DAVYDENKO YURY ALEKSANDROVICH

Male, born on 10 December 1971

Reside in Russia, Irkutsk City

Education

Academic Degree of Candidate of Technical Sciences Theme of the dissertation «Development of hardware-software complex for the differential-normalized method of electroinvestigation», 9 November 2005, Novosibirsk, Joint Institute of Geology Geophysics and Mineralogy named AA, Trofimuka SB RAS.

Higher

1 September 1994 – 31 July 1996	Irkutsk State Technical University, Russia, Irkutsk Specialty: Master's Degree in Geology and Mineral Exploration
1 September 1989 – 31 July 1994	Irkutsk State Technical University, Russia, Irkutsk Specialty: Geophysical Methods of Prospecting Mineral Deposits

Work experience

23 November 2020 – Present time	Federal State Budget Education Institution of Higher Education «Irkutsk National Research Technical University» Siberian School of Geosciences Website: http://www.istu.edu/deyatelnost/obrazovanie/instituty/ssg/default Job title: Executive Director, Head of the Geophysics Department
1 July 2014 – Present time	LLC «GELIOS», Russia, Irkutsk Website: http://gelios-geo.com/ Job title: General Director Responsibilities: Services in the field of engineering geophysics
17 June 2013 – Present time	LLC «KVAZIGEOID», Russia, Irkutsk Job title: General Director Responsibilities: Hydrogeological and geophysical surveys
10 January 2012 – 31 August 2012	Federal State Institution of Science of the Institute of the Earth's Crust, Siberian Branch of the Russian Academy of Sciences, Russia, Irkutsk Website: http://www.crust.irk.ru/

13 September 1996 – 12 December 2011	Job title: Leading Engineer Responsibilities: Integrated interpretation of geophysical research LLC Siberian Geophysical Research and Production Company, Russia, Irkutsk Web-site: http://dnme.ru Job title: Leading Geophysicist Responsibilities: Integrated interpretation of geophysical research In this period he took part in a large number of onshore and offshore geophysical expeditions, for example Arctic, in Cuba, Mexico, Kazakhstan, the European part of Russia, the Far East and Siberia. I have provided methodical support marine electromagnetic survey for hydrocarbons exploration in the Kara, Barents and Caspian Seas
13 September 1996 – Present time	Federal State Budget Education Institution of Higher Education «Irkutsk National Research Technical University», Russia, Irkutsk. Web-site: https://www.istu.edu Job title: Associate Professor Responsibilities: Research activities, the introduction of scientific and technical Developments, teaching

Language

- Russian — Native
- English — B1 – Intermediate

Key skills

- PC User, MS Office
- Object Pascal/Delphi, EM and IP sounding technologies development
- Forward modeling and inversion of EM/IP data and potential field data
- Complex analysis and interpretation of geophysical data sets
- Organization of team for complex exploration projects
- Presentation results on meetings, conferences, and conversation with customers.

The most important publications

In total more than 70 scientific articles are published

1. **Davydenko Yu.A.,** Ivanov S.A., Kudryavceva E.O., Legeydo P.Y., Veeken P.C.H. Geo-electric surveying, a useful tool for hydrocarbon exploration // 71-st EAGE conference & exhibition incorporating SPE Evropec 2009, Rome (9-12 june.2008). P. 53.
2. **Davydenko Yu.A.**, Ivanov S.A., Kudryavceva E.O., Legeydo P.Y., Veeken P.C.H. Geo-electric analysis based on quantitative separation between electro-magnetic and induced polarization field response // Amsterdam (9-11 june.2009). P. 78.

3. Veeken P.C.H., Legeydo P.Y, **Davydenko Yu.A.,** Ivanov S.A., Kudryavceva E.O., Chuvaev A.A. Benefits of the induced polarization geoelectric method to hydrocarbon exploration // Geophysics. 2009. V. 74, № 2. P. 47-58.
4. Veeken P.C.H., Legeydo P.Y., Pesterev I.Y., **Davydenko Yu.A**., Kudryavceva E.O., Ivanov S.A. Geoelectric modelling with separarion between electromagnetic and induced polarization field component // First break. 2009. V. 27. P. 53-64.
5. Veeken P.C.H., **Davydenko Yu.A.,** Ivanov S.A., Garina., S.Y., Legeydo P.Y. Classification of induced polarisation anomalies using relaxation time attributes // 72nd EAGE Conference & Exhibition incorporating SPE EUROPEC 2010, Barcelona, Spain, 14-17 June 2010, P. 72. / DOI: 10.3997/2214-4609.201401083.
6. Ageenkov E.V., **Davydenko Yu.A**., Fomitskii V.A. Influence of the off-axis position of the transmitter and receiver circuits on the results of differentially normalized electromagnetic sounding // Russian Geology and Geophysics. 2012. V. 53. P. 116-121.
7. **Davydenko Yu.A**., Pesterev I.Yu., Taranyuk A.V. The possibility evaluation of HTEM techniques usage in deal with searching diamonds deposits taking into account induced polarization effects of permafrost rocks.// 12th EAGE International Conference on Geoinformatics - Theoretical and Applied Aspects on May 13-16, 2013, Kiev/DOI: 10.3997/2214-4609.20142443.
8. **Davydenko Yu.A**., Davydenko A.Yu., Kupriyanov I.S., Pesterev I.Yu., Popkov P.A., Sleptsov S.V., Yakovlev S.V. The effect of integration of the robastny regression analysis with inversion for transition processes in a method of a median gradient when studying tubes of explosion on the Anabar board//Notes of Mining institute, St. Petersburg, 2013. T. 200. Page 28-33. (In Russian).
9. Shargorodskiy A.V., **Davydenko Y.A**., Nikulin S.V. Evaluation of the sensitivity and resolution of the aero-electromagnetic system DIP-4A made for uranium deposit model on Reagen Vitimsky plateau // GeoBaikal14 third international conference on exploration and field development in east Siberia 2014, Irkutsk 18-22 august. / 10.3997/2214-4609.20141758.
10. **Davydenko Y.A**., Popkov P.A., Novopashina A.V. Perspectives of using the inductive component of transition process in traditional DC methods // Geophysical researches. 2015. T. 16, No. 4. Page 73-84. (In Russian).
11. **Davydenko Yu.A**., Bogdanovich D.V., Lavrentieva N.A., Abornev K.V., Bashkeev A.S., Shibeko E.A., // Application of 3D modeling of transient electromagnetic fields during the electrical prospecting search of ore minerals mountain Altai // Integration of science and practice as mechanism of effective development of the geological industry of the Republic of Uzbekistan, International scientific and practical conference, Tashkent, Uzbekistan, Part 1, 2016. - page 243-244 (In Russian).
12. **Davidenko, Y.A**., Persova, M.G., Popkov P.A., Novopashina A.V. // The Use of 3D Approach for EMS-IP Technology Data Processing in Search of Kimberlite Pipes //Near Surface Geoscience 2016 - First Conference on Geophysics for Mineral Exploration and Mining/ DOI: 10.3997/2214-4609.201602105.
13. Bukhalov, S.V., **Davidenko, Y.A**., Bogdanovich, D.V., Shibeko E.A., Shulga, V.V., Persova, M.G.// The results of three-dimensional modeling of EMS-IP technology data in search for gold deposits in the Altai Mountains//GeoBaikal 2016 - 4th International Conference: From East Siberia to the Pacific - Geology, Exploration and Development/DOI: 10.3997/2214-4609.201601699 (In Russian).
14. Parshin, A.V., **Davidenko, Y.A**., Prosekin, S.N., Lavrentieva, N.A., Budyak, A.E.// Express methodics of geoinformational processing of geophysical and low-quality geochemical data for prospecting of gold//GeoBaikal 2016 - 4th International Conference: From East Siberia to the Pacific - Geology, Exploration and Development/DOI: 10.3997/2214-4609.201601722 (In Russian).

15. Vladimirov A.G., Mekhonoshin A.S., Khromykh S.V., Mikheev E.I., Travin A.V., Volkova N.I., Kolotilina T.B., **Davydenko Yu.A**., Borodina E.V., Khlestov V.V. // Mechanisms of mantle-crust interaction at deep levels of collision orogens (case of the Olkhon region, West Pribaikalie) // Geodynamics & Tectonopysics 4.12.16.
16. Parshin A.V., Auzina L.I., Prosekin S.N., Blinov A.V., Kosterev A.N., Lonshakov G.S. Usmanova A.M., Shestakov S.A., **Davydenko Yu.A**.. Geoinformation approach to assessment of resource prospects of the areas (on the example of fields of underground waters of Eastern Siberia)//Geoinformatics — 2017/P. 11-20.
17. Davydenko A.Yu., Ayksheva N.A., Bukhalov S.V., **Davydenko Yu.A**.. Result of integration of data of pulse electroinvestigation and an aero magnetic exploration by search of underground waters in the south of Yakutia//Notes of Mining institute. 2017. T. 224. Page 156-162.
18. **Davydenko Y**., Bashkeev A., Iakovlev S., Pesterev I. and Roginsky K.. System of Electromagnetic Sounding Intended for a High Resolution Engineering Site Surveying on the Shallow Water / 81st EAGE Conference and Exhibition 2019. Extended abstract. DOI: 10.3997/2214-4609.201901128.
19. Bashkeev A.S., **Davidenko Y.A**., Abornev K.V., Bukhalov S.V. and Iakovlev S.V. Some Technological Aspects of Start-Stop Electromagnetic Soundings in the Transition Zone of the Shelf / Marine Technologies 2019 (EAGE). Extended abstract (in Russian). DOI: 10.3997/2214-4609.201901818.
20. Tyrzhanov A.A., **Davydenko Y.A**., Bashkeev A.S., Bukhalov S.V., Shishmarev R.A. and Kovalsky Y.F.. Approbation of the Ems-Ip Technology for the Kimberlite Pipe Exploration in Conditions of A Wide Manifestation of Double Induced Polarization Effects on the Baytakhsky Area / Engineering and Mining Geophysics 2019 15th Conference and Exhibition (EAGE). Extended abstract (in Russian). DOI: 10.3997/2214-4609.201901758.
21. Bukhalov S.V., **Davydenko Y.A**., Bashkeev A.S. and Abornev K.V.. The Research Ore Body'S Geoelectric Properties In-Situ with System Ems-Ip / Engineering and Mining Geophysics 2019 15th Conference and Exhibition (EAGE). Extended abstract (in Russian). DOI: 10.3997/2214-4609.201901774.
22. Belova A.Y., Gurevich D.V., Bogdanovich D.V., Aikasheva N.A., Bashkeev A.S., Bukhalov S.V. and **Davidenko Y.A**.. Search for Concealed Copper-Molybdenum Mineralization in Northern Kazakhstan with the Help of Electromagnetic Sounding Technologies and Induced Polarization (Ems-Ip) / Engineering and Mining Geophysics 2019 15th Conference and Exhibition (EAGE). Extended abstract (in Russian). DOI: 10.3997/2214-4609.201901778.
23. Shkirya M., **Davidenko Y**., Bogdanovich D., Bukhalov S., Belova A. and Bashkeev A. Investigation of the Effects of Induced Polarization over the Hydrocarbons Deposit in the South of Yakutia / 24th European Meeting of Environmental and Engineering Geophysics (EAGE). Extended abstract (in Russian). DOI: 10.3997/2214-4609.201802570.
24. P.C.H. Veeken. A. Kashubin, D. Curia, **Y. Davydenko**, I.I. Priezzhev From data conditioning, depth imaging and reservoir characterization to machine learning / First Break: Machine Learning – 2020 - Volume 38, Issue 6, Jun 2020 - p. 71 – 77.
25. A.Y. Belova, M.S. Shkirya, **Y.A. Davydenko** and A.S. Bashkeev Some Methodological Aspects of the Application of Electromagnetic Sounding Technology and Induced Polarization at the Verkhnekamsk Deposit of Potash and Magnesium Salts / EAGE Engineering and Mining Geophysics 2020. – Volume 2020, p.1 – 9.
26. **Y.A. Davydenko,** D.A. Skrypnichenko, S.V. Snopkov and A.Y. Davydenko Geophysical Research Results of Archaeological Sites on The Site of Barun-Hal II in The Baikal Region / EAGE GeoBaikal 2020. – Volume 2020, p.1 – 5.
27. M.S. Shkirya, D.V. Gurevich, S.A. Tereshkin, A.Y. Belova and **Y.A. Davydenko**. Application of Pulsed Electric Prospecting for Allocation of Zones of Sulfide Mineralization of Copper-Porphyry Type in the Territory of Northern / EAGE GeoBaikal 2020. – Volume 2020, p.1 – 5.
28. A.V. Parshin. **Y.A. Davidenko**, A.S. Bashkeev and S.V. Bukhalov. Two UAV-based electromagnetic systems for the formation of a complete set of low-altitude UAS-geophysical

methods / Second EAGE Workhop on Unmanned Aerial Vehicles. – 2020 – Volume 2020, p.1 – 4.

29. A. Belova, **Y. Davydenko,** D. Gurevich, A. Bashkeev, S. Bukhalov and P. Veeken Mineral prospecting for copper-molybdene ores in northern Kazakhstan using electromagnetic sensing and induced polarization technology (EMS-IP) / 82nd EAGE Annual Conference & Exhibition Workshop Programme. – 2020 – Volume 2020, p.1 – 5.
30. P.C.H. Veeken, A. Kashubin, **Y. Davydenko**, I.I. Priezzhev An integrated workflow from data conditioning, depth imaging, reservoir characterization to machine learnings / 82nd EAGE Annual Conference & Exhibition Workshop Programme. – 2020 – Volume 2020, p.1 – 14.

Intellectual property

1. Legeodo P.Y., Mandelybaum M.M., Pesterev I.Y., Ageenkov E.V., Alaev V.N., **Davydenko Y.A.**, Ivanov S.A., Vladimirov V.V., Malytsev S.K., Lisitsin E.D., Petrov A.A., Kyasper V.E. [2006]. Electromagnetic sounding method using a transient field spatial derivation on several separations/ Patent for invention of Electromagnetic sounding method using a transient field spatial derivation on several separations, Pub. № WO/2006/101419
2. Legeido P.Y., Madelybaum M.M., **Davydenko Y.A.,** Pesterev I.Y., Vladimirov V.V. [2008]. Method and device for carrying out marine electrical exploration during a ship travel/ Patent for invention of Method and device for carrying out marine electrical exploration during a ship travel, Pub. № WO/2008/136700
3. Legeodo P.Y., Mandelybaum M.M., Pesterev I.Y., Ageenkov E.V., Alaev V.N., **Davydenko Y.A.**, Ivanov S.A., Vladimirov V.V., Malytsev S.K., Lisitsin E.D., Petrov A.A., Kyasper V.E. [2006]. Electromagnetic sounding method using a transient field spatial derivation on several separation/ Patent application for invention Pub. № WO/2006/101419
4. Ageenkov E.V., Legeido P.Y., Pesterev I.Y., Ivanov S. A., Kudryavtseva E.O., Garina S. Y., **Davydenko Y.A.** [2010]. Method for quantitatively separating the effects of electromagnetic induction and induced polarization/ Patent for invention, Pub. № WO/2010/047613