

**EDUCATION**

- 2004: B.Sc., Department of Chemistry, University of Crete, Greece
- 2007: M.Sc., Department of Chemistry, University of Crete, Greece.
- 2009: PhD, Department of Chemistry, University of Crete, Greece.

FELLOWSHIPS & AWARDS

- 2000 - 2001: National Fellowship Foundation Award for entering first best in the Undergraduate Program at the Department of Chemistry.
- 2004 - 2005: National Fellowship Foundation Award for entering first best in the Graduate Program at the Department of Chemistry.
- 2005 - 2008: National Fellowship Foundation for a Ph.D. project: PENED2003 03ED819

PROFESSIONAL EXPERIENCE

- 2003 - 2009: Diploma, M.Sc. & Ph.D. thesis on Organic Chemistry.
Supervisor: Prof. H. E. Katerinopoulos, University of Crete, Greece.
- 2004 - 2005: Research Associate in projects:
1. “*Development of production methods based on natural dyes and identification of essential oils’ constituents derived from plants in Crete.*”(HEI-NET)
2. “*Synthesis of calcium fluorescent dyes.*”
Supervisor: Prof. H. E. Katerinopoulos, University of Crete, Greece.
- 2008: Research Associate in project: “*Controlling of calcium crystallization with chemical additives*”
Supervisor: Assistant Prof. K. Dimadis, University of Crete, Greece.
- 2010 - 2018: Scientific Collaborator in projects:
1. EEA grants - Greek Ministry of Economy, Competitiveness and Shipping: “*Innovation center of Crete with emphasis on management of natural resources (2010-2012).*”
2. EOX-DEDISA: “*Improving the Reclamation and Reuse of the Organic Fraction of Municipal Solid Wastes in Agricultural and Environmental Applications (2011).*”
3. National Participation 2009-EnviFriendly - Life05: “*Environmental friendly technologies for regional development.*”
4. SoilTrEC: “*Soil Transformations in European Catchments (2011-2014).*”
5. KILL*SPILL: “*Integrated biotechnological solutions for combating marine oil spills (2015).*”
6. THALIS-CYBERSENSORS: “*High Frequency Monitoring System for Integrated Water Resources Management of Rivers (2011-2015).*”
7. CONDENSE: “*The Condense Managing System: Production of Novel Fertilizers from Manure and Olive Mill Wastewater (2015-2016).*”
8. RECAR: “*Preventing and Remediating degradation of soils in Europe through Land Care (2016).*”

9. National Participation CHARM: “*Chromium in Asopos Groundwater System: Remediation Technologies and Measures (2016).*”
10. National Participation MIRAGE: “*Mediterranean Intermittent River ManAGEmenT (2014-2015).*”
11. ΣΥΓΑΠΙΕΖ (Greek): “*Independent Coordination Office for the Implementation of Environmental Liability (2017-2021).*”
12. WaysTUP!: “*Value chains for disruptive transformation of urban biowaste into biobased products in the city context (2019-2021)*”

Scientific Directors: Prof. N. P. Nikolaidis; Prof. N. Kalogerakis; Prof. I. Tsanis, Technical University of Crete, Greece.

TECHNICAL EXPERIENCE

Operation:

- GC-MS
- HPLC-MS
- FT-IR
- UV-VIS Spectrophotometers
- Fluorescence Spectrophotometers
- 300MHz NMR
- 500MHz NMR
- Capillary Electrophoresis
- Ion Chromatography
- Elemental analysis of Total Organic Carbon & Total Nitrogen
- Microwave Digestor
- Kjedahl Digestor
- Voltammetry
- excellent knowledge of PC's.

PUBLICATIONS

1. E. Roussakis; **S. Voutsadaki**; E. Pinakoulaki; D. P. Sideris; K. Tokatlidis; H. E. Katerinopoulos
“*ICPBCZin: A red emitting ratiometric fluorescent indicator with nanomolar affinity for Zn²⁺ ions.*”
Cell Calcium **2008**, 44, 270.
2. E. Roussakis; **S. Voutsadaki**; E. Pinakoulaki; D. P. Sideris; K. Tokatlidis; H. E. Katerinopoulos
“*Erratum to “ICPBCZin: A red emitting ratiometric fluorescent indicator with nanomolar affinity for Zn²⁺ ions.”*”
Cell Calcium **2009**, 45, 412.
3. **S. Voutsadaki**; G. K. Tsikalas; E. Klontzas; G. E. Froudakis; H. E. Katerinopoulos
A “turn-on” coumarin-based fluorescent sensor with high selectivity for mercury ions in aqueous media.
Chem. Commun., **2010**, 46, 3292.
4. **S. Voutsadaki**; G.K. Tsikalas; E. Klontzas; G.E. Froudakis; S.A. Pergantis; K.D. Demadis; H.E. Katerinopoulos
“*A cyclam-type “turn on” fluorescent sensor selective for mercury ions in aqueous media.*”
RSC Advances, **2012**, 2(33), 12679.
5. **S. Voutsadaki**; H.E. Katerinopoulos
Zinc and cadmium ion fluorescent probes incorporating mono- and poly-aza macrocyclic ionophores.
Manuscript in preparation.
6. **S. Voutsadaki**; H.E. Katerinopoulos
Potential zinc fluorescent probes incorporating the bis-picolyllamine ionophore.
Manuscript in preparation.
7. **S. Voutsadaki**; D. Moraitis; N.P. Nikolaidis
Mobility of geogenic origin As and Cr in soils.
Presented at 5th European Bioremediation Conference, ID 191, July 4-7, **2011**, Chania, Crete, Greece.

8. D. Moraetis; **S. Voutsadaki**; M. Kotronakis; G. Kontolaimakis; F.E. Stamati; N.P. Nikolaidis; N. Kalogerakis
Mobility of nitrogen and heavy metals in biosolid amended soil.
Presented at the Goldschmidt Conference, August 14-18, **2011**, Prague, Czech Republic.
9. **S. Voutsadaki**; D. Moraetis; D. Efstathiou; G. Giannakis; N. Nikolaidis
High frequency water quality monitoring at Koiliaris Critical Zone Observatory identification of hydrological and geochemical patterns with multivariate analysis.
Presented at 1st EWaS-MED International Conference, “*Improving Efficiency of Water Systems in a Changing natural and financial Environment*”, 11-13 April, **2013**, Thessaloniki – Greece.
10. **S. Voutsadaki**; N. Nikolaidis
Evaluation of in-situ measurement of heavy metals using the Metalysyer-HM1000.
Presented at 6th European Bioremediation Conference, June 29 – July 2, **2015**, Chania, Crete, Greece.

CONFERENCES

1. *Total synthesis of a new zinc-probe*
S.Voutsadaki, E. Roussakis, H.E. Katerinopoulos
10th Chemistry M.Sc. graduate students' conference
2-4 July 2004, Kolympari, Chania, Crete.
2. *Synthesis and fluorescence studies of a zinc-probe*
S.Voutsadaki, E. Roussakis, H.E. Katerinopoulos
11th Chemistry M.Sc. graduate students' conference
8-10 July 2005, Kolympari, Chania, Crete.
3. *Synthesis and Spectral Properties of a Potential Fluorescent Zinc Indicator*
E. Roussakis, **S. Voutsadaki**, H.E. Katerinopoulos
14th European Symposium on Organic Chemistry, 4-8 July 2005, Helsinki Finland.
4. *Synthesis and Spectral Properties of a Potential Fluorescent Zinc Indicator.*
E. Roussakis, **S. Voutsadaki**, H.E. Katerinopoulos
12th Hellenic Symposium of Pharmaceutical Chemistry
27-28 January 2006, Patras Greece.
5. *Coumarin-type dicarboxylate and aza-macrocyclic fluorescent indicators as potential zinc ion concentration probes*
S. Voutsadaki, E. Roussakis, H. E. Katerinopoulos
2th Hellenic Symposium of Organic Chemistry
19-21 April 2007, Athens, Greece
6. *Coumarin-type Dicarboxylate and Aza-macrocyclic Fluorescent Indicators as Potential Zinc Ion Concentration Probes*
S. Voutsadaki, E. Roussakis, H. E. Katerinopoulos
8th International Conference in Medicinal Chemistry
Patras, Greece March 15-17, 2007
7. *Synthesis and Ion Selectivity Studies of Potential Fluorescent Ion Indicators.*
H. E. Katerinopoulos, E. Roussakis, G. K. Tsikalas, **S. Voutsadaki**
236th ACS National Meeting, Philadelphia, PA, August 17-21, 2008, MEDI 79
8. *Synthesis and fluorescence study of the properties of a new, coumarin-based mercury probe*
S. Voutsadaki, H.E. Katerinopoulos
10th Congress in Chemistry Greece-Cyprus
2-4 July 2009, Heraklion, Crete.
9. *Synthesis, spectral profile and competition study of a new coumarin-based probe, selective for mercury II ions.*
S. Voutsadaki, H. E. Katerinopoulos
3rd Hellenic Symposium on Organic Synthesis
15-17 October, Athens, Greece, 2009
10. *Mobility of geogenic origin As and Cr in soils.*
S. Voutsadaki, D. Moraitis, N.P. Nikolaidis
5th European Bioremediation Conference, ID 191, July 4-7, **2011**, Chania, Crete, Greece.

11. *Mobility of nitrogen and heavy metals in biosolid amended soil.*

D. Moraetis, **S. Voutsadaki**, M. Kotronakis, G. Kontolaimakis, F.E. Stamati, N.P. Nikolaidis, N. Kalogerakis
Goldschmidt Conference, August 14-18, **2011**, Prague, Czech Republic. Goldschmidt 2011 conference, August 14-18, Prague, Czech Republic.

12. *High frequency water quality monitoring at Koiliaris Critical Zone Observatory identification of hydrological and geochemical patterns with multivariate analysis.*

S. Voutsadaki, D. Moraetis, D. Efstathiou, G. Giannakis, N.P. Nikolaidis
1st EWaS-MED International Conference, April **2013**, Thessaloniki, Greece.

13. *Development of an Integrated Suspended Sediment Sampling System - Prototype Results.*

S. Neratzaki, K. Moirogiorgou, D. Efstathiou, G. Giannakis, **S. Voutsadaki**, M. Zervakis, I. Sybetheros, I. Zacharias, G. Karatzas, N. P. Nikolaidis
EGU General Assembly, **2015**, Vienna, Austria.

14. *Evaluation of in-situ measurement of heavy metals using the Metalysr-HM1000.*

S. Voutsadaki, N. Nikolaidis
6th European Bioremediation Conference, June 29 – July 2, **2015**, Chania, Crete, Greece.

15. *Evaluation of a constructed wetland for wastewater treatment, with emphasis on the removal of emerging organic contaminants and antibiotic resistant bacteria.*

S. Christofilopoulos, A. Kaliakatsos, K. Triantafyllou, **S. Voutsadaki**, N. Nikolaidis, V. Danae, N. Kalogerakis
International Conference on Environmental Engineering and Management 2017, Bologna, Italy.

SPEAKING LANGUAGES

1. First Certificate in English, Cambridge University
2. Zertifikat Elementarstufe Deutsch
3. Greek (Greek Nationality)