## Curriculum vitae Ass.Prof. Marina A. Tugarina Irkutsk, RUSSIA

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Place and date of birth: Irkutsk, 08/10/1959

## **Education and scientific career:**

1981 - graduated with honors from the Irkutsk Polytechnic Institute (qualification - mining engineer, hydrogeologist),

1983-1987 - postgraduate studies (Department of Hydrogeology and Engineering Geology, IPI), 1989 - defence of a dissertation for the degree of candidate of geological and mineralogical sciences in the specialty "Hydrogeology" (Dissertation Council of the Leningrad Mining Institute); From 1987 - Senior Lecturer, from 1994 to the present - Associate Professor at the Department of Hydrogeology, Engineering Geology and Geoecology at INRTU, then at the Department of Applied Geology, Geophysics and Geoinformation Systems at the Institute of Subsoil Use of INRTU.

Scientific and pedagogical experience - 39 years. Teaching experience - 37 years.

Academic title - Candidate of geological and mineralogical sciences, Associate Professor (Higher Attestation Commission).

## **Professional experience:**

From 1981 to 2007 - participation in field and processing hydrogeological work and in the preparation of reports including those successfully defended at the State Reserves Committee, for eight solid mineral deposits in Transbaikalia.

2003 - the responsible executor of work from INRTU on the assessment of hydrogeological conditions for watering the Severomuisky tunnel

2007 - 2016 - Leading and Chief Hydrogeologist of the Research and Development Institute of Geology, Engineering Surveys and Ecology, INRTU, continued the study of the hydrogeological conditions of gold deposits in Altai, Buryatia, Irkutsk Oblast and the Trans-Baikal Territory, as well as 2 underground water deposits within the Udokan deposit area and during exploration in the Kimkano-Sutarsky deposit (EAO).

2012-2014 work as the Russian national expert from the Irkutsk region on the hydrogeology of the Baikal region in the UNESCO project "Transboundary diagnostic analysis of the Lake Baikal basin". Based on the results of the work on the UNESCO project, an intergovernmental report on the state of groundwater in the lake basin was prepared and published in English, Russian and Mongolian.

Until 2020 - the head of the educational professional program for the specialization "Prospecting and exploration of groundwater and engineering and geological surveys".

**Grants:** 2003-2006 - responsible executor of the section in the project of the Federal Target Program "Integration".

**Teaching experience**: teaching students (all forms of education) of the following disciplines: Structural Hydrogeology; Hydrogeochemistry; Ecological Hydrogeology; General Hydrogeology; Ecological Hydrogeology; Foreign language in the field of professional communications; Basics of Hydrogeology; Introduction to the Specialty; Hydrogeology of Oil and Gas Structures; Hydrogeology of the Baikal region; Hydrogeology for mining students; Geology for construction students; for Master's students - Oil and Gas Hydrogeology; Environmental Problems of Oil and Gas Producing Regions; International Scientific and Technical Communications.

2004-2011 - teaching at Interregional Training Center INRTU, since 2010 - Training and Research Center TNK.

2009-2010 - a lecture course "Hydrogeology of oil and gas basins" was prepared and delivered in English according to the international Tempus-Tasis project (EU) for the students of the Training and Research Center TNK in INRTU.

## **Internships and professional development:**

1997-1998 - under the JFDP (Fulbright) program, completed a language training course at the University of Nebraska (in Omaha, USA) and a professional internship (in the field of environmental hydrogeology) at the University of South Carolina (USA).

1998 - 2001 - participation in the educational project REAP (British Council) with the University of Kingston (UK).

2018 - advanced training at the Interregional Center for Advanced Studies and Retraining of Specialists of the Federal State Budgetary Educational Institution of Higher Education INRTU in five programs, including "English for Special Purposes (Scientific Communication)" (level B2).

**Scientific interests**: hydrogeological features of fault zones, hydrogeology of mineral deposits, ecological aspects of hydrogeology.

**Publications:** published 104 works incuding 3 co-authored monographs, 3 textbooks. The most significant:

- 1. **Tugarina M.A**. Hydrogeological features of fault zones in the south of Eastern Siberia // Problems of seismology in Uzbekistan. Tashkent: IS AN RUz. 2010.Vol. II. No. 7. P.180-184.
- 2. Seminsky K.Zh., **Tugarina M.A.** Results of complex studies of the underground hydrosphere of the western shoulder of the Baikal rift (on the example of the section of Bayandai settlement Krestovsky m.) // Geodynamics & Tectonophysics (electronic journal IZK SB RAS). 2011. Vol.2. ISSUE 2.p.126-144.
- 3. Seminsky K.Zh., **Tugarina M.A.** Features of the underground hydrosphere of the western shoulder of the Baikal rift: the results of hydrogeological studies along the profile of the village. Bayandai Cape Krestovsky. Reports of the Academy of Sciences, 2011, v. 439, No. 6, pp. 775-779. (Presented by Academician Yu.M. Pushcharovsky).
- 4. Vrba Y., Borchuluun U., Buyanhishig N., Plyusnin A.M., **Tugarina M.A.** Groundwater Resources in Shallow Transboundary Aquifers in the Lake Baikal Basin: Current State of Knowledge, Protection and Management. Report for the Transboundary Diagnostic Analysis of the Lake Baikal Basin. (UNESCO report on the state of groundwater in the Lake Baikal basin, 2014). Published by UNESCO-IHP, September 2013.71 p.
- 5. **M.A. Tugarina**, K. Zh. Seminsky. Basic principles of structural and hydrogeological mapping of the Baikal region / Proceedings of the Second Russia China International Meeting on the Central Asian Orogenic Belt (September 6–12, 2017, Irkutsk, Russia). Geodynamics & Tectonophysics, 2017. Volume 8. ISSUE 3. P 577-579. doi: 10.5800 / GT2017830296.
- 6. **Tugarina M.A.**, Seminsky K.Zh., Borchuluun U. Structural and hydrogeological complexes: / M.A. Tugarin et al. // Ecological atlas of the Baikal region / Editorial board: V.M. Plyusnin (previous), A.R. Batuev and others Irkutsk: Institute of Geography named after V.B. Sochavy SB RAS, Institute of System Dynamics and Control Theory. V.M. Matrosov SB RAS. 2017. [Electronic resource of the geoportal]: Map No. 35. Access mode: http://atlas.isc.irk.ru free (date of access...).
- 7. **M.A. Tugarina** and O.G. Lopatovskaya. Influence of Mineral Sources on Formation of Soils in the Foothills of Eastern Sayan Mountains (Buryatia). Jornal IOP Conference Series: Earth and Environmental Science. Link to publication in IOP Conference Series: Earth and Environmental Science https://iopscience.iop.org/issue/1755-1315/408/1. doi: 10.1088 / 1755-1315 / 408/1/012068.

*Hirsch index* in RSCI h = 4 *Citation in the indexed citation system*: 167 (RSCI).

**Awards**: Certificate of Honor from the Ministry of Education and Science RF, title "Veteran of Labor", 2010.

Marital status: married, 2 sons.