

# Magnetoelectricity

(Scientific session of the Physical Sciences Division  
of the Russian Academy of Sciences, 20 January 2009)

A A Gorbatsevich, O E Omel'yanovskii, V I Tsebro; A K Zvezdin, A P Pyatakov;  
A A Mukhin, V Yu Ivanov, V D Travkin, A S Prokhorov, A A Volkov, A V Pimenov,  
A M Shuvaev, A Loidl; V M Mukhortov, Yu I Golovko, Yu I Yuzyuk

A scientific session of the Physical Sciences Division of the Russian Academy of Sciences (RAS) devoted to the problem of magnetoelectricity was held on 20 January 2009 in the conference hall of the P N Lebedev Physical Institute, RAS. The following reports were presented at the session:

(1) **Gorbatsevich A A** (St. Petersburg Physico-Technical Center for Research and Education, RAS, St. Petersburg), **Omel'yanovskii O E, Tsebro V I** (P N Lebedev Physical Institute, RAS) "Toroidal ordering in crystals and nanostructures";

(2) **Zvezdin A K** (A M Prokhorov Institute of General Physics, RAS, Moscow), **Pyatakov A P** (A M Prokhorov Institute of General Physics, RAS, Moscow; Physics Department, M V Lomonosov Moscow State University, Moscow) "Inhomogeneous magnetoelectric interaction in multiferroics and related new physical effects";

(3) **Mukhin A A, Ivanov V Yu, Travkin V D, Prokhorov A S, Volkov A A** (A M Prokhorov Institute of General Physics, RAS, Moscow), **Pimenov A V, Shuvaev A M** (University of Wuerzburg, Germany), **Loidl A** (University of Augsburg, Germany) "Terahertz spectroscopy and the magnetoelectric properties of manganite-based multiferroics";

(4) **Mukhortov V M, Golovko Yu I** (Southern Scientific Center, RAS, Rostov-on-Don), **Yuzyuk Yu I** (Physics Department, Southern Federal University, Rostov-on-Don) "Heteroepitaxial films of a bismuth ferrite multiferroic doped with neodymium".

An abridge version of the reports is given below.