Alexey Kamyshny, Ph.D.

Department of Geological & Environmental Sciences,
Ben-Gurion University of the Negev,
P.O. Box 653, Beer Sheva 84105, Israel
Phone: +972-8-647-2655
Fax: +972-8-647-2997
E-mail: alexey93@gmail.com
Internet site: http://www.kamyshny.net

Date of Birth: February 12, 1972 (Moscow, Russia)
Citizenship: Israeli

EDUCATION

2002-2006: Ph.D. studies at Casali Institute of Applied Chemistry of The Hebrew University of Jerusalem.
Title of thesis: "Reactions of Inorganic Polysulfides in Aqueous Systems"
Supervisor: Professor Ovadia Lev
Ph.D. degree received on June 11, 2006

1999-2002: M.Sc. student at Casali Institute of Applied Chemistry of The Hebrew University of Jerusalem.
Title of thesis: "Formation of Carbonyl Sulfide by the Reaction of Carbon Monoxide and Inorganic Polysulfides"
Supervisor: Professor Ovadia Lev
M.Sc. degree received on April 29, 2002

1994-1998: B.Sc., The Hebrew University of Jerusalem, Chemistry Department.
B.Sc. degree received on October 01, 1998.

1993-1994: Technion (Israel Institute of Technology), Chemistry Department, Haifa, Israel.

1989-1991: Moscow State University, Chemistry Department, Russia.

PROFESSIONAL EXPERIENCE

August 2011 – present: Senior Lecturer, Department of Geological & Environmental Sciences, Ben-Gurion University of the Negev, Beer Sheva Israel.

August 2008 – July 2011: Research Associate, Max Planck Institute for Marine Microbiology, Bremen, Germany. Research Associate, University of Maryland, College Park, Department of Geology and The Earth System Science Interdisciplinary Center.

November 2005 - October 2007 and February 2008 – July 2008: Postdoctoral Research Associate, Max Planck Institute for Marine Microbiology, Bremen, Germany.

November 2007 – January 2008: Postdoctoral Research Associate, Leibniz Institute for Baltic Sea Research, Warnemünde, and Max Planck Institute for Marine Microbiology, Bremen, Germany.

1998-1999: Researcher at R&D Laboratory (organic synthesis) at the BioLab plant, Jerusalem.

1995-1998: Student work in the field of low-calorie sweeteners in the team of Professor Helga Furedi-Milhofer, laboratory of Professor Nissim Garti, Casali Institute of Applied Chemistry, The Hebrew University of Jerusalem.

CRUISE AND FIELD WORK EXPERIENCE

May 2004 – September 2005: Four one day sampling expeditions to Lake Kinneret (Tiberias). Water column sampling for measurements of reduced inorganic sulfur species. (Chief scientist)

September - October 2005: Three one day sampling trips to Arava and Negev Deserts (Southern Israel). Deep wells water sampling for measurements of reduced inorganic sulfur species. (Chief scientist).

March 2006: "Spes-Mea" vessel. WATT-2006A research cruise, Wadden Sea. Sediment cores collection for measurements of reduced inorganic sulfur compounds. (3 days)

July 2006: "Spes-Mea" vessel. WATT-2006B research cruise, Wadden Sea. Water samples collection for measurements of reduced inorganic sulfur compounds. (5 days)

February - March 2007: RV "Meteor" M72-2 research cruise. Study of sedimentary biogeochemical processes at mud volcanoes rich area in Northern Black Sea. (3 weeks)

May - June 2007: RV "Meteor" M72-5 research cruise. Study of biogeochemical processes in water column of Black Sea. (3 weeks)

July 2007: RV "Professor Albrecht Penck" "Redox" 07PE/07/16 research cruise. Study of sedimentary and water column processes in Baltic Sea. (2 weeks)

October 2008 – May 2009: Three four to six days sampling expedition to Fayetteville Green Lake, NY. Water column and sediment sampling for measurements of concentrations and isotopic composition of sulfate, sulfide and its oxidation intermediates. (Chief Scientist).

March 2009 – June 2010: Six one day sampling expedition to Delaware Great Marsh (Delaware, USA). Marsh sediment sampling for measurements of concentrations and isotopic composition of sulfate, sulfide and its oxidation intermediates. (Chief Scientist)

September 2009: Sampling campaign at the Lake Rogoznica, Croatia. Water column sampling for inter-calibration of electrochemical and chromatographic techniques and measurements of concentrations and isotopic composition of sulfate, sulfide and its oxidation intermediates. (Chief Scientist, 9 days)

December 2010 – January 2010: Three one day sampling expeditions to Lake Kinneret (Tiberias). Water column and sediment sampling for measurements of concentrations and isotopic composition of sulfate, sulfide and its oxidation intermediates. (Chief Scientist)

May 2010 – June 2010: Sampling expedition to Yellowstone National Park. Sulfide-rich hydrothermal springs sampling for measurements of concentrations and isotopic composition of sulfate, sulfide and its oxidation intermediates. (Chief Scientist, 2 weeks)

May 2011: Wadden Sea water column and sediment sampling for measurements of concentrations and isotopic composition of sulfate, sulfide and its oxidation intermediates. (Chief Scientist, 2 days))

March 2011 – present: Five one day sampling expeditions to Lake Kinneret (Tiberias). Water column and sediment sampling for measurements of concentrations and isotopic composition of sulfate, sulfide and its oxidation intermediates. (Chief Scientist)

May 2012 – present: Five one day sampling expeditions to the Red Sea. Sediment sampling for measurements of speciation of redox-sensitive elements, including sulfur isotope composition. (Chief Scientist)

August 2012: Sampling of Hunnbunn fjord and Lake Nordbytjernet (Norway). Water column sampling for study of redox processes in the chemocline. (Chief Scientist, 10 days)

September 2014: Wadden Sea sediment sampling for measurements of concentrations and isotopic composition of sulfate, sulfide and its oxidation intermediates. (Chief Scientist, 3 weeks)

TEACHING EXPERIENCE

2004-2005: Laboratory practice in Analytical Chemistry (Hebrew University, Jerusalem, teaching assistant).

2004: Instrumental Analytical Chemistry (Hebrew University, Jerusalem, teaching assistant).
2003-2005: Laboratory Practice in Organic Synthesis (Hebrew University, Jerusalem, teaching assistant).
2002-2003: Water Chemistry (Hebrew University, Jerusalem, teaching assistant).
2002-2003: Laboratory Practice in Water Chemistry (Hebrew University, Jerusalem, teaching assistant).
2002-2003: Processing of Hazardous Wastes (Hebrew University, Jerusalem, teaching assistant).

2012-present: Environmental Organic Geochemistry (Ben-Gurion University of the Negev, Beer Sheva).
2013-present: Analytical Methods in Geochemistry (Ben-Gurion University of the Negev, Beer Sheva).
2013-present: Water Pollution Problems (Ben-Gurion University of the Negev, Beer Sheva).
2015-present: Precambrian Paleoceanography (Ben-Gurion University of the Negev, Beer Sheva).
2015-present: Biogeochemistry of Fossil Fuels (Ben-Gurion University of the Negev, Beer Sheva).

STUDENTS SUPERVISION AT THE BEN-GURION UNIVERSITY

Active Students

Postdoctoral Researcher
2015 – present – Alyssa Findlay

Ph.D. students
2014 – present – Tamir Buchshtav
2015 – present – Valeria Boyko

M.Sc. students
2012 – present – Ido Ben Laish
2013 – present – Debora Miriam Jäckel
2014 – present – Khoren Avetisyan
2014 – present – Irina Kurashov
2014 – present – Ilya Kutuzov
2014 – present – Rotem Klein

Alumni

2011 – 2013 – Nadav Knossow, M.Sc. student
2011 – 2013 – Barak Blonder, M.Sc. student
2012 – 2014 – Tamir Buchshtav, M.Sc. student
2014 – 2015 – Valeria Boyko, M.Sc. student

AWARDS AND SCHOLARSHIPS

1998: The Kaye Innovation Award for development of a novel crystalline form of aspartame.
2002-2004: Excellence scholarship.
2005-2007: Joint German-Israeli Minerva Postdoctoral Fellowship (60,000 Euro for 24 months).
2007-2008: Baltic Sea Research Institute at Warnemuende Stipend (4,500 Euro for 3 months, non-competitive).
2008: Max Planck Society Stipend (13,000 Euro for 6 months).
2008-2011: Marie Curie Actions International Outgoing Fellowship (215,400 Euro for 36 months). Project title: "Isotope Studies of the Sulfur Cycling using the Four Sulfur Isotopes: Developing Tools to Investigate the Flow of Sulfur through Biogeochemical Systems."

FUNDING

Co-Principal Investigator: National Science Foundation, Geobiology and Low Temperature Geochemistry Program; Award Number - 0843814 (J. Farquhar, PI) "Sulfur isotope study of sulfide oxidation products: Great Marsh of Delaware and Green Lake NY". (March 1, 2009 – February 28, 2011; $75,000)

Principal Investigator: NASA Exobiology Program; (J. Farquhar, Institutional PI; G. Druschel, co-I) "Determination of four sulfur isotopes fractionation during sulfide oxidation by abiotic and microbial processes in Yellowstone National Park pools, springs and streams with different pH values". (June 22, 2009 – June 21, 2011; $94,026)

Principal Investigator: Marie Curie Career Integration Grant "Hydrogen cyanide and thiocyanate transformations in anoxic aquatic systems". (April 1, 2012 – March 31, 2016; €100,000)

Co-Principal Investigator: Wolfson Foundation and Wolfson Family Charitable Trust for purchase of Gas-Source Mass-Spectrometer, Thermo MAT 253(O. Sivan, co-PI; S. Fainshtein, co-PI) "Hydrocarbons and sulfur transformations during generation of gas and oil. (July 19, 2012; 205,000 £).

Principal Investigator: Israel Science Foundation grant "Biogeochemical sulfur cycling in the Lake Kinneret: Quadruple stable sulfur isotope fractionation approach". (October 1, 2012 – September 30, 2016; 1,040,000 NIS, c.a. $262,000).

Principal Investigator: Israel Science Foundation Equipment Grant for purchase of Gas-Source Mass-Spectrometer, Thermo MAT 253. (October 1, 2012; 979,800 NIS, c.a. $247,000).

Co-Principal Investigator: Israel Science Foundation – National Natural Science Foundation of China Grant "Study of biogeochemical transformations of

redox-sensitive elements in modern limnic analogs of an Archean ocean". (October 1, 2012 – September 30, 2016; 1,040,000 NIS, c.a. $262,000).

MEMBERSHIP IN SCIENTIFIC SOCIETIES

Geochemical Society, American Geophysical Union, American Society of Limnology and Oceanography

ACADEMIC SERVICE

Conference Session Charing:

Goldschmidt – 2008 Conference, July 2008, Vancouver, Canada. Session 18c (co-chair, together with Prof. Dr. Gregory Druschel) "Sulfur Cycling: New approaches and techniques to the investigation of inorganic, organic, and biological reactions involving sulfur."

2010 Ocean Sciences Meeting, February 2010, Portland, Oregon, USA. Session CO05 (co-chair, together with Prof. Gregory Druschel) "Biogeochemical Sulfur Cycling in Reducing Environments and Stratified Systems."

Spring 2013 ACS National Meeting, April 2013, New Orleans, Louisiana, USA. Session (co-chair, together with Prof. Gregory Druschel) "Geochemistry of Sulfur".

Peer-reviewer for Geochimica et Cosmochimica Acta, Marine Chemistry, Environmental Science and Technology, Analytical Chemistry, Biotechnology and Bioengineering, International Journal of Hydrogen Energy, Open Journal of Marine Science, Journal of Chemistry Materials Science, Rapid Communications in Mass Spectrometry, PNAS, Journal of Geophysical Research – Atmospheres, Biogeochemistry, Environmental Chemistry

Member of Meeting Committee of American Society of Limnology and Oceanography (2010-2012)

PUBLICATIONS

31 peer-reviewed publications (12 as a first co-author, 2 as a single author) with h-index 11 (excluding self-citations), 1 book chapter, 2 patents, 18 conference and international workshop poster presentations, 20 conference and international workshop oral presentations (1 plenary invited presentation, 1 keynote invited presentation, 1 invited presentation), 18 invited seminars.

LANGUAGES

English, Hebrew, Russian, German (survival level).