CV of Nikolai Bagdassarov, apl. Prof. Dr.

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https://www.geophysik.uni-frankfurt.de/gruppen/gesteinsphysik/mitarbeiter/bagdassarov.htm
Current position: Apl. Professor Dr., Head of Rock Physics Laboratory at the Geoscience Institute, Goethe University Frankfurt Main, Germany

Personal data
born on the 25-th February 1954 in Moscow, Russia
Languages: English (fluent), French (fluent), German (fluent), Russian (native speaker).

Professional experience:
- 1977-1985: Academy of Sciences of the USSR, O. J. Schmidt-Institute for Physics of the Earth, Bolschaya Gruzinskaya str. 10, 123810 Moskau Russland. Scientific Officer;
- 1985-1990: Academy of Sciences of the USSR, V. I. Vernadsky-Institute for Geochemistry and analytical Chemistry, Kossygin str. 19, 117975 Moskow Russia. Senior Scientific Officer
- October 1990 – July 1995: University Bayreuth, Bavarian Geoinstitute 95440 Bayreuth, Germany. Scientific officer BAT IIa (1991-1995), Fellow of Alexander von Humboldt Foundation (1990-1991),
- August 1995 till present: University Frankfurt, Institute for Geosciences, Altenhoeferallee 1, 60438 Frankfurt am Main, Germany. Permanent faculty position – apl. Professor.

Ph. D:
On the 5-th Juni 1985 at Institute of Physics of the Earth, Academy of Sciences of the USSR, Bolschaya Gruzinskaya str. 10, 123 810 Moscow Russia. Doktoral degree in Geophysics. *State Examinations* in Geophysics and Rock Physics.

Habilitation:
On the 24-th November 2003 at the Department of Geosciences of Frankfurt University, Habilitation degree in geophysics.

Education:
- 1971-1977: M. V. Lomonossow-University Moscow, Faculty of Physics, Chair of Physics of the Earth and Planets, Vorob'evy Gory, 119889 Moscow Russia. Master Degree in Physics in 1977.
- 1986-1989: M. W. Lomonosow –University Moscow, Faculty of Computer Sciences and Applied Mathematics, Vorob'evy Gory 119899 Moscow, Russia. Second Master degree in computer sciences and applied mathematics in 1989.

Teaching experience:
- An Frankfurt University (1995 till now): Laboratory exercises in "Geophysics and rock physics", field geophysical exercises in "Gravimetry", lecture courses "Introduction into rock physics", "Physics of Magmas and Volcanoes" (bachelor level in

geosciences) , "Phase transitions and critical phenomena in Geosciences ", "Impact phenomena on the Earth and other Planets", “Rock mechanics” for master level in geophysics, physics and geosciences. Organization of the field geophysical-geological excursion to Baikal lake in 2006.

Supervising:

Ph. D. student J. Maumus at Uni-Frankfurt (1998-2002), Ph. D. student Mélanie Forien (2007-2011), Ph. D. student G. Solferino at ETH Zürich (2005-2008), M.S. student G. Golabek at Uni-Frankfurt (2006), M. S. student F. Schröder at Uni-Frankfurt (2007-2008).

Membership:

American Geophysical Union since 1991. Address: 2000 Florida Avenue N.W. Washington, DC 20009 USA

German Science Foundation (DFG) Projects:

DFG Research Project: „Schmelztransport und elektrische Eigenschaften teilgeschmolzener Gesteine unter Hochdruck“ (1998-2002)
DFG Research Project: Differenziation-, Permeabilität-, Gewebe- und Korngrenzen - Entwicklung in teilgeschmolzenen mafischen Gesteinen während der Schmelzabtrennung: Experimente im Zentrifugeofen mit kontrollierter Sauerstoffugazität. (2006-2010)
DFG-Cooperation projects with Geophysical Research Station in Bishkek, Kyrgisien (2008-2009)

Supervision of international projects:

DAAD (German Academic Exchange Program) Project “Electrical conductivity of brucite during dehydration” with Ècole Normal Supérieure in Paris, France (with Dr. F. Brunet, École Normale Superieure, Paris) 2004-2006

DAAD Project with Technical University of Irkutsk, Russia (with Prof. A. Dmitriev, University of Applied sciences in Irkutsk, Russia) 2005-2007

DAAD Project “Anionic conductivity of Bi_2O_3 at high pressure” with University Linköping, Sweden (with Prof. Dr. S. Simak, Linköping University, Sweden) 2006-2008

Industrial Project “Electrical conductivity and dielectric constant measurements of borehole concrete samples” (with Schlumberger GmbH, Paris, France) 2007-2008.

Bosch-Foundation Cooperation Project with Nanjing University, China “Xenolith electrical conductivity and MT structure of North China Craton” (with Prof. Q. Wang, Nanjing University China) 2011.

Subcontractor of Swiss Science Foundation Project “New protonic oxide ceramic conductors” with Dr. A. Braun Group "Fundamentals of Ceramic Energy Materials", Laboratory for High Performance Ceramics (with Swiss Federal Laboratories for Materials Science and Technology) 2009-2010.

Publications:

More than 60 publications in peered review international magazines. The most recent publications relevant to the proposals:

- Wang Q., Bagdassarov N., Ji Sh. (2013) The Moho as a transition zone: A revisit from seismic and electrical properties of minerals and rocks. Tectonophysics 609, 395–422.
- Gasc, J. Brunet, F., Bagdassarov, N., Morales-Florez V (2011) Electrical conductivity of polycrystalline Mg(OH)2 at 2 GPa: effect of grain boundary hydration–dehydration.

Physics and Chemistry of Minerals, 38(7), 543-556., DOI: 10.1007/s00269-011-0426-3
- N. Bagdassarov (2011) Phase transitions in $CsHSO_4$ up to 2.5 GPa: Impedance spectroscopy under pressure. J. Phys. Chem. Solids (2011), doi:10.1016/j.jpcs.2011.01.008
- N. Bagdassarov, V. Batalev, and V. Egorova, State of lithosphere beneath Tien Shan from petrology and electrical conductivity of xenoliths, J. Geophys. Res. (2011), 116, B01202, doi:10.1029/2009JB007125
- N. Bagdassarov, G. Solferino, G.J. Golabek, M.W. Schmidt, Centrifuge assisted percolation of Fe–S melts in partially molten peridotite: Time constraints for planetary core formation", Earth and Planetary Science Letters 288 (2009) 84–95
- N. Bagdassarova, G.J. Golabek, G. Solferino, M.W. Schmidt, Constraints on the Fe–S melt connectivity in mantle silicates from electrical impedance measurements, Physics of the Earth and Planetary Interiors 177 (2009) 139–146
- F. Schröder, N. Bagdassarov, Phase transitions and electrical properties of Bi_2O_3 up to 2.5 GPa, "Solid State Communications" 147, 374–376 (2008)
- N.S. Bagdassarov, M. G. Kopylova, S. Eichert, Laboratory derived constraints on electrical conductivity beneath Slave craton, "Physics of the Earth and Planetary Interiors" 161, 126–133 (2007)