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Date and place of birth

5 Mach 1979, Rostov-on-Don, Russia

Education

Rostov State University (Rostov-on-Don, Russia), License in Geo-ecology (2002); University of Nantes (Nantes, France), Master in Geography (2001); Rostov State University (Rostov-on-Don, Russia), PhD in Geography (2005).

Research interests

Environmental issues of continental water bodies, estuaries, inland seas, sea coasts and coastal zones, assessment of their vulnerability and self-cleaning capacity in case of oil pollution.

Due to a series of long-term (up to 15 years) field observations of natural changes in oil pollution composition in watercourses of the Lower Don River basin, in the Sea of Azov, on the Atlantic coasts of France and Spain, in the Loire River estuary, in the Strait of Kerch and on the Black Sea coast around oil terminals of the city of Novorossiysk, the rates of oil pollution natural destruction were determined and their dependence on the principal geographical factors was quantified in order to assess the self-cleaning capacity of coastal and aquatic ecosystems.

Research projects

- 1. Petroleum components in the water bodies of the Sea of Azov and the Black Sea basins: regularities of distribution, dynamics of transformation and self-cleaning capacity assessment – Grant of the President of Russian Federation, 2010 - 2011;
- 2. Estimation of geographical factors' influence on the oil pollution distribution in the aquatic systems and on the dynamics of their self-cleaning – Federal special-purpose program, 2011 – 2013;
- 3. Assessment of fluxes of greenhouse gases and petroleum components in the aquatic and terrestrial landscapes of Rostov Region with the use of GIS-technologies – Grant of the Southern Federal University, 2013;
- 4. Transformation of oil pollution in the coastal, marine and continental aquatic ecosystems and their vulnerability assessment - Grant of the Russian foundation for basic research and the National Center for Scientific Research of France (CNRS), 2011 - 2015.

Teaching at Southern Federal University (since 2002)

Oil pollution and self-cleaning (taught in English, Bachelor's degree, 5 ECTS); Remote and GIS-technologies (taught in Russian, Bachelor's degree, 5 ECTS); Climatology and meteorology (taught in Russian, Bachelor's degree, 5 ECTS); Remote sensing in environmental monitoring and protection (taught in Russian, Master's degree, 5 ECTS).

Principal publications (h-index Scopus = 4, h-index Web of Science = 3)

Kuznetsov A.N., Fedorov Yu.A. Oil Components in the Mouth Area of the Don R. and in the Sea of Azov: Results of Many-Year Studies. Water Resources, 2014, Vol. 41, No. 1, pp. 55 - 64.

Kuznetsov A.N., Fedorov Yu.A., Fattal P. Les effets et le comportement du fioul déversé en 2007 dans le détroit de Kertch suite à un naufrage de pétrolier. Méditerranée. Revue géographique des pays méditerranéens. 2012. No 119. P. 91 – 99.

Fedorov Yu.A., Dotsenko I.V., Kuznetsov A.N., Belov A.A., Loginov E.A., 2009. Regularities of Organic Carbon Distribution in Bottom Sediments of the Russian Part of the Sea of Azov. Oceanology. Vol. 49. No 2. P. 211 – 217.

Fedorov Yu.A., Kuznetsov A.N., Trofimov M.E. Sedimentation Rates in the Sea of Azov Inferred from Cs-137 and Am-241 Specific Activity. Doklady Earth Sciences. Pleiades Publishing Ltd., 2008. Vol. 423. No. 8. P. 1333 – 1334.

Fedorov Yu.A., Sapozhnikov V.V., Agatova A.I., Arzhanova N.V., Belov A.A., Kuznetsov A.N., Lapina N.M., Loginov E.B., Predeina L.M., Semochkina T.B., Torgunova N.I. Multidisciplinary Ecosystem Studies in the Russian Part of the Sea of Azov (July 18-25, 2006). Oceanology. 2007. Vol. 47. No 2. P. 294 – 297.

Fedorov Y.A., Stradomskaya A.G., Kuznetsov A.N. Regularities in the Transformation of Oil Pollution in Watercourses Based on Long-Term Observational Data. Water Resources, 2006, Vol. 33, No. 3, P. 300 – 309.

Kuznetsov A., Fedorov Yu., Fattal P., Ebner F. Self-Cleaning Capacity of Seacoasts in Case of Oil Pollution. EMECS'11 SeaCoasts XXVI. Joint conference. Managing Risks to Coastal Regions and Communities in a Changing World. Abstract book. St-Petersburg, 2016.

Kuznetsov A., Fedorov Yu., Fattal P. Chronology of Contemporary Sedimentation and Pollutants Accumulation in the Bottom Sediments of the Sea of Azov. EMECS'11 SeaCoasts XXVI. Joint conference. Managing Risks to Coastal Regions and Communities in a Changing World. Abstract book. St-Petersburg, 2016

Kuznetsov A., Fedorov Yu., Fattal P. Oil pollution of the Black Sea coastal zone in the area of oil terminals of Novorossiysk. 15th International Multidisciplinary Scientific GeoConference SGEM 2015. Water Resources, Forest, Marine and Ocean Ecosystems. Conference proceedings. Vol. 2. Sofia (Bulgaria): STEF92 Technology Ltd., 2015. P. 683 – 690.

Fedorov Yu., Kuznetsov A. Radionuclides in bottom sediments of the Sea of Azov. 15th International Multidisciplinary Scientific GeoConference SGEM 2015. Ecology, Economics, Education and Legislation. Conference proceedings. Vol. 1. Ecology and Environmental Protection. Sofia (Bulgaria): STEF92 Technology Ltd., 2015. P. 707 – 712.

Kuznetsov A.N., Fedorov Yu.A., Fattal P., Zagranichny K.A., Ebner F. Dynamics of Spilled Oil Natural Transformation on the Sea Coasts in Different Geographical Conditions. 14th International Multidisciplinary Scientific GeoConference SGEM 2014. Conference proceedings. Vol. 2. Sofia (Bulgaria): STEF92 Technology Ltd., 2014. P. 561 – 568.

Kuznetsov A.N., Fedorov Yu.A., Dotsenko I.V., Afanasiev K.A. Dynamics of Sedimentation in the Big Tambukan Sulfide Lake According to the Results of 137Cs and 210Pb Specific Activity Measurement. 14th International Multidisciplinary Scientific GeoConference SGEM 2014. 14th GeoConference on Ecology, Economics, Education and Legislation. Conference proceedings. Vol. 2. Sofia (Bulgaria): STEF92 Technology Ltd., 2014. P. 201 – 205.

Kuznetsov A.N., Fedorov Yu.A., Fattal P., Zagranichny K.A. Peculiarities of fuel oil natural transformation in the Strait of Kerch polluted in November 2007 in consequence of tanker accident. 13th International Multidisciplinary Scientific GeoConference SGEM 2013. Conference proceedings. Vol. 3. Sofia (Bulgaria): STEF92 Technology Ltd., 2013. P. 839 – 846.

Kuznetsov A.N., Fedorov Yu.A., Fattal P. Study of Sedimentation Rates and Oil Components' Accumulation in the Sediment Cores of the Sea of Azov and the Don River Using the Method of Radioisotopes. 12th International Multidisciplinary Scientific GeoConference SGEM 2012. Conference proceedings. Vol. 3. Sofia (Bulgaria): STEF92 Technology Ltd., 2012. P. 973 – 978.

Kuznetsov A.N., Fedorov Yu.A., Fattal P. Regularities of spilled oil transformation in watercourses and coastal zone (results of long-term observations). 11th International Multidisciplinary Scientific GeoConference SGEM 2011. Conference proceedings. Vol. 3. Sofia (Bulgaria): STEF92 Technology Ltd., 2011. P. 579 – 586.