

Vladimir B. Nalbandyan

http://scholar.google.com/citations?user=S_rOtwYAAAAJ

https://www.researchgate.net/profile/Vladimir_Nalbandyan

ORCID: 0000-0002-8624-0165

Born: 1952.

Citizenship: Russian Federation.

Marital status: married, have two adult daughters and three grandchildren.

Education: Rostov State University, 1969-1974, Diploma on Inorganic Chemistry

Candidate of Sciences (Russian equivalent to PhD) in Physical Chemistry (Rostov State University, 1982)

Associate Professor, Department of General and Inorganic Chemistry, Southern Federal University since 1990.

Member, International Centre for Diffraction Data (www.icdd.com)

Consulting Editor, Powder Diffraction File (responsible for the subfile "Ionic conductors")

Supervisor of eight Cand. Sci. dissertations defended successfully in 1985, 1996, 1999, 2005 and 2014.

Hirsh index: 11 (Web of Science), 14 (Google), 11 (Scopus), 8 (Scopus excluding self-citations)

Materials of interest: mixed metal oxides with special attention to those comprising monovalent cations, as solid electrolytes, battery electrode materials, ferroelectrics and/or antiferromagnets.

Methods in use: high-temperature solid-state synthesis and crystal growth; soft-chemistry routes (low-temperature ion exchange, ion extraction and ion substitution); hot pressing; X-ray diffraction; impedance spectroscopy; thermal and chemical analyzes; database mining.

Problems of interest: general principles of inorganic crystal chemistry with special attention to morphotropic series and principles governing cation mobility; search for and studies of solid-state alkali ion or proton conductors, electrode materials for lithium-ion and sodium-ion batteries; search for materials with unusual magnetic ordering; morphotropic phenomena in ferroelectric solid solutions.

Collaborations: Faculty of Physics, Moscow State University (magnetism); Petersburg Nuclear Physics Institute, Joint Institute for Nuclear Research, Australian Nuclear Science and Technology Organisation and Paul Scherrer Institute (neutron diffraction); Saratov State University (battery materials); Kazan E. K. Zavoisky Physical-Technical Institute (solid-state NMR).

Reviewer for 14 research journals: J. Solid State Chem., J. Solid State Electrochem., Inorg. Chem., etc.

Most recent research projects:

2014-16: Search for, crystal structures, magnetic, electrical and redox properties of novel mixed oxides containing 3d elements in reduced and mixed oxidation states. Grant from RFBR No 14-03-01122.

2011-13: Atomic and magnetic structure of new mixed tellurates and antimonates of alkali metals with d elements. Grant from RFBR No 11-03-01101.

2010-11: Pattern production of inorganic and organic substances. Grant-in Aid from the International Centre for Diffraction Data No 00-15.

Lecturer in: Structural Chemistry and Crystallography; Metal science; Work with Foreign Research Literature; General and Physical Chemistry with Elements of Qualitative Analysis (in Russian); Solid State Chemistry; X-Ray Diffraction (in English).