ΕΘΝΙΚΟΝ & ΚΑΠΟΔΙΣΤΡΙΑΚΟΝ ΠΑΝΕΠΙΣΤΗΜΙΟΝ ΑΘΗΝΩΝ
NATIONAL & KAPODISTRIAN UNIVERSITY OF ATHENS

DEPARTMENT OF CHEMISTRY

Aikaterini Sakellari

Title: Research Associate (Ph.D.), Permanent staff
Sector: Inorganic Chemistry, Inorganic Chemical Technology and Environmental Chemistry
Laboratory: Environmental Chemistry
Phone: **+30 210 7274419 (office)**
Fax: **+30 210 7274945 (office)**
Email: esakel@chem.uoa.gr

Academic Qualifications:

- Ph.D. in Chemical Oceanography (2006), University of Athens
- M.Sc. in Chemical Oceanography (2002), University of Athens
- B.Sc. in Chemistry (2000) Chemistry Dept., University of Athens

Appointments/Activities:

- 2007-today: Research Associate (permanent staff), Chemistry Dept., University of Athens
- 2006-2007: Participation in the research program for the "Determination of physicochemical parameters and qualitative composition of wastes of Attica" (Funding: Association of Communities and Municipalities in the Attica Region – ACMAR)
- 2000-2006: Participation in 7 research projects

Teaching Activities: (current)

Undergraduate courses (laboratory lectures and supervision)

- Chemical Oceanography
- Environmental Management and Technology

Postgraduate courses (lectures and laboratory supervision)

Inter-departmental postgraduate course in Oceanography

- Marine Resources and Marine Chemical Technology
- Ecotoxicology
- Methodology, Elaboration and Results of Research Programs of Chemical Oceanography
- Management of Marine Environment

Postgraduate course of Chemistry Dept.: Chemistry, Technology and Management of the Environment

- Chemical Oceanography
- Renewable Energy Sources
- Consultation Methods of Environmental Matters

Post-Graduate Course on Education for Environment and Sustainable Development within the Inter-University Post Graduate course on Science Chemistry Education

- Education for the Environment and Sustainable Development I
- Education for the Environment and Sustainable Development II
- Non Formal and Informal Education for Sustainable Development

Research Interests/Activities:

- Long-term experience in heavy metal analysis in various matrices of environmental samples such as seawater, sediments, biota, drinking, ground, interstitial and rainwater, foodstuffs, human blood, solid wastes and products of waste recycling
- Trace metal accumulation in biota and humans
- Biogeochemical studies of metals in marine systems
- Metal speciation/fractionation in different phases of the marine environment, in order to assess metal bioavailability and how this is affected by dissolved organic matter. Application of special techniques such as Diffusive Gradients in Thin Films (DGT) and Differential Pulse Anodic Stripping Voltammetry (DPASV).
- Copper complexing properties of various matrices (seawater, rainwater, algal exudates, wastewaters, plant extracts etc) with the use of Differential Pulse Anodic Stripping Voltammetry (DPASV).
- Metal fractionation in sediments and its impact on their mobilization and transition from sediment to pore water and overlying water and vice versa.

Scientific Publications/Citations:

- 17 publications in refereed journals
- 27 refereed international conference publications
- 11 refereed national conference publications
- 240 citations (excluding self citations); H-index 7 (sources: Scopus, Google Scholar, ISI Web of Science)

Top five recent publications

- "Organic matter characterization and copper complexing capacity in the sea surface microlayer of coastal areas of the Eastern Mediterranean", S. Karavoltsos, E. Kalambokis, A. Sakellari, M. Plavšić, E. Dotsika, P. Karalis, L. Leondiadis, M. Dassenakis, M. Scoullos, *Marine Chemistry*, 173 **(2015)**, 234.
- "Copper complexation in wet precipitation: impact of different ligand sources", S. Karavoltsos, A. Sakellari, A. Makarona, M. Plavšić, D. Ampatzoglou, E. Bakeas, M. Dassenakis, M. Scoullos, *Atmospheric Environment*, 80 **(2013)**, 13.
- "Copper complexing properties of exudates and metabolites of macroalgae from the Aegean Sea", S. Karavoltsos, A. Sakellari, S. Strmečki, M. Plavšić, E. Ioannou, V. Roussis, M. Dassenakis, M. Scoullos, *Chemosphere*, 91 **(2013)**, 1590.
- "Bioaccumulation of metals (Cd, Cu, Zn) by the marine bivalves *M. galloprovincialis, P. radiata, V. verrucosa* and *C. chione* in Mediterranean coastal microenvironments: association with metal bioavailability", A. Sakellari, S. Karavoltsos, D. Theodorou, M. Dassenakis, M. Scoullos, *Environmental Monitoring and Assessment*, 185 **(2013)**, 3383.
- "Assessment of copper, cadmium and zinc remobilization in Mediterranean marine coastal sediments", A. Sakellari, M. Plavsic, S. Karavoltsos, M. Dassenakis, M. Scoullos, *Estuarine, Coastal and Shelf Science,* 91 **(2011)**, 1.

Distinctions:

- 2002 – 2005 Ph.D. financed by the Hellenic Ministry of Environment

Other Activities:

- Analyst (chemist) of the Laboratory of Environmental Chemistry according to ISO/IEC 17025:2005
- Member of the Association of Greek Chemists
- Member of the Hellenic Association of Oceanographers