summer School  
in Saint Petersburg**

**Nuclear Magnetic Resonance in Condensed Matter**

**6<sup>th</sup> Meeting “NMR in Heterogeneous Systems”  
June 29 – July 3, 2009**

**Timetable**

**an AMPERE event**

Saint Petersburg, Russia  
June 17, 2009

**June 29, Monday**

9.00 – 12.00	<b>Registration</b>	
11.20 – 12.00	<b>Coffee Break</b>	
12.00 – 12.20	<b>OPENING</b>	Prof. Sergei Bureiko Prof. Vladimir I. Chizhik Saint Petersburg, Russia
12.20 – 13.00 <b>Lecture</b>	Transport properties of MF-4Sc membranes modified by inorganic dopants	Andrei Yaroslavtsev, Moscow, Russia.
13.00 – 14.00	<b>Lunch</b>	
<b>Evening session. Chairman:</b>		
14.00 – 14.40 <b>Lecture</b>	A few details of NMR history in Saint Petersburg	Vladimir I. Chizhik Saint Petersburg, Russia
14.40 – 15.20 <b>Lecture</b>	NMR as monitoring method of nanocarbon-polymer and nanocarbon-biopolymer interaction	Alexander Gribanov, Saint Petersburg, Russia
<b>Oral session.</b>		
15.20 – 15.40 <b>Oral</b>	Molecular order and dynamics of a liquid crystalline dendrimer studied by means of <sup>2</sup> H NMR spectroscopy	Mario Cifelli, Pisa, Italy
15.40 – 16.00	<b>Coffee Break</b>	
16.00 – 16.40 <b>Lecture</b>	Magnetic resonance imaging studies of swelling, sedimenting and absorbing materials	Sergey Dvinskikh, Stockholm, Sweden
<b>Oral session.</b>		
16.40 – 17.00 <b>Oral</b>	Multiple quantum NMR dynamics of a gas of spin carrying molecules in nanopores	Anna Fedorova, Chernogolovka, Russia
17.00 – 17.20 <b>Oral</b>	Investigation of aqueous solutions with organic molecules by NMR relaxation.	Alexey Donets, Saint Petersburg, Russia
17.20 – 17.40 <b>Oral</b>	Label-free EPR recognition of biogenic destruction of stone monuments	Timofei Popov, Saint Petersburg, Russia
18.00	<b>Welcome Party</b>	

**June 30, Tuesday**

9.00 – 10.00	<b>Breakfast</b>	
<b>Morning session. Chairman:</b>		
10.00 – 10.40 <b>Lecture</b>	Newly developed hardware and software features	Naouki Fujii, Tokyo, Japan
10.40 – 11.20 <b>Lecture</b>	NMR investigations of ionic and molecular transport in synthetic membranes	Vitaly Volkov, Chernogolovka, Russia
11.20 – 11.40	<b>Coffee Break</b>	
11.40 – 12.10 <b>Lecture</b>	Ionic Liquids as new objects for NMR investigations	Vladimir Matveev Saint Petersburg, Russia
12.10 – 12.50 <b>Lecture</b>	Nano-scale water structure in ultra-dry photosynthetic membranes and lichen thalli	Hubert Harańczyk, Cracow, Poland
13.00 – 14.00	<b>Lunch</b>	
<b>Evening session. Chairman:</b>		
14.00 – 14.40 <b>Lecture</b>	55Mn NMR and magnetoresistive properties of lanthanum-strontium (A- Sr <sup>2+</sup> , K <sup>+</sup> ; B-□ □ manganitoperovskites La <sub>0.6</sub> A <sub>0.2</sub> Mn <sub>1.2-x</sub> B <sub>x</sub> O <sub>3</sub> Cr, Ni, Co)	Georgyi Levchenko, Donetsk, Ukraine
14.40 – 15.00 <b>Oral</b>	A theoretical and experimental studying of NMR contrasting properties of nanocomposites on basis of ferrum oxides stabilized by arabinogalactan matrix	Marina Petrova Novosibirsk, Russia
15.00 – 15.20 <b>Oral</b>	Solid-state <sup>13</sup> C NMR analysis of reactivity of fossil coals	Svetlana Zimina Kiev, Ukraine
15.20 – 15.40 <b>Oral</b>	Continuous wave EPR Spectrum Analysis by Non-Linear Fitting	Alexander Levantovsky, Saint Petersburg, Russia
15.40 – 16.00	<b>Coffee Break</b>	
16.00 – 18.00	<b>Poster Session</b>	

**July 1, Wednesday**

9.00 – 10.00	<b>Breakfast</b>	
10.00	<b>Excursion to town Pushkin, visiting the Ekaterina Palace, parks.</b>	

## July 2, Thursday

9.00 – 10.00	<b>Breakfast</b>	
<b>Morning session. Chairman:</b>		
10.00 – 10.40 <b>Lecture</b>	BCC and magnesium based alloys for hydrogen storage: an <i>ab initio</i> study	Marina Shelyapina, Saint Petersburg, Russia
10.40 – 11.20 <b>Lecture</b>	Investigation of nanostructured ferroelectric materials by means of NMR spectroscopy and spin lattice relaxation	Dieter Michel, Leipzig, Germany
11.20 – 11.40	<b>Coffee Break</b>	
11.40 – 12.20 <b>Lecture</b>	Singlet Nuclear Magnetic Resonance	Malcolm Levitt, Southampton, Great Britain
12.20 – 13.00 <b>Lecture</b>	The generating functions formalism for the analysis of spin response to the periodic trains of RF pulses	Nikita Lukzen, Novosibirsk, Russia
13.00 – 14.00	<b>Lunch</b>	
<b>Evening session. Chairman:</b>		
14.00 – 14.30 <b>Lecture</b>	Repetitive transcranial magnetic stimulation (rTMS) phenomena: the fMRI studies	Michail Lomarev, Saint-Petersburg, Russia
14.30 – 15.00 <b>Lecture</b>	Expansion of diagnostic opportunities by means of algebraic operations with MR images	Nikolai Anisimov, Moscow, Russia
<b>Oral session.</b>		
15.00 – 15.20 <b>Oral</b>	Some experience of late entry into microMRI (problems and paradoxes)	Oleg Falaleev, Krasnoyarsk, Russia
15.20 – 15.40 <b>Oral</b>	H1 NMR parameters of treatment water by IMEDIS apparatus.	Michail Gotovskiy, Moscow, Russia
15.40 – 16.00	<b>Coffee Break</b>	
16.00 – 17.40	<b>Poster Session</b>	
18.00	<b>Banquet</b>	

## July 3, Friday

9.00 – 10.00	<b>Breakfast</b>	
<b>Morning session. Chairman:</b>		
10.00 – 10.30 <b>Lecture</b>	The NMR detection in low magnetic field	Galina Kupriyanova, Kaliningrad, Russia
10.30 – 11.00 <b>Lecture</b>	Nuclear Quadrupole resonance of $^{14}\text{N}$ nuclei in low magnetic field	Georgy Mozzhukhin, Kaliningrad, Russia
11.00 – 11.20 <b>Oral</b>	Relaxation Times on $^{27}\text{Al}$ in powdered topazes	Natalia Kulminskaya, Saint Petersburg, Russia
11.20 – 11.40	<b>Coffee Break</b>	
11.40 - 12.00 <b>Oral</b>	MuScaT – a method for performing long molecular dynamics simulations	Vladimir Neverov Saint Petersburg, Russia
12.00 – 12.20 <b>Oral</b>	Comparative analysis of the chimeric domains SHH and SHA structure and dynamics	Maria Timchenko, Pushchino, Russia
12.20 – 12.40 <b>Oral</b>	The investigation of structure and conformational equilibrium of some steroid estrogen analogues	Svetlana Morozkina, Saint Petersburg, Russia
12.40 – 13.00	<b>Closing</b>	
13.00 – 14.00	<b>Lunch</b>	
14.00	<b>Excursion to Saint Petersburg</b>	