

## CURRICULUM VITAE

SURNAME **FRONTASYEVA** FIRST NAME(S) **Marina Vladimirovna**

### Official address:

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**Nationality:** Russian

### Education (*degrees, dates, universities*)

1970 Physical Faculty, Department of Theoretical and Nuclear Physics, Saratov State University  
1974 Postgraduate courses of Saratov State University and DLNP JINR  
1982 Candidate of Physics and Mathematical Sciences  
1997 Associate Professor

### Career/Employment (*employers, positions and activities*)

1974 - 1977 Junior Scientist, Saratov State University  
1977 - 1982 Research Scientist, Joint Institute for Nuclear Research  
1982 - 1989 Section Head  
1989 - 1997 Senior Scientist  
1997 - present Head of Department of Neutron Activation Analysis and Applied Research  
1997 – present Associate Professor of Department of Chemistry, New Technologies and Materials, Faculty of Natural and Engineering Sciences of the International University “Nature, Society and Man” of Dubna

### Specialization (*specify*)

- (i) **main field:** Neutron activation analysis (NAA) for studying the environment and new materials
- (ii) **other fields:** NAA for geology, biology, high technologies and new materials
- (iii) **current research interest**  
Study of atmospheric pollutants on the regional and continental scale using nuclear and related techniques and GIS (geographical information systems) technology. Monitoring the anthropogenic impact on the environment; bio-nano-technology, wastewater remediation

### Honours, Awards, Fellowships, Membership of Professional Societies

1997 - present Member, International Committee on Activation Analysis (ICAA)  
1999 - present Member of the Scientific Council on Analytical Chemistry of the Russian Academy of Sciences  
1994 - 2009 Scientific Secretary of the Scientific Council on Applied Nuclear Physics of the RAS  
1992 - 1997 Member, Editorial Board of the Int. Journal “*The Science of the Total Environment*” (STOTEN)  
2005 - present Member, Editorial Board of the Int. *Journal of Nuclear and Radiation Physics* (JNRP)  
2006 - present Member, Editorial Board of the «*Chimie*» (Analele Stiintifice ale "Alexandru Ioan Cuza" din IASA Universitatii. ISSN:1221-5341)  
2008 - present Member, Editorial Board of the *Journal of Science and Art*, Romania  
2009 - present Member, Editorial Board of the *Journal of Natural Sciences* ("Scientific Research Publishing"), USA  
May 2009 - State Prize of the Government of Republic of Macedonia for the “Geochemical Atlas of Veles and the Environs”  
2012 – present Deputy/ Managing Editor of the *Journal of Chemistry-Didactics-Ecology-Metrology*  
2014-present Coordinator of the United Nations Commission for Europe on Long-Range Transboundary Air Pollution  
2016-present Member, Editorial Board of the *Journal of Radiation and Nuclear Applications*

### Publications (*list selected publications on separate page*)

- **Number of papers in refereed journals:** 376 (more than 350 of them are dedicated to NAA), two books, two patents of Russian Federation
- **Number of communications to scientific meetings:** About 120 oral presentations at international scientific meetings.



## Ten recent publications relevant for the present application:

1. S.S. Pavlov, A.Yu. Dmitriev, M.V. Frontasyeva. Automation system for neutron activation analysis at the reactor IBR-2, Frank Laboratory of Neutron Physics, Joint Institute for Nuclear Research, Dubna, Russia. *Journal of Radioanalytical and Nuclear Chemistry*, **2016**. DOI:10.1007/s10967-016-4864-8.
2. Maňkovská B., Frontasyeva M. V. and Ostrovnaya T.M. Temporal and spatial trends (1990–2010) of trace element atmospheric deposition in Slovakia – assessment based on moss analysis. Chapter of a book “Air Pollution”, INTECH, Open Access Publisher, (Impact Factor 0.579), **2015**.
3. Barandovski L., Frontasyeva M.V., Stafiliv T., Sajn R., Ostrovnaya T.M.. Multi-element atmospheric deposition in Macedonia studied by the moss biomonitoring technique. *Environ Sci Pollut Res.*, Vol.22, **2015**, p. 16077-16097. DOI 10.1007/s11356-015-4787-x. 2015.
4. Harmens H., Norris D.A., Sharps K., Mills G., Alber R., Aleksiyenak Y., Blum O., Cucu-Man S.-M., Dam M., De Temmerman L., Ene A., Fernandez J.A., Martinez-Abaigar J., Frontasyeva M., Godzik B., Jeran Z., Lazo P., Leblond S., Liiv S., Magnússon S.H., Mankovska B., Pihl Karlsson G., Piispanen J., Poikolainen J., Santamaria J.M., Skudnik M., Spiric Z., Stafilov T., Steinnes E., Stihl C., Suchara I., Thoni L., Todoran R., Yurukova L., Zechmeisteret H.G. al. Heavy metal and nitrogen concentrations in mosses are declining across Europe whilst some "hotspots" remain in 2010. *Environmental Pollution*, No. 200, **2015**, p. 93-104. (Impact Factor 4.306).
5. Hristozova G., Marinova S., Strelkova L.P., Goryainova Z., Frontasyeva M.V., Stafilov T.. Milti-element atmospheric deposition study in the area of lead-zinc plant in Kardzhali, Bulgaria. *American Journal of Analytical Chemistry*, USA, Vol. 5, **2015**, p. 920-931.
6. Harry Harmens, Gina Mills, Felicity Hayes, Katrina Sharps, Marina Frontasyeva and the participants of the ICP Vegetation. Air Pollution and Vegetation. ICP Vegetation Annual Report, 2013/2014. ICP Vegetation Programme Coordination Centre, CEH Bangor, UK, **2014**.
7. Qarri, P. Lazo, T. Stafilov, M. Frontasyeva, H. Harmens, L. Bekteshi, K. Baceva, Z. Goryainova. Multi-elements atmospheric deposition study in Albania. *Environmental Science and Pollution Research* (Impact Factor: 2.65). No. 21, **2014**, p. 2506–2518. DOI:10.1007/s11356-013-2091-1.
8. M. Krmar, D. Radnović, and M.V. Frontasyeva. Moss biomonitoring technique used to study spatial and temporal atmospheric deposition of heavy metals and airborne radionuclides in Serbia. In D.T. Mihailovic Ed., *Essays of Fundamental and Applied Environmental Topics*, Nova Publishers Inc., **2012**, pp. 159-192, ISBN: 978-1-61942-522-4.
9. Z. Spiric, M. Frontasyeva, E. Steinnes, Trajce Stafilov. Multi-element atmospheric deposition study in Croatia. *International Journal of Environmental Analytical Chemistry*, Taylor & Francis, Vol. 92, No. 10, **2012**, p. 1200–1214. <http://dx.doi.org/10.1080/03067319.2011.561336>
10. M.V. Frontasyeva. Neutron activation analysis for the Life Sciences. A review. “*Physics of Particles and Nuclei*”, **2011**, Vol. 42, No. 2, p. 332-378 (in English). <http://www.springerlink.com/content/f836723234434m27/>