# CURRICULUM VITAE CHRISTOS STELIOS AKRATOS

## ADDRES

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## **Personal information**

Birth date: 30 January1980 Family condition: Married with 3 children Citizenship: Greek

## ACADEMIC TITLES

- November 2002: Environmental Engineering Diploma, School of Engineering, Democritus University of Thrace, Rank 8,47/10.
- June 2006: PhD, Department of Environmental Engineering, School of Engineering, Democritus University of Thrace (Subject: "Optimization of design parameters of subsurfase flow constructed wetlands using pilot-scale units".

# ACADEMIC AND PROFESSIONAL EXPERIENCE:

- <u>August 2020-today</u>: Associate Professor in Water Resources and wastewater Management, Department of Civil Engineering, Democritus University of Thrace, Xanthi, Greece.
- <u>May 2018-August 2020</u>: Assistant Professor in Water Resources and wastewater Management, Department of Civil Engineering, Democritus University of Thrace, Xanthi, Greece.
- <u>May 2013-May 2018</u>: Assistant Professor in Water Resources and wastewater Management, Department of Environmental and Natural Resources Management, University of Patras, Agrinio, Greece.
- <u>May 2009 May 2013</u>: Lecturer in Water Resources emphasizing in Wetlands Management, Department of Environmental and Natural Resources Management, University of Patras, Agrinio, Greece.
- <u>August 2007-May 2009</u>: Post doctoral researcher, Department of Environmental Engineering, School of Engineering, Democritus University of Thrace
- <u>August 2006-August 2007</u>: Compulsory Military Service

# **FOREIGN LANGUAGES**

- 1. English: Level C2. Certificates:
  - June 2003: Certificate of Proficiency in English (University of Cambridge)
  - March 2003: Certificate of Proficiency in English (University of Michigan)
  - June 1995: First Certificate in English (University of Cambridge)

- 2. German: Level C1. Certificates:
  - March 2017: Goethe Zertifikat in Deutsch C1

# **SCLORASHIPS**

- Scholarship of Labor home 1999 and 2000 (during under-graduate studies)
- Scholarship of Scholarship State Foundation 2001 (during under-graduate studies)
- Scholarship of Technical Chamber of Greece 2002 (during under-graduate studies)
- Scholarship of REVOIL S.A. during academic year 2003 2004 (during post-graduate studies)
- Scholarship of Bodossaki Foundation 2003 2006 (during post-graduate studies)

## PARTICIPATION IN RESEARCH PROJECTS

- **Research project title:** Study of full scale constructed wetlands units for wastewater treatment
  - Budget: 80000 Euros

**Source of funding:** European Union - European Social Fund (ESF) & National Sources, in the framework of the program EPEAEK-Pithagoras II Operational Program of Ministry of Education

**Role:** Member of the main research team

Starting and ending dates: 1/1/2005 until 31/12/2006

• **Research project title:** Risk assessment of Lake Poliftos waters, Prefecture of Kozani **Budget:** 150000 Euros

**Source of funding:** European Union - European Social Fund (ESF) & National Sources, in the framework of the program EPEAEK Environment – Archimedes Operational Program of Ministry of Education

**Role:** Member of the main research team

Starting and ending dates: 1/1/2004 until 31/12/2005

• **Research project title:** HYDRANET

Budget: 2000000 Euros

**Source of funding:** European Union - European Social Fund (ESF) & National Sources, in the framework of the program INTERREG IIIB-MEDDOC

**Role:** Member of the main research team

Starting and ending dates: 1/1/2006 έως 30/6/2007

• **Research project title:** A pilot monitoring program for the transboundary basin of River Nestos

Budget: 411800 Euros

**Source of funding:** European Union - European Social Fund (ESF) & National Sources, in the framework of the program INTERREG IIIA / PHARE CBC Greece – Bulgaria

**Role:** Member of the main research team

Starting and ending dates: 1/1/2006 until 31/7/2008

• **Research project title:** Integrated sludge treatment and wastewater treatment using natural systems

Budget: 675750 Euros

**Source of funding:** European Union - European Social Fund (ESF) & National Sources, in the framework of GSRT's Regional operational program

Role: Member of the main research team

Starting and ending dates: 1/1/2007 until 31/3/2008

• **Research project title:** Monitoring program of surface waters and groundwater of River Nestos

Budget: 170710 Euros

**Source of funding:** Regional Authority of Eastern Macedonia and Thrace **Role:** Member of the main research team

Starting and ending dates: 14/7/2008 until 31/10/2008

Research project title: Hexavalent Chromium REDUCTION from contaminated groundwater and from wastewaters (CREDUCTION)
Budget: 600000Euros
Source of funding: European Union - European Social Fund (ESF) & National Sources, in the framework of the program "THALIS" of the "Operational Program Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF) 2007-2013
Role: Member of the main research team Starting and ending dates: 1/4/2012 until 31/3/2015

# TEACHING ACTIVITIES (2007-2019)

## **Teaching – Undergraduate Courses**

•	Introduction on Environmental Engineering	2009-2013
•	Hydrogeology	2008-2013
•	Applied Hydraulics	2009-2017
•	Technical Hydrology	2008-2017
•	Natural Systems for wastewater management	2009-2019
•	Environmental Measurements	2007-2009
•	Solid waste management	2015-2017
•	Wastewater management	2015-2019

## **Teaching – Postgraduate Courses**

- "Constructed wetlands for wastewater and sludge treatment", in the M.Sc. programs "Hydraulic engineering and environment", Democritus University of Thrace (2017-today).
- "Constructed wetlands for wastewater and sludge treatment", in the M.Sc. programs "Water Resources Engineering and Management" and "Air Quality Control, Solid Waste and Waste Water Process Engineering", University of Stutgart (2015-today).
- «Wastewater management» in the M.Sc. program "Waste Management", Hellenic Open University (2015-today).
- "Advanced Environmental Technologies" and "Environmental Laboratory Techniques" in the M.Sc. program "Applications for Environmental Protection and Management, University of Patras (2015-2017).
- "Environmental pollution remediation of degraded elements in protected areas ecotoxicology and biotechnological applications" in the M.Sc. program "Sustainable Management of Protected Areas", University of Patras, (2 semesters) (2009-2011)
- "Environmental Impact Assessment Studies" in the M.Sc. program "Sustainable Management of Protected Areas", University of Patras, (2 semesters) (2009-2011)
- M.Sc. "Ecological and Environmental Engineering", Department of Environment, University of Aegean). Ecological Engineering lectures.

# POSTGRADUATE SUPERVISION

# Ph.D. Students

- 1. Sultana M. (2010-2014) "Wastewater treatment using constructed wetlands" Supervisor.
- 2. Chowdhury A. (2010-2014) "Composting of agro-industrial by-products" Co-supervisor.
- 3. Eleftheriadou E. (2018-today) Co-supervisor
- 4. Anastasopoulos P. (2019-today) Supervisor

## M.Sc. Students

- 1. Theodori C. (2009-2010)
- 2. Herouveim E. (2009-2011)
- 3. Tassoula Evangelia (2013-2014).
- 4. Agathou Dimitra (2015-2016)
- 5. Karampasis George (2015-2017)
- 6. Theodoridou Anatoli (2016-2017)
- 7. Anagnostidou Ekaterini (2016-2017)
- 8. Zamvrakidou Afroditi (2016-2017)
- 9. Theodoridou Anatoli (2017-2018)
- 10. Theochari Charouls (2017-2018)
- 11. Mastrandreou Ioannis (2017-2018)
- 12. Gavriilidis Gerorgios (2017-2018)
- 13. Karametos Ioannis (2017-2018)
- 14. Skatharos Grigorios (2018-2019)
- 15. Roubou Eleni (2018-2019)
- 16. Efthimiadis Konstantinos (2018-2019)
- 17. Giapamtzis Christos (2018-2019)

## **DISTINCTIONS**

2012:

The most cited articles published since 2007: "C.S. Akratos and V.A. Tsihrintzis. (2007). Effect of Temperature, HRT, Vegetation and Porous Media on Removal Efficiency of Pilot-Scale Horizontal Subsurface Flow Constructed Wetlands, Ecological Engineering, Vol. 29, pp. 173-191"

## **INVITED TALKS AND ORGANIZING – SCIENTIFIC COMMITTEES**

- June 2001: Conference secretariat in International Conference of Ecological Protection of the Planet Earth I, June 5-8 2001, Xanthi Greece.
- July 2009: Member of organizing committee in International Conferences «2nd International Conference on Water Economics, Statistics, and Finance» και «Asset Management of Small and Medium Wastewater Utilities» 3-5 July, Alexandroupoli.
- July 2010: Member of scientific committee in X Protection and Restoration of Environment International Conference
- April 2013: Member of scientific committee in 1st EWaS-MED International Conference
- October 2013: Member of scientific committee in International 4<sup>th</sup> Conference of Decentralized Wastewater Treatment Plants
- March 2014: Member of scientific committee in 4<sup>th</sup> Environmental Conference of Macedonia
- Horizon 2020 Capacity Building/Mediterranean Environment Programme, "Best environmental practices in olive mill waste management and new technologies" Lecture on "Post-treatment of Olive Mill Waste Water in pilot-scale and full-scale constructed wetlands"

## NATIONAL AND INTERNATIONAL COOPERATIONS

• Institute for Sanitary Engineering, water quality and solid waste management, University of Stuttgart (Prof. Heidrun Steinmetz): June – August 2014: Visiting researcher

- Linnaeus University, Sweden (Prof. William Hogland)
- Dublin City University, Ireland (Dr. Enrico Marsili)
- Institute of Chemical Engineering, Bulgarian Academy of Sciences, Bulgaria (Prof. Venko Beschkov)
- Czestochowa University of Technology, Czech (Dr. Ewa Neczaj)
- National Research Center, Egypt (Dr. Ahmed Mahmoud Shaban)
- Cartif Technology Centre, Spain (Dr. Dolores Hidalgo-Barrio)
- Versuchs- und Lehranstalt für Brauerei in Berlin, Germany (Dr. Gerhard Andreas Schreiber)
- Ceramic Technology Institute, Spain (Dr. Mar Rodrvguez Rodrigo)
- EU Voronezh State University, Russia (Anna Kamynina)
- Asociación de Investigación de la Industria Metalmecánica, afines y conexas, Spain (Dr. Ana Valero Gomez)
- Leitat Technological Center, Spain (Dr. Anna Serra)
- T.E. Laboratories, Ireland (Dr. Niamh Walsh)
- Konectia (Natural Connections and Consulting S.L.), Spain (Juan Carlos Barrera)
- Mekorot, Israel (Dr. Roy Elkayam)
- Hebrew University of Jerusalem (Prof. Ovadia Lev)
- Shenyang Jianzhu University, China (Dr. Yunan Gao)
- Department of Chemical Engineering, University of Patras (Prof. S. Pavlou)
- Department of Biology, University of Patras (Prof. G. Aggelis)
- FORT/ICE-HT, Patras
- Department of Chemistry, Aristotle University of Thessaloniki (Prof. A. Zouboulis)
- Department of Biology, Aristotle University of Thessaloniki (Prof. M. Yiangou)
- Department of Chemical Engineering, Aristotle University of Thessaloniki (Assist. Prof. M. Mitrakas)
- Department of Environmental Engineering, Democritus University of Thrace (Asc. Prof. P. Melidis)
- School of Rural and Surveying Engineering, National Technical University of Athens (Prof. V. Tsihrintzis)
- Department of Biochemistry and Biotechnology, University of Thessaly (Assoc. Prof. T.D. Karpouzas)
- Department of Chemical Engineering, National Technical University of Athens (Prof. G. Lyberatos)
- Olive mill of Mr. C. Theodorou, Amfilochia
- Union of Agricultural Cooperatives of Agrinio
- Cheese dairy Papathanasiou, Agrinio

## PUBLICATIONS IN INTERNATIONAL JOURNALS

- G.K. Sylaios, V.A. Tsihrintzis, C. Akratos, A. Tsikliras and K. Haralambidou. (2003). Residual Currents and Fluxes through the Mouth of Vassova Lagoon, Mediterranean Marine Science, Vol. 4, No. 2, pp 39-52.
- G.K. Sylaios, V.A. Tsihrintzis, C. Akratos and K. Haralambidou. (2004). Monitoring and Analysis of Water, Salt and Nutrient Fluxes at the Mouth of a Lagoon, Water, Air and Soil Pollution – Focus, Vol. 4, pp. 111-125. (IF 2012: 1.748, Cited: 5)
- 3. G.K. Sylaios, V.A. Tsihrintzis, Ch. Akratos, A. Tsikliras and K. Haralambidou. (2005). Exchange Dynamics through the Mouth of a Coastal Lagoon, Journal of Marine Environmental Engineering, Vol. 8, No. 1., pp. 1-19. (Cited: 0)

- 4. K.I. Haralampidou, V.A. Tsihrintzis, G.K. Sylaios and C. Akratos. (2005). Seasonal and Spatial Characteristics of Water Quality in the Estuary of Strymon River, Journal of Marine Environmental Engineering, Vol. 7, No. 4, pp. 231-239. (Cited: 4)
- G.K. Sylaios, V.A. Tsihrintzis, C. Akratos and K. Haralambidou. (2006). Quantification of Water, Salt and Nutrient Exchange Processes at the Mouth of a Mediterranean Coastal Lagoon, Environmental Monitoring & Assessment, Vol 119, pp. 275-301. (IF 2012: 1.592, Cited 8)
- C.S. Akratos, V.A. Tsihrintzis, I. Pechlivanidis, G.K. Sylaios and H. Jerrentrup. (2006). A Free Water Surface Constructed Wetland for the Treatment of Agricultural Drainage Entering Vassova Lagoon, Kavala, Greece, Fresenius Environmental Bulletin, Vol. 15, pp. 1553-1562. (IF 2012: 0.641, Cited: 5)
- 7. P. Melidis, C. Akratos, V.A. Tsihrintzis and E. Trikoilidou. (2007). Characterization of Rain and Roof Drainage Water Quality in Xanthi, Greece, Environmental Monitoring & Assessment, Vol. 127, pp. 15-27. (IF 2012: 1.592, Cited: 19)
- 8. C.S. Akratos and V.A. Tsihrintzis. (2007). Effect of Temperature, HRT, Vegetation and Porous Media on Removal Efficiency of Pilot-Scale Horizontal Subsurface Flow Constructed Wetlands, Ecological Engineering, Vol. 29, pp. 173-191. (IF 2012: 3.272, Cited: 155)
- 9. V.A. Tsihrintzis, C.S. Akratos, G.D. Gikas, D. Karamouzis, and A.N. Angelakis. (2007). Performance and Cost Comparison of a FWS and a VSF Constructed Wetland Systems, Environmental Technology, Vol. 28, pp 621-628. (IF 2012: 1.606, Cited: 24)
- G.D. Gikas, C.S. Akratos and V.A. Tsihrintzis. (2007). Performance Monitoring of a Vertical Flow Constructed Wetland Treating Municipal Wastewater, Global Nest: The International Journal, Vol. 9, pp. 277-285. (IF 2012: 0.698, Cited: 5)
- C.S. Akratos, J.N.E. Papaspyros and V.A. Tsihrintzis. (2008). An Artificial Neural Network Model and Design Equations for BOD and COD Removal Prediction in Horizontal Subsurface Flow Constructed Wetlands, Chemical Engineering Journal, Vol. 143, pp. 96-100. (IF 2012: 3.473, Cited: 37)
- 12. K.I. Vatalis, G. Charalampides, O. Manoliadis, C. Akratos and A. Asvesta. (2008). Water quality assessment of the Polyfyto lake in Western Macedonia, Greece, Journal of Environmental Protection and Ecology, Vol. 9, pp. 540-549 (IF 2012: 0.259, Cited: 2)
- C.S. Akratos, J.N.E. Papaspyros and V.A. Tsihrintzis. (2009). Total Nitrogen and Ammonia Removal Prediction in Horizontal Subsurface Flow Constructed Wetlands: Use of Artificial Neural Networks and Development of a Design Equation, Bioresource Technology. Vol. 100, pp.586-596. (IF 2012: 4.750, Cited: 21)
- 14. G. D. Gikas, V. A. Tsihrintzis, C. S. Akratos and G. Haralambidis. (2009). Water quality trends in Polyphytos reservoir, Aliakmon river, Greece. Environmental Monitoring and Assessment, Vol 149, pp. 163-181 (IF 2012: 1.592, Cited: 16)
- C.S. Akratos, J.N.E. Papaspyros and V.A. Tsihrintzis. (2009). Artificial Neural Network Use in Ortho-phosphate and Total Phosphorus Removal Prediction in Horizontal Subsurface Flow Constructed Wetlands, Biosystems Engineering, Vol. 102, pp. 190-201 (IF 2012: 1.869, Cited: 17)
- A.I. Stefanakis, C.S. Akratos, G.D. Gikas and V.A. Tsihrintzis (2009). Effluent quality improvement of two pilot-scale, horizontal subsurface flow constructed wetlands using natural zeolite (clinoptilolite), Microporous and Mesoporous Materials, Vol. 12, pp. 131-143. (IF 2012: 3.365, Cited: 19)
- 17. A.I. Stefanakis, C.S. Akratos, P. Melidis and V.A. Tsihrintzis. (2009). Surplus activated sludge dewatering in pilot-scale sludge drying reed beds, Journal of Hazardous Materials 172 (2-3), pp. 1122-1130 (IF 2012: 3.925, Cited: 15)
- 18. P. Melidis, G.D. Gikas, C.S. Akratos, and V.A. Tsihrintzis. (2010). Dewatering of primary settled urban sludge in a vertical flow wetland, Desalination 250, pp. 395-398 (IF 2012: 3.041, Cited: 9)

- 19. A.I. Stefanakis, C.S. Akratos and V.A. Tsihrintzis. (2011). Effect of wastewater stepfeeding on removal efficiency of pilot-scale horizontal subsurface flow constructed wetlands, Ecological Engineering 37, pp. 431-443 (IF 2012: 3.272, Cited: 9)
- M. Michailides, P. Panagopoulos, C.S. Akratos, A.G. Tekerlekopoulou, and D.V. Vayenas. (2011). A full-scale system for aerobic biological treatment of olive mill wastewater, Journal of Chemical Technology and Biotechnology 86, pp. 888-892 (IF 2012: 2.504, Cited: 8)
- 21. E. Herouvim, C.S. Akratos, A.G. Tekerlekopoulou and D.V. Vayenas. (2011). Treatment of olive mill wastewater in pilot-scale vertical flow constructed wetlands, Ecological Engineering 37, pp. 931-939 (IF 2012: 3.272, Cited: 15)
- G.D. Gikas, V.A. Tsihrintzis and C.S. Akratos. (2011). Performance and modeling of a vertical flow constructed wetland-maturation pond system, Journal of Environmental Science and Health Part A Toxic/Hazardous Substances and Environmental Engineering 46, pp. 692-708 (IF 2012: 1.252, Cited: 10)
- 23. M. Michailides, G. Christou, C.S. Akratos, A.G. Tekerlekopoulou and D.V. Vayenas. (2011). Composting of olive leaves and pomace from a three-phase olive mill plant, International Biodeterioration and Biodegradation 65 (3), pp. 560-564 (IF 2012: 2.059, Cited: 2)
- 24. A.K.M.M.B. Chowdhury, C.S. Akratos, D.V. Vayenas and S. Pavlou. (2013). Olive mill waste composting: a review. International Biodeterioration & Biodegradation 85, 108-119. (IF 2012: 2.059, Cited: 1)
- M.K. Michailides, M.Y. Sultana, A.G. Tekerlekopoulou, C.S. Akratos and D.V. Vayenas. (2013). Biological Cr(VI) removal using bio-filters and constructed wetlands, Wat. Sci. Tech. 68, pp. 2228-2233. (IF 2012: 1.102, Cited: 0)
- A.K.M.M.B. Chowdhury, M.K. Michailides, C.S. Akratos, A.G. Tekerlekopoulou, S. Pavlou and D.V. Vayenas. (2014). Composting of three phase olive mill solid waste using different bulking agents, International Biodeterioration and Biodegradation 91, pp. 66-73. (IF 2012: 2.059, Cited: 0)
- 27. M-Y. Sultana, C.S. Akratos, S. Pavlou and D.V. Vayenas. (2014) Chromium removal in constructed wetlands: A review, International Biodeterioration and Biodegradation 96, pp. 181-190.
- 28. M.K. Michailides, A.G. Tekerlekopoulou, C.S. Akratos, S. Coles, S. Pavlou and D.V. Vayenas. (2015). Molasses as an efficient low-cost carbon source for biological Cr(VI) removal, Journal of Hazardous Materials 281, pp. 95-105.
- 29. M. Sultana, A.K.M.M.B. Chowdhury, M.K. Michailides, C.S. Akratos, A.G. Tekerlekopoulou, and D.V. Vayenas. (2015). Integrated Cr(VI) removal using constructed wetlands and composting, Journal of Hazardous Materials 281, pp. 106-113.
- M.K. Michailides, T. Tatoulis, Mar-Yam Sultana, A.G. Tekerlekopoulou, I. Konstantinou, C. S. Akratos, S. Pavlou and D.V. Vayenas (2015) "Start-up of a free water surface constructed wetland for treating olive mill wastewater" Hemijska industrija (Chemical Industry) 69, 577-583.
- T.I. Tatoulis, A.G. Tekerlekopoulou, C.S. Akratos, S. Pavlou and D.V. Vayenas (2015) "Aerobic Biological Treatment of Second Cheese Whey in Suspended and Attached Growth Reactors" Journal of Chemical Technology and Biotechnology, 90, 2040-2049.
- 32. Abu Khayer Md. Muktadirul Bari Chowdhury, F. Konstantinou, A. Damati; C.S. Akratos, D. Vlastos, A.G. Tekerlekopoulou, D.V. Vayenas (2015) "Is physicochemical evaluation enough to characterize olive mill waste compost as soil amendment? The case of genotoxicity and cytotoxicity evaluation" Journal of Cleaner Production, 93, 5106, 94-102.
- 33. Mar-Yam Sultana, T.I. Tatoulis, C.S. Akratos, A.G. Tekerlekopoulou, D.V. Vayenas (2015) "Effect of operational parameters on the performance of a horizontal subsurface flow constructed wetland treating secondary cheese whey and Cr(VI) wastewater" International Journal of Civil and Structural Engineering, Volume 2 : Issue 1 [ISSN : 2372-3971].

- I. Vasiliadou, Abu Khayer Md. Muktadirul Bari Chowdhury, C.S. Akratos, A.G. Tekerlekopoulou, S. Pavlou, D.V. Vayenas (2015), "Mathematical modeling of olive mill waste composting process" Waste Management, 43, 61-71.
- 35. M-Y. Sultana, C. S. Akratos, S. Pavlou and D.V. Vayenas (2015) "Constructed wetlands in the treatment of agro-industrial wastewater: A review" Hemijska industrija (Chemical Industry), 69, 127-142
- M-Y. Sultana, C. Mourti, T. Tatoulis, C. Akratos, A.G. Tekerlekopoulou, D.V. Vayenas (2015) "Effect of hydraulic retention time, temperature, and organic load on a horizontal subsurface flow constructed wetland treating cheese whey wastewater" Journal of Chemical Technology and Biotechnology, 91, 726-732.
- 37. Tatoulis T.I., Zapantiotis S., Frontistis Z., Akratos C.S., Tekerlekopoulou A.G.\*, Pavlou S., Mantzavinos D., Vayenas D.V. (2016), "A hybrid system comprising an aerobic biological process and electrochemical oxidation for the treatment of black table olive processing wastewaters" International Biodeterioration and Biodegradation, International Biodeterioration & Biodegradation 109, 104-112.
- O.N. Tsolcha, A.G. Tekerlekopoulou, C. S. Akratos, S.Bellou, G. Aggelis, M. Katsiapi, M. Moustaka-Gounic, D.V. Vayenas (2016), "Treatment of second cheese whey effluents using a Choricystis-based system with simultaneous lipid production" Journal of Chemical Technology and Biotechnology, 9, 2349-2359.
- K.A. Karanasios, I.A. Vasiliadou, A.G. Tekerlekopoulou, C.S. Akratos, S. Pavlou, D.V. Vayenas (2016) "Effect of C/N ratio and support material on heterotrophic denitrification of potable water in bio-filters using sugar as carbon source" International Biodeterioration & Biodegradation, 111, 62–73.
- 40. T. Tatoulis, A. Stefanakis, Z. Frontistis, C.S. Akratos, A.G. Tekerlekopoulou, D. Mantzavinos, D.V. Vayenas (2017), "Treatment of table olive washing water using trickling filters, constructed wetlands and electrooxidation" Environmental Science and Pollution Research, 24, 1085-1092.
- 41. O.N. Tsolcha, A.G. Tekerlekopoulou, C.S. Akratos, G. Aggelis, S. Genitsaris, M. Moustaka-Gouni, D.V. Vayenas (2017) "Biotreatment of raisin and winery wastewaters and simultaneous biodiesel production using a Leptolyngbya-based microbial consortium" Journal of Cleaner Production, 148, 185–193.
- 42. Tatoulis, T., Akratos, C.S., Tekerlekopoulou, A.G., Vayenas, D.V., Stefanakis, A.I. (2017) "A novel horizontal subsurface flow constructed wetland: Reducing area requirements and clogging risk" Chemosphere, 186, pp. 257-268.
- 43. Petalas, C.P., Akratos, C.S., Tsihrintzis, V.A. (2018) Hydrogeological Investigation of a Karst Aquifer System Environmental Processes, 5 (1), pp. 155-181.
- 44. Tatoulis, T.I., Michailides, M.K., Tekerlekopoulou, A.G., Akratos, C.S., Pavlou, S., Vayenas, D.V. (2018) "Simultaneous treatment of agro-industrial and industrial wastewaters: Case studies of Cr(VI)/second cheese whey and Cr(VI)/winery effluents" Water (Switzerland), 10 (4), art. no. 382
- 45. Tsolcha, O.N., Tekerlekopoulou, A.G., Akratos, C.S., Antonopoulou, G., Aggelis, G., Genitsaris, S., Moustaka-Gouni, M., Vayenas, D.V. (2018) "A Leptolyngbya-based microbial consortium for agro-industrial wastewaters treatment and biodiesel production" Environmental Science and Pollution Research, pp. 1-10. Article in Press.
- 46. O.N. Tsolcha, A.G. Tekerlekopoulou, C.S. Akratos, G. Aggelis, S.Genitsaris, M. Moustaka-Gouni, D.V.Vayenas, (2018) "Agroindustrial wastewater treatment with simultaneous biodiesel production in attached growth systems using a mixed microbial culture", Water (Switzerland), 10 (11), art. no. 1693, .
- 47. A. Kotoulas, D. Agathou, I.E. Triantaphyllidou, T.I. Tatoulis, C.S. Akratos, A.G. Tekerlekopoulou, D.V. Vayenas, (2019) "Zeolite as a potential medium for ammonium recovery and second cheese whey treatment", Water (Switzerland), 11 (1), art. no. 136, .

48. A. Kotoulas, D. Agathou, I.E. Triantaphyllidou, T.I. Tatoulis, C.S. Akratos, A.G. Tekerlekopoulou, D.V. Vayenas, (2019) "Second cheese whey treatment using zeolite under continuous flow mode and its application on wheat growth", Water (Switzerland), 11 (5), art. no. 928, .

Years since first publication:	15
Mean number of papers/year:	3,27
Citations (excluding self citations) :	1206
Citations/publication	24.61
Н	19

#### PUBLICATIONS IN INTERNATIONAL CONFERENCES

- G.K. Sylaios, V.A. Tsihrintzis, C. Akratos and K. Haralambidou. (2002). Monitoring and Analysis of Water, Salt and Nutrient Fluxes at the Mouth of a Lagoon, Proceedings of the International Conference Protection and Restoration of the Environment VI, July 1-5, Skiathos Island, Greece, pp. 435-442.
- G.K. Sylaios, V.A. Tsihrintzis, Ch. Akratos, A. Tsikliras and K. Haralambidou. (2002). Exchange Dynamics through the Mouth of a Coastal Lagoon, 1st Scientific Conference "Oceanographical Aspects for a Sustainable Mediterranean", Hellenic Oceanographers Association and European Federation of Marine Science and Technology Societies, 27-29 September, Athens, Greece, in CD-Rom #M13.
- 3. K. Haralambidou, G. Sylaios, V.A. Tsihrintzis, C.S.. Akratos. (2003). Monitoring program for the study and Management of Strymon river estuary, Proceedings of 9th Conference of Hellenic Hydrotechnical Union.
- Ch. Akratos and V.A.Tsihrintzis (2004). Pilot Scale Constructed Wetlands for Wastewater Treatment Studies, Proceedings of the International Conference Protection and Restoration of the Environment VII, June 28 – July 1, Myconos Island, Greece.
- Ch. Akratos, Georgoula Z. and V.A.Tsihrintzis (2004). Characterization of Urban Stormwater Runoff Quality in Xanthi, Greece, Proceedings of the International Conference Protection and Restoration of the Environment VII, June 28 – July 1, Myconos Island, Greece.
- 6. K. Haralampidou, V.A. Tsihrintzis, G.K. Sylaios and C. Akratos. (2004). Seasonal and Spatial Characteristics of Water Quality in the Estuary of Strymon River, Proceedings of the International Conference on Protection and Restoration of the Environment VII, June 28-July 1, 2004, Mykonos, Greece, CD-Rom Section III (Surface Water Flow and Quality), #3.
- V.A. Tsihrintzis, D. Karamouzis, C. Akratos and A.N. Angelakis. (2004). Compapison of a Free-Water Sufrace and a Vertical Subsurface Flow Constructed Wetland System, Proceedings of the 6th International Conference on Waste Stabilization Ponds and the 9th International Conference on Wetland Systems, Volume III: Wetland Systems, Stabilization Ponds Communications of Common Interest, September 26 – October 1, 2004, Avignon, France, IWA, pp. 199-206.
- 8. E. Trikilidou, P. Melides, V.A. Tsihrintzis, C.S. Akratos. (2005). Rain water drainage system, Proceedings of 5th National Conference of Hellenic Committee for Water Resources Management, tpp. 603-612.
- C.S. Akratos, V.A. Tsihrintzis and J.N.E. Papaspyros. (2005). Performance of Pilot-scale Horizontal Subsurface Flow Constructed Wetlands in Wastewater Treatment, Proceedings of the 9th Conference on Environmental Science and Technology, September 1-3, 2005, Rhodes Island, Greece, Vol. A, pp. 38-43.
- G.D. Gikas, G.K. Sylaios, G. Balomenos, C.S. Akratos, V.A. Tsihrintzis and H. Jerrentrup. (2005). Monitoring of Physicochemical Parameters in Four Lakes in Chrysoupolis, Kavala, Greece, Proceedings of the 9th Conference on Environmental Science and Technology, September 1-3, 2005, Rhodes Island, Greece, Vol. B, pp. 268-273.

- 11. Pechlivanidis, C. Akratos, V.A. Tsihrintzis, G. Sylaios and H. Jerrentrup. (2005). Free Water Surface Constructed Wetland for the Treatment of Agricultural Drainage in Vassova Lagoon, Kavala, Greece, Proceedings of the 13th International Symposium on Environmental Pollution and its Impacts on Life in the Mediterranean Region, Mediterranean Scientific Association of Environmental Protection (MESAEP), October 8-12, 2005, Thessaloniki, Greece, p. 226.
- 12. M. Koutrakis, G. sylaios, N. Kamidis, D. Markou, C. Akratos and V.A. Tsihrintzis. (2006). Monitoring the restoration of Drana lagoon (Evros river delta)
- 13. C.S. Akratos, V.A. Tsihrintzis, G.D. Gikas E.P. Kotti. (2006). Natiral systems for wastewater treatment in north Greece, Proceedings 1st Conference of Decentralized Wastewater Treatment Plants, pp. 169-176.
- 14. C.S. Akratos, G.D. Gikas, V.A. Tsihrintzis. (2006). Monitoring of Vertical flow constructed wetland in Maditos, Proceedings 1st Conference of Decentralized Wastewater Treatment Plants, pp. 193-200.
- C.S. Akratos, G.D. Gikas and V.A. Tsihrinztis. (2006). Performance Monitoring of α Vertical Flow Constructed Wetland Treating Municipal Wastewater, Proceedings of the International Conference on Protection and Restoration of the Environment VIII, 3-7 July, 2006, Chania- Crete, Greece.
- G.K. Sylaios, C.S. Akratos, V.A. Tsihrintzis and K.I. Haralampidou. (2006). Comparison of the Intertidal Flushing Characteristics of Two Adjacent Coastal Lagoons, Proceedings of the International Conference on Protection and Restoration of the Environment VIII, 3-7 July, 2006, Chania- Crete, Greece.
- 17. C.S. Akratos, J.N.E. Papaspyros, G.D. Gikas and V.A. Tsihrintzis. (2006). Performance and Modeling of Vertical Flow Constructed Wetlands Treating Municipal Wastewater in North Greece, Proceedings of 10th International Conference on Wetland Systems for Water Pollution Control, September 23-29, 2006, Lisbon, Portugal.
- G.D. Gikas, C.S. Akratos, V.A. Tsihrintzis. G. Haralampides, K. Vatalis and A. Asvesta. (2006). Quality study of Polifitos Lake in Aliakmon river, Proceedings of 10th National Conference of Hellenic Hydro-technical Union.
- 19. K. Tsilfidis, G.D. Gikas, C.S. Akratos, A. Gemitzi, V.A. Tsihrintzis and H. Jerrentrup. (2006). Evaluation and management plan for 4 freshwater Lakes in Nestos river delta, Proceedings of 10th National Conference of Hellenic Hydro-technical Union.pp. 281-288.
- 20. I. Makris, C.S. Akratos, G. Gkikas, P. Melidis and V.A. Tsihrintzis. (2007). Dewatering of primary settled urban sludge in vertical flow wetland filters, Proceedings of 1st Conference on Environmental Management, Engineering, Planning and Economics, 24-28 June, Skiathos, Greece.
- K.I. Vatalis, G. Charalampides, O. Manoliadis, C. Akratos and A. Asvesta. (2007). Sustainability indicators of Polifyto lake in the region of Western Macedonia Grece, Proceedings of 1st Conference on Environment Management, Engineering, Planning and Economics, 24-28 June, Skiathos, Greece, pp. 341-346.
- 22. I. Xitzi, C.S. Akratos, P. Melidis and V.A. Tsihrintzis. (2007). Study of activated sludge dewatering in lab-scale reed-planted SDB's, Proceedings of the 10th Conference on Environmental Science and Technology, September 1-3, 2007, Kos Island, Greece.
- 23. G.K. Sylaios, C.S. Akratos, V. Pisinaras, N. Kamidis and V.A. Tsihrintzis. (2008). 'TRITON': Monitoring station of wave and hydrodynamic conditions in Nestos river estuary, Proceedings of 3rd Environmental Conference of Macedonia, 18-20 March, Thessaloniki.
- 24. A.I. Stefanakis, C.S. Akratos, P. Melidis and V.A. Tsihrintzis. (2008). Activated Sludge Dewatering in Pilot-Scale, Vertical Flow Constructed Wetlands, Proceedings 2nd Conference of Decentralized Wastewater Treatment Plants, 2-5 May 2008, Skiathos, Greece, pp91-96.
- 25. A.I. Stefanakis, C.S. Akratos and V.A. Tsihrintzis. (2008). Effect of Water Level Raising at the Outlet and Effluent Recirculation on Removal Efficiency of Pilot-Scale, Horizontal Subsurface Flow Constructed Wetlands, Proceedings 2nd Conference of Decentralized Wastewater Treatment Plants, 2-5 May 2008, Skiathos, Greece, pp. 109-114.
- K.A. Liolios, K.N. Moutsopoulos, V.A. Tsihrintzis and C.S.Akratos. (2008). A computational investigation of flow and contaminantremoval in horizontal wetlands, 6th GRACM International Congress on Computational Mechanics Thessaloniki, 19-21 June 2008.
- 27. A.I. Stefanakis, C.S. Akratos and V.A. Tsihrintzis. (2008). Performance of Pilot-Scale Vertical Flow Constructed Wetlands Treating Wastewater, Proceedings of IX Protection and Restoration of Environment International Conference, 29 June-4 July 2008, Kefallonia, Greece.

- 28. V.A. Tsihrintzis, G.K. Sylaios, C. Akratos and V. Pisinaras. (2008). Beach Nourishment Studies Along the East Macedonia Thrace Coastline, Proceedings of IX Protection and Restoration of Environment International Conference, 29 June-4 July 2008, Kefallonia, Greece.
- 29. G.K. Sylaios, C. Akratos, V. Pissinaras, N. Kamidis and V.A. Tsihrintzis. (2008). 'Triton': a Monitoring Station for Wave Climate, Hydrodynamics and Turbidity Offshore Nestos River Mouth, N. Greece, Proceedings of IX Protection and Restoration of Environment International Conference, 29 June-4 July 2008, Kefallonia, Greece.
- 30. E. Herouvim, C.S. Akratos and D. V. Vayenas. (2010). Pilot-scale vertical flow constructed wetlands for olive mill wastewater treatment, Proceedings 3<sup>rd</sup> Conference of Decentralized Wastewater Treatment Plants, 14-16 May, Skiathos.
- 31. A. Tekerlekopoulou, M. Michailidis, E. Herouvim, G. Christou, I. Konstantinou, C.S. Akratos and D. V. Vayenas. (2010). Free water surface constructed wetland treating olive mill wastewater, Proceedings of X Protection and Restoration of Environment International Conference, 5-9 July 2010, Corfu, Greece.
- 32. G. Christou, M. Michailidis, A. Tekerlekopoulou, C.S. Akratos and D. V. Vayenas. (2011). Composting of olive mill plant wastes, Proceedings of 4<sup>th</sup> Environmental Conference of Macedonia, 18-20 March, Thessaloniki.
- 33. M. Michailidis, E. Herouvim, A. Tekerlekopoulou, C.S. Akratos and D. V. Vayenas. (2011). A novel hybrid system for integrated olive mill wastewater treatment, Proceedings of 4<sup>th</sup> Environmental Conference of Macedonia, 18-20 March, Thessaloniki.
- Michail Michailides, Christos S. Akratos, Athanasia G. Tekerlekopoulou and Dimitrios V. Vayenas. (2012). Horizontal subsurface flow constructed wetland treating Cr(VI), Proceedings of XI Protection and Restoration of Environment International Conference, 3-6 July 2012, Thessaloniki, Greece.
- 35. M. Michailides, A.G. Tekerlekopoulou, C.S. Akratos, S. Pavlou and D.V Vayenas. (2012). A kinetic study of biological Cr(VI) reduction in draw-fill reactors, Proceedings of XI Protection and Restoration of Environment International Conference, 3-6 July 2012, Thessaloniki, Greece.
- A.G. Tekerlekopoulou, M. Michailides, C.S. Akratos, S. Pavlou and D.V Vayenas. (2012). Biological reduction of chromium Hexavalent, Proceedings of 1st Environmental Conference of Thessaly.
- 37. M. Michailides, A.G. Tekerlekopoulou, C.S. Akratos and D.V. Vayenas. (2013). Biological removal of hexavalent chromium, ammonium, iron and manganese from potable water using a trickling filter, Proceedings of 1st EWaS-MED International Conference, 11-13 April 2013, Thessaloniki.
- M.K. Michailides, M. Sultana, A.G. Tekerlekopoulou, C.S. Akratos and D.V. Vayenas. (2013). Biological Cr(VI) removal using bio-filters and constructed wetlands, Proceedings of International conference on Asset management for enhancing energy efficiency in water and wastewater systems, 24-26 April, 2013, Marbella, Spain.
- M.K. Michailides, A.G. Tekerlekopoulou, C.S. Akratos and D.V. Vayenas. (2013). Biological Cr(VI) reduction. Proceedings of the 13th International Conference on Environmental Science and Technology, 5-7 September 2013, Athens, Greece.
- M. Sultana, M.K. Michailides, C.S. Akratos, A.G. Tekerlekopoulou and D.V. Vayenas (2013). Effect of hydraulic residence time on Cr(VI) removal using constructed wetlands. Proceedings of the 13th International Conference on Environmental Science and Technology, 5-7 September 2013, Athens, Greece.
- 41. M. Sultana, M.K. Michailides, C.S. Akratos, A.G. Tekerlekopoulou and D.V. Vayenas (2013). Constructed wetlands pilot-scale units for the co-treatment of Cr(VI) and secondary cheese-whey. Proceedings 4<sup>th</sup> Conference of Decentralized Wastewater Treatment Plants, 25-27 October 2013, Volos.
- M.K. Michailides, M. Sultana, C.S. Akratos, A.G. Tekerlekopoulou and D.V. Vayenas (2014). Integrated chromium waste treatment. Proceedings of 4<sup>th</sup> Environmental Conference of Macedonia, 14-16 March, Thessaloniki.
- C.S. Akratos

- 43. M.K. Michailides, A.G. Tekerlekopoulou, S. Coles, C.S. Akratos, and D.V. Vayenas. (2014). Chromium (VI) in the environment: history and strategies for the treatment of polluted water and wastewater with Cr(VI), Proceedings of IWA Regional Symposium on Water, Wastewater, and Environment: Traditions and Culture, 21-24 March, Patras.
- 44. T.I. Tatoulis, A.G. Tekerlekopoulou, C.S. Akratos and D.V. Vayenas. (2014). Genesis and diaspora of the dairy process: Aerobic biological treatment of its wastewaters, Proceedings of IWA Regional Symposium on Water, Wastewater, and Environment: Traditions and Culture, 21-24 March, Patras.
- 45. Mar-Yam Sultana, T. Tatoulis, C.S. Akratos, A.G. Tekerlekopoulou and D.V. Vayenas (2014), "Effect of operational parameters on the performance of a horizontal subsurface flow constructed wetland treating secondary cheese whey and Cr(VI) wastewater", Second International Conference on Advances in Civil, Structural and Environmental Engineering ACSEE" 25-26 October, 2014, Zurich, Switzerland.
- 46. T.I Tatoulis, A. Stefanakis, C.S Akratos, A.G. Tekerlekopoulou, A. Gianni, I. Zacharias and D.V. Vayenas, (2015) " Treatment of agro-industrial wastewaters using novel horizontal subsurface constructed wetlands", WETPOL 2015 - 6th International Symposium on Wetland Pollutant Dynamics and Control Annual Conference of the Constructed Wetland Association 13th to 18th September, 2015 - York.
- 47. T.I Tatoulis, A. Stefanakis, C.S Akratos, A.G. Tekerlekopoulou, A. Gianni, I. Zacharias and D.V. Vayenas, (2015) "A Novel horizontal subsurface flow constructed wetland for the treatment of cheese-whey", WASTEnet 2015 Scientific Conference, Sustainable Solutions To Wastewater Management: Maximizing The Impact Of Territorial Co-Operation, 19th-21st June, 2015, Kavala, Greece.
- 48. T.I Tatoulis, A. Stefanakis, C.S Akratos, A.G. Tekerlekopoulou, A. Gianni, I. Zacharias and D.V. Vayenas, (2015) "Treatment of table olive washinh waters using horizontal subsurface flow constructed wetlands", WASTEnet 2015 Scientific Conference, Sustainable Solutions To Wastewater Management: Maximizing The Impact Of Territorial Co-Operation, 19th-21st June, 2015, Kavala, Greece.
- 49. T. Tatoulis, S. Zapantiotis, Z. Frontistis, A.G. Tekerlekopoulou, C.S. Akratos, D. Mantzavinos and D. V. Vayenas, (2015) "Treatment of table olive washing waters using attached growth biological system followed by electrooxidation" 6th European Bioremediation Conference, June 29 July 2, 2015, Chania, Crete, Greece.
- 50. M.K. Michailides, T.I. Tatoulis, A.G. Tekerlekopoulou, C.S. Akratos, S. Pavlou and D.V. Vayenas, (2015) "Second cheese whey as an efficient low-cost carbon source for biological hexavalent chromium removal", Novel Methods for Integrated Exploitation of Agricultural by-Products, November 16-18, 2015, Thessaloniki, Greece.
- 51. T. Tatoulis, A. Stefanakis, S. Zapantiotis, Z. Frontistis, A.G. Tekerlekopoulou, C.S. Akratos, D. Mantzavinos, D.V. Vayenas, (2015) "Treatment of Table Olive Washing Waters Using Constructed Wetlands Followed by Electrooxidation" 4th European Conference on Environmental Applications of Advanced Oxidation Processes EAAOP4, October 21-24, 2015, Athens, Greece.
- 52. T. Tatoulis, A.M. Damati, A.G. Tekerlekopoulou, C.S. Akratos, D. Vlastos, D.P. Mathopoulos and D.V. Vayenas, (2015) "Dairy wastewater: Aerobic treatment and in vitro evaluation of genotoxicity", 10<sup>th</sup> Hellenic Conference of Chemical engineering, 4-6 June 2015, Patra.
- 53. O.N. Tsolcha, A.G. Tekerlekopoulou, C.S. Akratos, S. Bellou, G. Aggelis, S. Pavlou and D.V. Vayenas, (2015) "Study for the use of microalgae in dairy wastewater treatment with simultaneously biofuel production", 10<sup>th</sup> Hellenic Conference of Chemical engineering, 4-6 June 2015, Patra.
- 54. I. Vassiliadou, Abu Khayer Md. Muktadirul Bari Chowdhury, C.S. Akratos, A.G. Tekerlekopoulou, S. Pavlou and D.V. Vayenas, (2015) "Mathematical modeling development

for olive mill waste composting", 10<sup>th</sup> Hellenic Conference of Chemical engineering, 4-6 June 2015, Patra.

- 55. O.N. Tsolcha, A.G. Tekerlekopoulou, C.S. Akratos, S. Bellou, G. Aggelis, G. Antonopoulou, M. Moustaka, M. Katsiapi and D.V. Vayenas, (2015) "Microalgae valorization for biofuel production and nutrient removal using different substrates", 6th Hellenic conference Microviokosmos, 3-5 April 2015, Athens.
- 56. T. Tatoulis, A.G. Tekerlekopoulou, C.S. Akratos and D.V. Vayenas, (2015) "Study of dairy wastewaters' organic matter aerobic degradation and genotoxic control", 6th Hellenic conference Microviokosmos, 3-5 April 2015, Athens.
- 57. M.K. Micahailides, A.G. Tekerlekopoulou, S. Coles, C.S. Akratos, S. Pavlou and D.V. Vayenas, (2015) "Hexavalent chromium aerobic reduction using suspended and attached growth bioreactors", 12th Conference of Chemistry Greece- Cyprus 8, 9 & 10 May 2015, Thessaloniki.
- M. Sultana, M.K. Micahailides, A.G. Tekerlekopoulou, C.S. Akratos, and D.V. Vayenas, (2015) "Hexavalent chromium treatment using constructed wetlands", 12th Conference of Chemistry Greece- Cyprus 8, 9 & 10 May 2015, Thessaloniki.
- 59. T.I. Tatoulis, M. Sultana, M.K. Micahailides, C.S. Akratos, A.G. Tekerlekopoulou, and D.V. Vayenas, (2015) "Agro-industrial wastewater treatment using constructed wetlands", 3<sup>rd</sup> common Conference (13<sup>th</sup> EYE, 90 EEDYII, 10 EYS) 10-12 December 2015, Αθήνα.
- 60. Ο.Ν. Τσολχά, Α.Γ. Τεκερλεκοπούλου, Χ.Σ. Ακράτος, Γ. Αγγελής, Σ. Γενίτσαρης, Μ. Μουστάκα, Δ.Β. Βαγενάς, (2016) "Χρήση μικτής καλλιέργειας κυανοβακτηρίωνμικροφυκών στην επεξεργασία αποβλήτων με ταυτόχρονη παραγωγή βιοκαυσίμων" 220 Πανελλήνιο Συνέδριο Χημείας, 2-4 Δεκεμβρίου 2016, Θεσσαλονίκη.
- 61. Τ. Τατούλης, Ζ. Φροντιστής, Α. Τεκερλεκοπούλου, Χ. Ακράτος, Σ. Παύλου, Δ. Μαντζαβίνος, Δ. Βαγενάς, (2017) "Επεξεργασία υγρών αποβλήτων αγροτοβιομηχανικών μονάδων με χρήση βιολογικών φίλτρων, υγροβιοτόπων και ηλεκτροχημικής οξείδωσης" 11ο Πανελλήνιο Συνέδριο Χημικής Μηχανικής", 25-27 Μαΐου 2017, Θεσσαλονίκη.
- 62. Ο.Ν.Τσολχά, Α.Γ.Τεκερλεκοπούλου, Χ.Σ. Ακράτος, Μ. Μουστάκα, Γ. Αγγελής, Δ.Β. Βαγενάς, (2017) "Εφαρμογές μικροφυκών για επεξεργασία αγροτο-βιομηχανικών αποβλήτων και παραγωγή βιοκαυσίμων" Το Πανελλήνιο Συνέδριο Μικροβιόκοσμου, 7-9 Απριλίου 2017, Αθήνα.
- 63. Β. Πατρινού, Ο. Τσολχά, Χ. Νικολάου, Μ. Ντούρου, Χ. Ακράτος, Α. Τεκερλεκοπούλου, Γ. Αγγελής , Δ. Βαγενάς, (2017) "Χρήση Βιομάζας Μικροφυκών για Παραγωγή Βιοαιθανόλης" 50 Πανελλήνιο Συνέδριο Πράσινη Χημεία και Βιώσιμη Ανάπτυξη, 20-22 Οκτωβρίου 2017, Πάτρα.
- 64. T.I. Tatoulis, A.G. Tekerlekopoulou, C.S. Akratos and D.V. Vayenas. (2018) "Winery wastewater treatment using biological filter and constructed wetland", Proceedings 5th Conference of Decentralized Wastewater Treatment Plants, 28-30 August 2018, Thessaloniki, Greece,
- 65. Tatoulis T.I., Akratos C.S., Tekerlekopoulou A.G. and Vayenas D.V. (2019) "Hybrid Constructed Wetland Treatment Systems for Agro-industrial Wastewater", International Symposiu of Constructed Wetlands, 29-31 August Patra, Greece.
- 66. Τ. Τατούλης, Μ. Μιχαηλίδης, Α. Τεκερλεκοπούλου, Χ. Ακράτος, Σ. Παύλου, Δ. Βαγενάς, (2019) "Συνεπεξεργασία αγροτοβιομηχανικών και βιομηχανικών υγρών αποβλήτων: Μελέτη αναγωγής Cr(VI) με χρήση δευτερογενή ορού γάλακτος και αποβλήτων οινοποιείου" 120 Πανελλήνιο Επιστημονικό Συνέδριο Χημικής Μηχανικής, 29-31 Μαΐου 2019, Αθήνα.
- 67. V. Patrinou, O. Tsolcha, A. Tekerlekopoulou, C. Akratos, G. Aggelis, M. Dourou, M. Moustaka-Gouni, Genitsaris S., D.V. Vayenas, (2019) "Agroindustrial wastewater treatment with simultaneous biodiesel production in attached growth systems using a mixed microbial culture" 80 Πανελλήνιο Συνέδριο Μικροβιόκοσμου, 18-20 Απριλίου 2019, Αθήνα.

## **BOOKS**

Stefanakis, A.I., Akratos, C.S., Tsihrintzis, V.A., (2014). Vertical flow constructed wetlands: Ecoengineering systems for wastewater and sludge treatment, first ed. Elsevier, Burlington, USA.

#### CHAPTERS IN BOOKS

- 1. C.S. Akratos, I. Boskidis and V.A. Tsihritzis. (2008). Quality characterization of urban runoff in Xanthi, Honor book for Professor Chriztos Tzimopoulos.
- 2. C.S. Akratos, P. Melides, A. Stefanakis, G. Gikas and V.A. Tsihrintzis. (2008). Composting of activated sludge using constructed wetlands, In "Biosolids management with emphasis in the legislation in international and nation level " V.A. Tsihrintzis, P. Gikas and A. Angelakis.
- 3. A. Stefanakis, C.S. Akratos and V.A. Tsihritzis. (2008). Pilot-scale vertical flow constructed wetlands units for activated sludge treatment –Wastewater treatment using vertical flow constructed wetlands Aivasides A., Voudrias E, Komilis D., Melides P. And Tsihrintzis V.A. Integrated management of sludge and wastewater using natural systems, In "Biosolids management with emphasis in the legislation in international and nation level "V.A. Tsihrintzis, P. Gikas and A. Angelakis.
- 4. M. Michailides, E. Herouvim, C.S. Akratos, A.G. Tekerlekopoulou and D.V. Vayenas. (2014). Biological treatment of olive mill waste, Honor book for Professor Themistoklis Lekkas.
- 5. C.S. Akratos. (2015). Constructed wetlands: Removal mechanisms, In "Urban Water Reuse Handbook" Saeid Eslamian.
- 6. Stefanakis A.I., Akratos C.S. (2016). Removal of pathogenic bacteria in Constructed Wetlands: mechanisms and efficiency. In A.A. Ansari, S.S. Gill, R. Gill, G. R. Lanza, L. Newman (Eds), Phytoremediation: Management of Environmental Contaminants, Volume 4 pp. 327-346, Springer.
- 7. Tekerlekopoulou, A.G., Akratos, C.S., Vayenas, D.V. (2017) "Integrated biological treatment of olive mill waste combining aerobic biological treatment, constructed wetlands, and composting" In "Olive Mill Waste: Recent Advances for Sustainable Management", pp. 139-159.
- 8. Akratos, C.S., Tekerlekopoulou, A.G., Vasiliadou, I.A., Vayenas, D.V. (2017) "Cocomposting of olive mill waste for the production of soil amendments" In "Olive Mill Waste: Recent Advances for Sustainable Management", pp. 161-182.
- Masi F., Rizzo A., Bresciani R., D.V. Vayenas, C.S. Akratos, A. G. Tekerlekopoulou, A.I. Stefanakis, (2018). Olive Mill Wastewater Treatment in Constructed Wetlands. In A.I. Stefanakis (Ed.), Constructed Wetlands for Industrial Wastewater TreatmentEdition: 1st EditionChapter: 8Publisher: John Wiley & Sons Ltd
- C.S. Akratos, D. Van Oirschot, A. G. Tekerlekopoulou, D.V. Vayenas, A.I. Stefanakis, (2018). Dairy Wastewater Treatment with Constructed Wetlands: Experiences from Belgium, the Netherlands and Greece.In A.I. Stefanakis (Ed.),Constructed Wetlands for Industrial Wastewater TreatmentEdition: 1st EditionChapter: 8Publisher: John Wiley & Sons Ltd
- C.S. Akratos, A. G. Tekerlekopoulou, D.V. Vayenas (2018). Treatment of Wastewater from Tanneries and the Textile Industry using Constructed Wetland Systems. In A.I. Stefanakis (Ed.), Constructed Wetlands for Industrial Wastewater TreatmentEdition: 1st EditionChapter: 8Publisher: John Wiley & Sons Ltd
- 12. Tekerlekopoulou A., Econonou C., Tatoulis T., Akratos C. and Vayenas D., "Wastewater treatment and water", In C. Galanakis (Ed.), The Interaction of Food Industry and Environment. Elsevier (in press).

## **RESEARCH INTERESTS**

This short profile includes a briefly description of the main elements of my curriculum vitae, presents my main research interests and my future research plants.

I started my research career as an undergraduate student of the Department of Environmental Engineering, Democritus University of Thrace, during my diploma thesis. The theme of my diploma thesis was 'Monitoring and Analysis of Water, Salt and Nutrient Fluxes at the Mouth of Vassova Lagoon'. My diploma thesis results were presented in 4 papers in International scientific journals and 2 publications in International scientific conferences.

After graduating in November 2002, I continued my studies in the same Department as a Ph.D. student. During my doctoral thesis, which was entitled 'Optimization of design parameters of subsurfase flow constructed wetlands using pilot-scale units', I developed innovative pilot-scale units, in order to estimate the effect of different operational parameters in CWs efficiency. The experimental results of my doctoral thesis were presented in 4 papers in International scientific journals and one of them was the most sited article for the period 2007-2011 for Ecological Engineering Journal. During my Ph.D. studies I also participated in all the other research activities of Ecological Engineering and Technology Laboratory gaining important experience in water resources management, monitoring of surface and coastal water bodies, coastal erosion and wastewater treatment. I finished my doctoral thesis in June 2006 (after 3.5 years) and after 1 year of obligatory military service I continued working in the same Department as Post-Doctoral researcher until May 2009, when I was appointed Lecturer in the Department of Environmental and Natural Resources Management, University of Ioannina. In January 2013 I was promoted to Assistant Professor in the same Department.

During this 5 years as faculty member of Environmental and Natural Resources Management Department I continued my research activities mainly in the areas of wastewater treatment using constructed wetlands and biological trickling filters (applications mainly for agro-industrial and industrial wastewater treatment), composting of agricultural solid waste. During the years as faculty member I have also taught eight undergraduate and two graduate courses in the general area of water resources and ecological management. In addition, I have supervised to completion 12 diploma Theses and 2 graduate study Theses, and I am the supervisor of 1 and co-supervisor of another one Ph.D. students.

A significant part of my research activities were part of fifteen funded projects, in which I have working as team member. I total until today I have co-authored 23 referred journal publications (12 as first or second author), 36 conference proceedings papers (18 as first or second author), and I have wrote chapters in 3 books.

In the future I intend to continue working on decentralized wastewater treatment systems aiming at developing innovative low cost treatment systems for wastewater treatment of small industries, agro-industries and remote villages and towns. Furthermore I intend to investigate further the biochemical processes, which take place in constructed wetlands in order to optimize or produce new design tools. Specifically I woulk like to concentrate in examining the removal mechanisms of toxic pollutants (i.e. phenols, Cr(VI), As etc) in constructed wetlands and to use alternative porous materials (e.g. plastic porous metarials), which will increase porosity and minimize clogging phenomenon in constructed wetlands. Moreover I would like to work groundwater artificial recharge using treated wastewater and specifically to examine the potential use of the vadose zone as a wastewater post-treatment stage. *C.S. Akratos*