

## CURRICULUM VITAE

Vlasoula Bekiari

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University of Patras*

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### EDUCATION

2000: PhD in Materials Science, Engineering Science Department, University of Patras

1993: BSc. in Chemistry, Department of Chemistry, University of Patras

### PREVIOUS EMPLOYMENT/OCCUPATION

2020-today: Associate Professor, Department of Agriculture, University of Patras

2013- 2020: Assistant Professor, Department of Fisheries and Aquaculture Technology, Technological Educational Institute of Western Greece

2008-2013: Lecturer, Department of Fisheries and Aquaculture Technology, Technological Educational Institute of Western Greece

2003-2008: Post-doctoral researcher, Engineering Science Department, University of Patras

2001- 2003: Adjunct Lecturer, Department of Materials Science, University of Patras

### TEACHING ACTIVITIES

Graduate and undergraduate courses in a) *General and Inorganic Chemistry*, b) *Analytical and Organic Chemistry* c) *Environmental Chemistry*

### RESEARCH INTERESTS

- Study of nanostructured materials and their use in water characterization and treatment
- Characterization of organic and inorganic pollutants in aqueous systems (UV-Vis spectrophotometry, fluorescence techniques, gas and ion chromatography)
- Preparation and characterization of new materials for environmental applications
- Determination of Total Carbon (TC) and Total Nitrogen (TN) in aqueous systems
- Determination of nutrients, Chemical Oxygen Demand (COD) and Biochemical Oxygen Demand (BOD) in aqueous systems

### PARTICIPATION IN RESEARCH PROJECTS

- Coordinator and Principal Investigator in 10 National Competitive Projects

### REVIEWER

- About *200 reviews* for *~20 scientific journals*
- *Reviewer of Greek research project* for GSRT (GREECE)

### REPRESENTATIVE PUBLICATIONS IN INTERNATIONAL PEER-REVIEWED JOURNALS

1. **V. Bekiari** and P.Lianos, 'Strongly Luminescent Poly(ethyleneglycol)-2,2'-bipyridine Lanthanide Ion Complexes', *Advanced Materials*, **1998**, 10, 1455.
2. **V. Bekiari**, G. Pistolis and P. Lianos, 'Intensely Luminescent Materials Obtained by Combining Lanthanide Ions, 2,2'- Bipyridine and Poly(ethyleneglycol) in Various Fluid or Solid Environments', *Chemistry of Materials*, **1999**, 11, 3189.
3. **V. Bekiari** and P. Lianos, 'High-yield Luminescence from Cadmium Sulfide Nanoclusters Supported In a Poly(ethyleneglycol) Oligomer', *Langmuir*, **2000**, 16, 3561.

4. **V. Bekiari** and P. Lianos, 'New High Yield Luminescent Materials Obtained by Combining Terpyridine, Metal Cations (Including Lanthanides) and Poly(EthyleneGlycol)', *Advanced Materials*, **2000**, 12, 1603.
5. T. Brankova, **V. Bekiari** and P. Lianos 'Photoluminescence emission from sol-gel organic/inorganic hybrid gels obtained through carboxylic acids solvolysis', *Chemistry of Materials*, **2003**, 15, 1855.
6. **V. Bekiari** and P. Lianos 'Ureasil gels as highly efficient adsorbent for water purification', *Chemistry of Materials*, **2006**, 18, 4142.
7. **V. Bekiari** and P. Lianos 'Use of Ureasil gels to extract small ions from aqueous solutions', *Journal of Hazardous Materials*, **2007**, 147, 184 .
8. **V. Bekiari**, M. Sotiropoulou, G. Bokias and P. Lianos 'Use of poly(N,N-dimethylacrylamide-co-sodium acrylate) hydrogel to extract cationic dyes and metals from water' *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2008**, 312, 214.
9. C. Varlikli, **V. Bekiari**, M. Kus, N. Boduroglu, I. Oner, P. Lianos, G. Lyberatos and S. Icli, 'Adsorption of dyes on Sahara desert sand', *Journal of Hazardous Materials*, **2009**, 170, 27.
10. **V. Bekiari** and P. Lianos, 'Poly(sodium acrylate) hydrogels as potential pH-sensitive sorbents for the removal of model organic and inorganic pollutants from water', *Global Nest Journal*, **2010**, 12, 262.
11. **V. Bekiari** and P. Avramidis, 'Data quality in water analysis: validation of combustion-infrared and combustion-chemiluminescence methods for the simultaneous determination of Total Organic Carbon (TOC) Total Nitrogen (TN)', *International Journal of Environmental Analytical Chemistry*, **2014**, 94, 65.
12. G. Panagopoulos, **V. Bekiari**, N. Lambrakis, P. Avramidis, C. Nikolaou, D. Koroniotis and C. Poulis, 'Hydrogeological and hydrochemical research of the vocha alluvial aquifer, korinthia prefecture, greece' *SGEM*, **2014**, 2, 481
13. M. Zamparas, G. Linardatos, G. Bokias and **V. Bekiari**, 'Ionic hydrogels as potential sorbent materials of organic and inorganic pollutants', *Journal of Surfaces and Interfaces of Materials*, **2014**, 2, 299.
14. P. Avramidis, **V. Bekiari**, D. Christodoulou, and G. Papatheodorou, 'Sedimentology and water column stratification in a permanent anoxic Mediterranean lagoon environment, Aetoliko Lagoon, western Greece' *Environmental Earth Sciences*, **2015**, 73, 5687.
15. **V. Bekiari**, K. Nikolaou, N. Koromilas, G. Lainioti, P. Avramidis, G. Hotos, J. K. Kallitsis and G. Bokias, 'Release of Polymeric Biocides from Synthetic Matrices for Marine Biofouling Applications', *Agriculture and Agricultural Science Procedia*, **2015**, 4, 445-450.
16. P. Avramidis, K. Nikolaou and V. Bekiari, 'Total Organic Carbon and Total Nitrogen in Sediments and Soils: A Comparison of the Wet Oxidation – Titration Method with the Combustion-infrared Method', *Agriculture and Agricultural Science Procedia*, **2015**, 4, 425-430.
17. Y. Cladas, G. Papantoniou, **V. Bekiari**, and N. Fragopoulou, 'Dystrophic event in Papas lagoon, Araxos Cape, western Greece in the summer 2012', *Mediterranean Marine Science*, **2016**, 17, 32.
18. P. Avramidis, K. Nikolaou, K. Poulos, **V. Bekiari** and A. Vantarakis, 'Environmental characterization of a Mediterranean protected shallow brackish coastal aquatic system, Klisova Lagoon, Western Greece: a case study', *Journal of Coastal Conservation*, **2017**, 21, 115.
19. **V. Bekiari**, G. Panagopoulos, D. Papoulis and D. Panagiotaras, 'Use of halloysite nanotubes to reduce ammonium concentration in water and wastewaters', *Materials Research Innovations*, **2017**, 21, 313.
20. D. Druvari, N.D. Koromilas, **V. Bekiari**, G. Bokias and J.K. Kallitsis, 'Polymeric Antimicrobial Coatings Based on Quaternary Ammonium Compounds', *Coatings*, **2018**, 8, 8.
21. I. Mylonas-Margaritis, D. Maniaki, J. Mayans, L. Ciammaruchi, V. Bekiari, C. P. Raptopoulou, V. Psycharis, S. Christodoulou, A. Escuer and S. P. Perlepes, 'Mononuclear Lanthanide(III)-Salicylideneaniline Complexes: Synthetic, Structural, Spectroscopic, and Magnetic Studies', *Magnetochemistry*, **2018**, 4, 45.
22. S. T. Tsantis, A. Lagou-Rekka, K.F. Konidaris, C.P. Raptopoulou, V. Bekiari, V. Psycharis and S.P. Perlepes, 'Tetranuclear oxido-bridged thorium(IV) clusters obtained using tridentate Schiff bases', *Dalton Transactions*, **2019**, 48, 15668.
23. N.C. Anastasiadis, C.M. Granadeiro, J. Mayans, C.P. Raptopoulou, V. Bekiari, L. Cunha-Silva, V. Psycharis, S.S. Balula, K.F. Konidaris and S.P. Perlepes, 'Multifunctionality in two families of dinuclear lanthanide(III) complexes with a tridentate Schiff-base ligand', *Inorganic Chemistry*, **2019**, 58, 9581.

24. N. Vlahos, E. Levizou, P. Stathopoulou, P. Berillis, E. Antonopoulou, V. Bekiari, N. Krigas, K. Kormas and E. Mente, 'An experimental brackish aquaponoc system using juvenile gilthead sea bream (*Sparus Aurata*) and rock samphire (*Critmum maritimum*)', *Sustainability*, 2019, 11, Article Number 4820.
25. A. Tsagdi, D. Druvari, D. Panagiotaras, P. Avramidis, V. Bekiari and J. K. Kallitsis, 'Polymeric Coatings Based on Water-Soluble Trimethylammonium Copolymers for Antifouling Applications', *Molecules*, 2020, 25, Article Number 1678.
26. P. S. Perlepe, K.N. Pantelis, L. Cunha-Silva, V. Bekiari, A. Escuer and T. C. Stamatatos, 'Rare Nuclearities in Ni(II) Cluster Chemistry: An Unprecedented {Ni<sub>12</sub>} Nanosized Cage from the Use of N-Naphthalidene-2-Amino-5-Chlorobenzoic Acid', *Inorganics*, 2020, 8, 32.
27. S.T. Tsantis, V. Bekiari, D.I. Tzimopoulos, C.P. Raptopoulou, V. Psycharis, A. Tsipis and S.P. Perlepes, 'Reactivity of coordinated 2-pyridyl oximes: Synthesis, structure, spectroscopic characterization and theoretical studies of dichlorodi[(2-pyridyl)furoxan]zinc(II) obtained from the reaction between zinc(II) nitrate and pyridine-2-chloroxime', *Inorganics*, 2020, 8, 47.
28. C.D. Polyzou, H. Nikolaou, C.P. Raptopoulou, K.F. Konidaris, V. Bekiari, V. Psycharis and S.P. Perlepes, 'Dinuclear lanthanide(III) complexes from the use of methyl 2-pyridyl ketoxime: Synthetic, structural, and physical studies', *Molecules*, 2021, 26, Article Number 1622.
29. C. Stamou, W. Papawassiliou, J. P. Carvalho, K.F. Konidaris, V. Bekiari, P. Dechambenoit, A.J. Pell and S.P. Perlepes, 'Indium(III) in the "periodic Table" of Di(2-pyridyl) Ketone: An Unprecedented Transformation of the Ligand and Solid-State 115In NMR Spectroscopy as a Valuable Structural Tool', *Inorganic Chemistry*, 2021, 60, 4829.
30. P. Avramidis and V. Bekiari, 'Application of a catalytic oxidation method for the simultaneous determination of total organic carbon and total nitrogen in marine sediments and soils', *PLoSOne*, 2021, 16, Article number e0252308.
31. S. Meropoulis, G. Rassias, V. Bekiari and C.A. Aggelopoulos, 'Structure-Degradation efficiency studies in the remediation of aqueous solutions of dyes using nanosecond-pulsed DBD plasma', *Separation and Purification Technology*, 2021, 274, Article number 119031.
32. G.T. Papanikolaou, A. Kourtellaris, K.N. Pantelis, V. Bekiari, A.J. Tasiopoulos and T.C. Stamatatos, 'Zinc(II) vs cadmium(II) in organic chelate-free chemistry: Synthesis and characterization of 1-D [Zn<sub>2</sub>(N<sub>3</sub>)<sub>4</sub>(MeCN)<sub>3</sub>]<sub>n</sub> and 2-D [Cd<sub>3</sub>(N<sub>3</sub>)<sub>6</sub>(MeCN)<sub>2</sub>]<sub>n</sub> coordination polymers', *Polyhedron*, 2021, 208, Article number 115423.
33. C.T. Chasapis, M. Peana, V. Bekiari, 'Structural Identification of Metalloproteomes in Marine Diatoms, an Efficient Algae Model in Toxic Metals Bioremediation', *Molecules*, 2022, 27, 378.
34. E. Gianni, G. Panagopoulos, K. Katsanou, D. Panagiotaras, V. Bekiari, 'Removal of total organic carbon from olive mill wastewater using palygorskite clay mineral', *Desalination and Water Treatment*, 2022, 254, 50.
35. S. T. Tsantis, Z.G. Lada, D.I. Tzimopoulos, V. Bekiari, V. Psycharis, C.T. Raptopoulou, S.P. Perlepes, 'Two different coordination modes of the Schiff base derived from ortho-vanillin and 2-(2-aminomethyl)pyridine in a mononuclear uranyl complex', *Heliyon*, 2022, 8(6), e09705.
36. C.D. Polyzou, P. Gkolfi, C.T. Chasapis, V. Bekiari, A. Zianna, G. Psomas, M. Ondrej, V. Tangoulis, 'Stimuli-responsive spin crossover nanoparticles for drug delivery and DNA-binding studies', *Dalton Transactions*, 2022, 51, 12427.
37. M. Peana, A. Pelucelli, C.T. Chasapis, S.P. Perlepes, S.P. Perlepe, V. Bekiari, S. Medici, M.A. Zoroddu, 'Biological Effects of Human Exposure to Environmental Cadmium', *Biomolecules*, 2023, 13, Article number 36.
38. D. Druvari, G.C. Lainioti, V. Bekiari, P. Avramidis, J.K. Kallitsis, G. Bokias, 'Development of Antifouling Coatings Based on Quaternary Ammonium Compounds through a Multilayer Approach', *International Journal of Molecular Sciences*, 2023, 24, Article number 6594.
39. E. Gianni, D. Panagiotaras, I. Giannakis, D. Papoulis, V. Bekiari, G. Panagopoulos, P. Petrounias, A. Kalarakis, 'Palygorskite-TiO<sub>2</sub> nanocatalysts for photocatalytic degradation of tebuconazole in water', *Water and Environment Journal*, 2023, 37, 351.
40. E. Zygouri, V. Bekiari, G. Malis, N.K. Karamanos, C. Koutsakis, G. Psomas, V. Tangoulis, 'pH-Sensitive Gold Nanorods for Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) Delivery and DNA-Binding Studies', *Molecules*, 2023, 28, Issue Article number 3780.

41. I. Mylonas-Margaritis, Z.G. Lada, A.A. Kitos, D. Maniaki, K. Skordi, V. Bekiari, A. Escuer, J. Mayans, V. Nastopoulos, E.G. Balkabassis, D. Papaioannou, 'Interesting chemical and physical features of the products of the reactions between trivalent lanthanoids and a tetradentate Schiff base derived from cyclohexane-1,2-diamine', Dalton Transactions, 2023, 52, 8332.
42. N. Vlahos, E. Levizou, E. Patsea, K. Tasiou, P. Berillis, E. Antonopoulou, V. Bekiari, N. Martou, K. Morfesis, D. Lazari, C. Chatzimavroudis, N. Krigas, K. Kormas, E. Mente, 'Salinity affects the efficiency of a brackish aquaponics system of sea bass (*Dicentrarchus labrax*) and rock samphire (*Crithmum maritimum*)', Aquaculture, 2023, Volume 57130, Article number 739493.
43. G. Hotos, V. Bekiari, 'Absorption Spectra as Predictors of Algal Biomass and Pigment Content of the Cultured Microalgae *Amphidinium carterae*, *Isochrysis galbana*, *Nephroselmis* sp., and *Anabaena* sp.', International Journal of Plant Biology, 2023, 14,879.

### **CONFERENCES**

Participation in about 100 national or international conferences

### **CITATIONS**

About 2500 citations in total. These include more than 2200 citations by other researchers. h-index = 28 (Source: Scopus).