

CURRICULUM VITAE

Professor Nicolas Kalogerakis, PhD, P.Eng

Professor of Biochemical Engineering

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Collaborating faculty (2020-...), Institute of Petroleum Research - FORTH, Chania, Greece.

Visiting Professor (2018-19), Dept of Chemical Engineering, American University of Sharjah, UAE

CV Highlights:

Nicolas Kalogerakis is a professor of Biochemical Engineering in the School of Chemical and Environmental Engineering at the Technical University of Crete where he has served as Vice-President of the University Council and Department Head (twice). Prior to that he was a Professor at SUNY-Buffalo (USA) and at the University of Calgary (Canada) where he climbed quickly through all ranks. In 1997, he returned to Greece as the founding faculty member of the Environmental Engineering Dept. He holds a Diploma in Chemical Engineering from NTUA (Athens, Greece), a Master degree from McGill University (Montreal, Canada) and a PhD from the Univ. of Toronto (Canada). During 2018-19, he was a Visiting Professor in the Dept of Chemical Engineering at the American University of Sharjah (UAE). Currently he is also Collaborating faculty at the Institute of Petroleum Research – FORTH, Chania Greece.

His area of expertise includes biochemical engineering & environmental biotechnology focusing on bioremediation and phytoremediation technologies for the restoration of contaminated sites; protection and restoration of the marine environment (oil spills and marine litter); novel oxygenation systems and wastewater treatment; and mathematical modeling of environmental processes. He has been very active in attracting external research funding totaling in excess of 25 million USD. Currently, Prof. Kalogerakis's group is participating in 3 EU funded research projects (Horizon-2020), coordinator of nanoBT, an ERA-MIN2 project and was the coordinator of KILL•SPILL, a large FP7-project, that was recently completed.

He has served as a member of the European Commission (EC) Environment Committee (2007-2011) and as Sherpa in the EC, High Level Group on Key Enabling Technologies (2013-2015).

Bibliographic Data:

Publications: 217 papers, 11 editorials and 6 patents

Scopus: Citations >9800, H-index 55

Google Scholar: Citations >14500, H-index 66.

Education

1979 -1983	<i>Doctor of Philosophy</i> , Department of Chemical Engineering & Applied Chemistry University of Toronto, Toronto, Ontario, Canada.
1977 -1979	<i>Master of Engineering</i> , Department of Chemical Engineering, McGill University, Montreal, Quebec, Canada.
1972 -1977	<i>Dipl. Chem. Engineering</i> , Department of Chemical Engineering, National Technical University of Athens (NTUA), Athens, Greece.

Academic Positions

1997 – present	<i>Professor of Biochemical Engineering & Director</i> , Laboratory of Biochemical Engineering & Environmental Biotechnology, TU-Crete, Chania, Greece
2018 – 2019	<i>Visiting Professor</i> , Dept. of Chemical Engineering, American University of Sharjah, UAE
2008 – 2009	<i>Visiting Professor</i> , Dept. of Environmental Management, Cyprus University of Technology, Lemesos, Cyprus
1995 – 1997	<i>Professor of Biochemical Engineering</i> , Department of Chemical Engineering, State University of New York (SUNY), Buffalo, NY, USA.
1990 – 1995	<i>Professor of Chemical Engineering</i>
1986 – 1990	<i>Associate Professor of Chemical Engineering</i>
1983 – 1986	<i>Assistant Professor of Chemical Engineering</i> , Department of Chemical & Petroleum Engineering, University of Calgary, Calgary, Alberta, Canada.

Administrative Positions

2013 – 2017	<i>Vice-President</i> , University Council, Technical University of Crete, Chania, Greece
2010 – 2013	<i>Vice-President</i> , Governing Council, University of Western Greece, Agrinio, Greece
2004 – 2008	<i>Head</i> , Dept. of Environmental Engineering, Technical University of Crete, Greece.
2000 – 2002	<i>Acting Head</i> , Dept. of Environmental Engineering, Technical University of Crete, Chania, Greece.
1997 – 2000	<i>Director of Graduate Studies</i> , Dept. of Environmental Engineering, Technical University of Crete, Chania, Greece
1989 - 1995	<i>Associate Director</i> , Pharmaceutical Production Research Facility (PPRF), University of Calgary, Calgary, Alberta, Canada.

International Distinctions & Awards

2019	Dishtinguished Speaker at Univerity of Toronto’s seminar series “ <i>Lectures on the Leading Edge</i> ”
2019	Dishtinguished Speaker at McGill Univeristy’s EUL seminar series
2017	<i>Research Excellence Award</i> , Technical University of Crete, Chania, Greece
2014 – present	<i>Advisory Board member</i> , City of Scientific Research and Technology Applications (SRTA-City) Alexandria, Egypt
2013 – present	<i>Advisory Board member</i> , CIIMAR – Interdisciplinary Centre of Marine and Environmental Research Porto, Portugal;
2013	<i>Top-10 most cited articles 2010-2011 Award</i> , Talanta, Elsevier
2010	<i>Top-50 most cited articles 2005-2009 Award</i> , J. Chromatography A, Elsevier
2008 – 2009	<i>Visiting Professor</i> , Cyprus University of Technology, (to set up graduate studies programs in Environmental Management & Technology).
2006	<i>Ecopolis 2006 Research Team Award</i> (Laboratory of Biochemical Engineering and Environmental Biotechnology – headed by Prof. N. Kalogerakis)

Representative in European Commission

- European Commission Committee – China Collaborative Research Program, Greek Delegate (2017)
- European Commission Committee – Prize design for best technology collecting marine litter (2016)
- Sherpa European Commission – High Level Group on Key Enabling Technologies (2013-2015)
- Environment Committee – National representative for Greece (expert) – GSRT (2007-2011)
- EC-Working Group E on priority substances– National representative of the Ministry of Environment and Climate Change of Greece (2007–2010).

Evaluation Panels

- *Vice Chair Environment Panel* – Marie Curie Actions (2004-07), DG Research, European Commission
- *Member Environment Panel* – Marie Curie Actions (2001-04), DG Research, European Commission
- *Member of Evaluation Committees* for FP-6 and FP-7 Collaborative RTD projects and Horizon-2020 Innovation and Research Actions, REA, European Commission (2001 – 2017).
- *Reviewer of Greek Research Funding Agencies* (1998 – 2017).
- *Member Environmental Sciences Panel* – SR&TD Project Grants, Fundação para a Ciência e a Tecnologia (FCT), Portugal (2014 – 2021).
- *Member of Expert Panel for Strategic Basic Research*, Research Foundation - Flanders (FWO), Belgium (2018-2021)

Journal Editorial Boards

Scientific Reports (Nature-Springer)

Frontiers in Environmental Sciences, Wastewater - Specialty Chief Editor (Nature Publishing Group);

New Biotechnology (Elsevier Publishers);

Microbial Biotechnology (Wiley & Society for Applied Microbiology)

Trends in Biotechnology (Elsevier Publishers);

Clean Technologies (MDPI);

Microplastics (MDPI) Editor-in-Chief;

Recent Patents on Engineering (Bentham Science Publishers);

The Open Chemical Engineering Journal (Bentham Science Publishers);

Journal of Environmental Engineering & Management (TU-lasi).

Guest Editor

Guest editor in special journal issues on bioremediation and/or phytoremediation:

Water Air Soil Pollution: Focus;

Environment International;

Biodegradation;

Journal of Chemical Technology and Biotechnology (3 times);

European Journal of Soil Biology (2 times);

Process Biochemistry;

International journal of Phytoremediation;

New Biotechnology (2 times)

Funded Research (competitive research programs since 2009)

Funding agency & Project title

Budget

Period

EU-Horizon2020 – **MINAGRIS** – R&I action program

147.187 €

2021-26

Micro- and NANO-Plastics in Agricultural Soils: sources, environmental fate and impacts on ecosystem services and overall sustainability.

(Total project funding: 6.999.972 €)

GR-HFRI /Faculty – X-PRESS – Research Grant “EXtreme environments: High PRESSure Sampling and experimentation system for deep-sea hydrocarbon releases”	178.000 €	2021-24
EU-ERA-MIN2 – nanoBT – R&I action program Application of nano-bubble technologies to mining industry operations (Co-ordinator, Total project funding: 540.000 €)	202.500 €	2020-23
EU-Horizon2020 – ELECTRA – R&I action program Electricity driven Low Energy and Chemical input Technology for Accelerated bioremediation. (Total project funding: 6.000.000 €)	275.625 €	2018-22
EU-Horizon2020 – OILY MICROCOSM – Marie Curie IF Global (TUC & MIT) Mechanistic Microscale Approach to the Microbial Degradation of Oil Droplets in Subsea Crude Oil Releases (postdoc: Dr. G. Kapellos)	176.408 €	2017-20
EU-Horizon2020 – MADFORWATER – R&I action program Development and application of integrated technological and management Solutions for wastewater treatment and efficient reuse in agriculture tailored to the needs of Mediterranean African Countries (Total project funding: 2.910.868 €)	215.000 €	2016-20
EU-Horizon2020 – INMARE – Innovation action program Industrial Applications of Marine Enzymes: Innovative screening and expression platforms to discover and use the functional protein diversity from the sea. (Total project funding: 6.000.000 €)	250.000 €	2015-19
EU-FP7- KILL•SPILL – RTD program Innovative Biotechnological Solutions for Combating Marine Oil Spills (Coordinator, Total project funding: 8.996.599 €)	448.080 €	2013-16
EU-FP7- BIOCLEAN – RTD program “New biotechnological approaches for biodegrading and promoting the environmental biotransformation of synthetic polymeric materials” (Total project funding: 2.995.988 €)	300.000 €	2012-15
EU-FP7- WATER4CROPS – RTD program “Integrating biotreated wastewater reuse and valorization with enhanced water use efficiency (WEF) to support the Green Economy in EU and India” (Total project funding: 5.973.764 €)	200.000 €	2012-16
GR-GSRT – program SYNERGASIA-II “Microalgae – Bioproducts” (Total project funding 650.000 €)	146.800 €	2012-15
EU-LIFE10 ENV/GR/601- CHARM “Chromium in Asopos groundwater system: remediation technologies and measures” (Total project funding 2.708.267 €)	590.538 €	2011-15
GR-GSRT – program HERAKLEITOS-II “Oil spill bioremediation in marine environments”	45.000 €	2010-13
GR-GSRT – program HERAKLEITOS-II “Membrane Bioreactor for municipal wastewater treatment”	45.000 €	2010-13
EU-FP7- Minotaurus – RTD program “Microorganism and enzyme immobilization: Novel techniques and approaches for upgraded remediation of underground-, wastewater and Soil” (Total project funding: 3.908.064 €)	289.864 €	2010-13
EU-FP7- Ulixes – RTD program	285.004 €	2010-13

“Unravelling and exploiting Mediterranean Sea microbial diversity and ecology for XEnobiotics’ and pollutants’ clean up” (Total project funding: 3.902.892 €)

EU-CIP-Eco-innovation - OMIWAT program	114.490 €	2010-12
“Olive Mill Wastewater Treatment” (Total project funding: 1.348.730 €)		

GR-Ministry of Environment & Climate Change - Contract	147.600 €	2010-11
“Scientific support to the Water Agency” – Coordinator		

EEA GRANTS – EL0075	498.800 €	2009-12
“Innovation Centre of Crete” – Coordinator (total project funding: 1.450.000 €)		

EEA GRANTS – EL0030	318.000 €	2009-12
“Agricultural utilization of tertiary treated wastewater as an alternative water resource” (total project funding: 2.296.000 €)		

EU-LIFE07 – INF/IT/000438 – Oleico+	95.000 €	2009-11
“European awareness raising campaign for an environmentally sustainable olive mill waste management” (Total project funding 1.003.000 €)		

Plus, another 53-research projects over the period 1984 to 2009. Total research funding exceeds 20 million €.

Publications by Prof. Nicolas Kalogerakis

(217 papers & 11 editorials, **Scopus: Citations > 9800, H-index 55**; Google Scholar: Citations >14500, H-index 66; ORCID# 0000-0001-7033-0302)

Patents

1. Docoslis, A., N. Kalogerakis, L.A. Behie and K.V.I.S. Kaler, "Filter for Perfusion Cultures of Animal Cells and the Like", US Patent 5,626,734 (May 6, 1997).
2. Koukaras, K., N. Kalogerakis, E.N. Kampouris, “Toxic Heavy Metals Removal System for Shellfish”, World patent WO 2009/083742 A1 (July 9, 2009).
3. Psillakis, E. and N. Kalogerakis, “Vacuum Assisted Headspace Microextraction sampling apparatus and method”, Greek patent (2012) EL 20110100054.
4. Kalogerakis, N., S. Fodelianakis, E. Antoniou, E. Korkaraki, “Production and application of a novel Bioaugmentation Pad for marine oil spills”, Greek patent (2015) EL 20140100211.
5. Antoniou, E., N. Kalogerakis, “Biosurfactant production of high purity by marine bacteria degrading the heavy fraction of crude oil”, Greek patent (2017) EL 20171009585.
6. Syranidou, E., N. Kalogerakis, “Perpetual recycling of C-C backbone weathered plastics by tailored marine consortia”, Greek patent awarded (April 2021).

Recent refereed journal publications (2011 - present)

1. Karkanorachaki, K., E. Syranidou, N. Kalogerakis, “Sinking characteristics of microplastics in the marine environment”, *Science of The Total Environment*, 793, (2021).
2. Kalogerakis N., G.C. Kalogerakis, Q.P. Botha, “Environmental applications of nanobubble technology: Field testing at industrial scale”, *Can. J. Chem. Eng.*, 1-10 (2021).
3. Mandalenaki A, Kalogerakis N, Antoniou E. “Production of High Purity Biosurfactants Using Heavy Oil Residues as Carbon Source”, *Energies*, 14(12):3557 (2021).
4. Makaroglou, G., H. Marakas, S. Fodelianakis, A. Axaopoulou, I. Koumi, N. Kalogerakis, P. Gikas, “Optimization of biomass production from *Stichococcus* sp. biofilms coupled to wastewater treatment”, *Biochemical Engineering Journal*, 169: 107964 (2021).
5. Charalampous, G.; Fragkou, E.; Kormas, K.A.; De Menezes, A.B.; Polymenakou, P.N.; Pasadakis, N.; Kalogerakis, N.; Antoniou, E.; Gontikaki, E. “Comparison of Hydrocarbon-Degrading Consortia from Surface and Deep Waters of the Eastern Mediterranean Sea: Characterization and Degradation Potential”, *Energies*, 14, 2246 (2021).

6. Wang, T., L. Wang, Q. Chen, N. Kalogerakis, Rong Ji, Yini Ma, "Interactions between microplastics and organic pollutants: Effects on toxicity, bioaccumulation, degradation, and transport", *Science of The Total Environment*, 748: 142427 (2020).
7. Christofilopoulos, S., A. Kaliakatsos, I. Gounaki, D. Venieri and N. Kalogerakis, "Evaluation of a constructed wetland for wastewater treatment: Addressing emerging organic contaminants and antibiotic resistant bacteria", *New Biotechnology*, 52: 94-103 (2019).
8. Kaliakatsos, A., S. Christofilopoulos, N. Kalogerakis and D. Venieri "Efficiency of two constructed wetland systems for wastewater treatment: removal of bacterial indicators and enteric viruses", *J. Chem. Techn. Biotechnol.*, 94: 2123–2130 (2019).
9. Riva V., F. Mapelli, E. Syranidou, E. Crotti, R. Choukrallah, Ni. Kalogerakis and S. Borin, "Root Bacteria Recruited by *Phragmites australis* in Constructed Wetlands Have the Potential to Enhance Azo-Dye Phytodepuration", *Microorganisms*, 7: 384 (2019).
10. Tian, I., Q. Chien, W. Jiang, L. Wang, H. Xie, N. Kalogerakis, Y. Ma and R. Ji, "A carbon-14 radiotracer-based study on the phototransformation of polystyrene nanoplastics in water versus in air", *Environ. Sci.: Nano*, 6: 2907-2917 (2019).
11. Syranidou E, Karkanorachaki, K, Amorotti F, Avgeropoulos A, Kolvenbach B, Zhou N-Y, Fava F, Corvini P and Kalogerakis N, "Biodegradation of mixture of plastic films by tailored marine consortia", *J. Hazard. Mater.*, 375: 33–42 (2019).
12. Cappello S, Cruz Viggi C, Yakimov M, Rossetti S, Matturro B, Molina L, Segura A, Marques S, Yuste L, Sevilla E, Rojo F, Sherry A, Mejeha OK, Head IM, Malmquist L, Christensen JH, Kalogerakis N and Aulenta F, "Combining electrokinetic transport and bioremediation for enhanced removal of crude oil from contaminated marine sediments: Results of a long-term, mesocosm-scale experiment" *Water Research*, 157 (2019) 381-395.
13. Lilli MA, Nikolaos P. Nikolaidis NP, George P. Karatzas GP, Nicolas Kalogerakis N, "Identifying the controlling mechanism of geogenic origin Cr release in soils", *J. Hazard. Mater.*, 366: 169–176 (2019).
14. Syranidou E, Thijs S, Avramidou M, Weyens N, Venieri D, Pintelon I, Vangronsveld J and Kalogerakis N, "Responses of the Endophytic Bacterial Communities of *Juncus acutus* to Pollution with Metals, Emerging Organic Pollutants and to Bioaugmentation with Indigenous Strains", *Front. Plant Sci.* 9:1526 (2018).
15. Karkanorachaki K, Kiparissis S, Kalogerakis GC, Yiantzi E, Psillakis E, Kalogerakis N, "Plastic pellets, meso- and microplastics on the coastline of Northern Crete: Distribution and organic pollution", *Marine Pollution Bulletin*, 133, 578–589 (2018).
16. Kapellos GE, Paraskeva CA, Kalogerakis N and Doyle PS, "Theoretical Insight into the Biodegradation of Solitary Oil Microdroplets Moving through a Water Column", *Bioengineering*, 5, 15 (2018).
17. Frascari D, Zanolli G,... Kalogerakis, N,... Ortega CV, "Integrated technological and management solutions for wastewater treatment and efficient agricultural reuse in Egypt, Morocco and Tunisia", *Integrated Environmental Assessment & Management*, 14: 447-462 (2018).
18. Syranidou E, Karkanorachaki K, Amorotti F, Franchini M, Repouskou E, Kaliva M, Vamvakaki M, Kolvenbach B, Fava F, Corvini PF-X, Kalogerakis N. "Biodegradation of weathered polystyrene films in seawater microcosms", *Scientific Reports*, 7:17991 (2017).
19. Syranidou E, Karkanorachaki K, Amorotti F, Repouskou E, Kroll K, Kolvenbach B, Corvini PF-X, Fava F, Kalogerakis N. "Development of tailored indigenous marine consortia for the degradation of naturally weathered polyethylene films", *PLoS ONE*, 12(8): e0183984 (2017).
20. Mapelli, F., Scoma, A., Michoud, G., Aulenta, F., Boon, N., Borin, S., Kalogerakis, N., Daffonchio, D., "Biotechnologies for Marine Oil Spill Cleanup: Indissoluble Ties with Microorganisms", *Trends in Biotechnology*, 9: 860-870 (2017).
21. Kalogerakis N, Karkanorachaki K, Kalogerakis GC, Triantafyllidi E, Gotsis AD, Partsinevelos P and Fava F., "Microplastics generation: Onset of fragmentation of polyethylene films in marine environment mesocosms". *Front. Mar. Sci.* 4: 84 (2017).
22. Syranidou, E., S. Christofilopoulos and N. Kalogerakis, "Juncus spp.—The halophyte for all (phyto)-remediation purposes?", *New Biotechnology*, 38: 43–55 (2017).
23. Syranidou, E., S. Christofilopoulos, M. Politi, N. Weyens, D. Venieri, J. Vangronsveld and N. Kalogerakis "Bisphenol-A removal by the halophyte *Juncus acutus* in a phytoremediation pilot: Characterization and potential role of the endophytic community", *J. Hazard. Mater.*, 323: 350–358 (2017).

24. Lilli MA, Syranidou E, Palliou A, Nikolaidis NP, Karatzas G, Kalogerakis N, "Assessing the impact of geogenic chromium uptake by carrots (*Daucus carota*) grown in Asopos river basin", *Environmental Research*, 152: 96–101 (2017).
25. Fountoulakis, M.S., Daskalakis, G., Papadaki, A., Kalogerakis, N. and Manios, Th., "Use of halophytes in pilot-scale horizontal flow constructed wetland treating domestic wastewater". *Environ Sci Pollut Res*, 24: 16682–16689 (2017)
26. Christofilopoulos, S., E. Syranidou, G. Gkavrou, E. Manousaki and N. Kalogerakis, "The role of halophyte *J. acutus* L. in the remediation of mixed contamination in a hydroponic greenhouse experiment", *J. Chem. Technol. Biotechnol.*, 91: 1665–1674 (2016).
27. Syranidou E, Christofilopoulos S, Gkavrou G, Thijs S, Weyens N, Vangronsveld J and Kalogerakis N, "Exploitation of Endophytic Bacteria to Enhance the Phytoremediation Potential of the Wetland Helophyte *Juncus acutus*", *Frontiers in Microbiology*, 7: 1016 (2016).
28. Paranychanakis NV, M Tsiknia, and N Kalogerakis, "Pathways regulating the removal of nitrogen in planted and unplanted subsurface flow constructed wetlands", *Water Research*, 102: 321-329 (2016).
29. Yiantzi, E, Kalogerakis, N, Psillakis, E, "Design and testing of a new sampler for simplified vacuum-assisted headspace solid-phase microextraction", *Analytica Chimica Acta*, 927: 46-54 (2016).
30. Dokou, Z., V. Karagiorgi, G.P. Karatzas, N.P. Nikolaidis, N. Kalogerakis, "Large scale groundwater flow and hexavalent chromium transport modeling under current and future climatic conditions: the case of Asopos River Basin", *Environmental Science and Pollution Research*, 23: 5307-5321 (2016).
31. Fodelianakis, S., E. Antoniou, F. Mapelli, M. Magagnini, M. Nikolopoulou, R. Marasco, M. Barbato, A. Tsiola, I. Tsikopoulou, L. Giaccaglia, M. Mahjoubi, A. Jaouani, R. Amer, E. Hussein, F.A. Al-Horani, F. Benzha, M. Blaghe, H.I. Malkawi, Y. Abdel-Fattah, A. Cherif, D. Daffonchio and N. Kalogerakis, "Allochthonous bioaugmentation in *ex situ* treatment of crude oil-polluted sediments in the presence of an effective degrading indigenous microbiome", *J. Hazard. Mater.*, 287: 78-86 (2015).
32. Babatsouli, P., S. Fodelianakis, N. Paranychanakis, D. Venieri, M. Dialynas, N. Kalogerakis, "Single Stage Treatment of Saline Wastewater with Marine Bacterial-Microalgae Consortia in a Fixed-bed Photobioreactor", *J. Hazard. Mater.*, 292: 155-163 (2015).
33. Bargiela, R, F Mapelli, D Rojo, B Chouaia, J Tornés... "Bacterial population and biodegradation potential in chronically crude oil-contaminated marine sediments are strongly linked to temperature", *Scientific Reports* 5, Article number: 11651 (2015) doi:10.1038/srep11651.
34. Gertler, C, R Bargiela, F Mapelli, X Han, J Chen, T Hai... "Conversion of Uric Acid into Ammonium in Oil-Degrading Marine Microbial Communities: a Possible Role of Halomonads" *Microbial ecology*, 70: 724-740 (2015).
35. Yiantzi, E, Kalogerakis, N, Psillakis, E, "Vacuum-assisted headspace solid phase microextraction of polycyclic aromatic hydrocarbons in solid samples", *Analytica Chimica Acta*, 890: 108-116 (2015).
36. Babatsouli, P., Palogos, I., Michalodimitraki, E., Costa, C., Kalogerakis, N. "Evaluation of a MBR pilot treating industrial wastewater with a high COD/N ratio", *J. Chem. Techn. Biotechnol.*, 90: 26-33 (2015).
37. Antoniou E, Fodelianakis S, Korkakaki E and Kalogerakis N "Biosurfactant production from marine hydrocarbon-degrading consortia and pure bacterial strains using crude oil as carbon source", *Front. Microbiol.* 6: 274 (2015).
38. Kalogerakis N, J Arff, IM Banat, OJ Broch, D Daffonchio, T Edvardsen, H. Equiraun, L Giuliano, A Handa, K Lopez-de-Ipina, I Marigomez, I Martinez, G Oie, F Rojo, J Skjermo, G Zanaroli and F Fava, "The role of environmental biotechnology in exploring, exploiting, monitoring, preserving, protecting and decontaminating the marine environment", *New Biotechnology*, 32: 157-167 (2015).
39. Mauro Majone, M, R Verdini, F Aulenta, S Rossetti, V Tandoi, N Kalogerakis, S Agathos, S Puig, G Zanaroli, F Fava, "In situ groundwater and sediment bioremediation: barriers and perspectives at European contaminated sites", *New Biotechnology*, 32: 133-146 (2015).
40. Dimitroula, H, Syranidou, E, Manousaki, E, Nikolaidis, NP, Karatzas, GP, Kalogerakis, N. "Mitigation measures for chromium-VI contaminated groundwater – The role of endophytic bacteria in rhizofiltration", *J. Hazard. Mater.*, 281: 114-120 (2014).
41. Lilli, MA, Daniel Moraetis, D, Nikolaidis, NP, Karatzas, GP, Kalogerakis, N. "Characterization and mobility of geogenic chromium in soils and river bed sediments of Asopos basin", *J. Hazard. Mater.* 281: 12-19 (2014).

42. Manousaki, E., K. Galanaki, L. Papadimitriou and N. Kalogerakis, "Metal Phytoremediation by the Halophyte *Limoniastrum Monopetalum* (L.) Boiss: Two Contrasting Ecotypes", *Int. J. Phytoremediation*, 16: 755–769 (2014).
43. Petoussi, M.A., S. Christofilopoulos and N. Kalogerakis, "Dynamics of a rhizodegradation pilot unit treating groundwater contaminated with Bisphenol-A", *Environmental Engineering Management J.*, 13: 2173–2178 (2014).
44. Palogos I, Babatsouli P, Costa C, Kalogerakis N "Computer simulation of a submerged membrane bioreactor treating high COD industrial wastewater", *Front. Environ. Sci.*, 2: 30 (2014). doi: 10.3389/fenvs.2014.00030
45. Daffonchio, D., et al., "Bioremediation of Southern Mediterranean oil polluted sites comes of age", *New Biotechnology*, 30: 743-748 (2013).
46. Nikolopoulou, M., N. Pasadakis, H. Norf and N. Kalogerakis, "Enhanced ex situ bioremediation of crude oil contaminated beach sand by supplementation with nutrients & Rhamnolipids", *Mar. Pollut. Bull.* 77: 37–44 (2013).
47. Nikolopoulou, M., P. Eickenbusch, N. Pasadakis, D. Venieri and N. Kalogerakis, "Microcosm evaluation of autochthonous bioaugmentation to combat marine oil spills", *New Biotechnology*, 30: 734-742 (2013).
48. Psillakis, E, E. Yiantzi, N. Kalogerakis, "Downsizing vacuum-assisted headspace solid phase microextraction", *J. Chrom A*, 1300: 119-126 (2013).
49. Kalogerakis, N., M. Politi, S. Foteinis, E. Chatzisyneon, D. Mantzavinos, "Recovery of antioxidants from olive mill wastewaters: A viable solution that promotes their overall sustainable management", *Journal of Environmental Management*, 128: 749-758 (2013)
50. Paranychanakis, NV, M Tsiknia, G Giannakis, NP Nikolaidis, N Kalogerakis, "Nitrogen cycling and relationships between ammonia oxidizers and denitrifiers in a clay-loam soil", *Applied Microbiology and Biotechnology*, 97: 5507-5515 (2013)
51. Nikolopoulou, M., N. Pasadakis, N. Kalogerakis, "Evaluation of autochthonous bioaugmentation and biostimulation during microcosm-simulated oil spills", *Mar. Pollut. Bull.* 72: 165–173 (2013).
52. Papaphilippou, PC, C Yiannapas, M Politi, VM Daskalaki, C Michael, N Kalogerakis, D Mantzavinos, D Fatta-Kassinou, "Sequential coagulation–flocculation, solvent extraction and photo-Fenton oxidation for the valorization and treatment of olive mill effluent", *Chemical Engineering Journal*, 224: 82-88 (2013).
53. Psillakis, E, Yiantzi, E, Sanchez-Prado, L, Kalogerakis, N, "Vacuum-assisted headspace solid phase microextraction: Improved extraction of semivolatiles by non-equilibrium headspace sampling under reduced pressure conditions", *Analytica Chimica Acta*, 742: 30-36 (2012).
54. Sanchez-Prado, L, Kalafata, K, Risticvic, S, Pawliszyn, J, Lores, M, Llompert, M, Kalogerakis, N, Psillakis, E, "Ice photolysis of 2,2',4,4',6-pentabromodiphenyl ether (BDE-100): Laboratory investigations using solid phase microextraction", *Analytica Chimica Acta*, 742: 90-96 (2012).
55. Daffonchio, D et al., "ULIXES, unravelling and exploiting Mediterranean Sea microbial diversity and ecology for xenobiotics' and pollutants' clean up", *Reviews in Environmental Science and Bio-Technology*, 11: 207-211 (2012).
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1. Nikolopoulou, M & N. Kalogerakis, "Petroleum Spill Control with Biological Means" In: *Comprehensive biotechnology*, Academic Press, pp 197-208, 2019
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9. Englezos, P. and N. Kalogerakis, *Applied Parameter Estimation for Chemical Engineers*, Marcel Dekker, New York, NY, 2001.

Plus, another eight (8) book chapters in the period 1986 – 1996.

Presentations at Scientific Conferences.

More than 250 presentations at international conferences and professional meetings. Many invited presentations at International Conferences, Universities & Research Organizations as well as European Commission workshops.

Recent Invited Presentations (2016 – 2020) – Keynote or Plenary

1. "Ecosystem and engineering process applications of air nanobubbles", 5th International Conference of Chemical Engineering, Iasi, Romania, Oct 28-30, 2020.
2. "Biodegradation of C-C backbone plastics and microplastics in the marine environment", University of Toronto (Lecture on Leading Edge series), Toronto, Canada, Oct 30, 2019.
3. "Biodegradation of plastics and secondary microplastics in the marine environment", ISPTS-2019 conference, Hoboken, NJ, USA, Oct 25-28, 2019.
4. "Biodegradation of microplastics and nanoplastics in the marine environment", McGill University (EUL series), Montreal, Canada, Oct 23, 2019.
5. "Biodegradation of Secondary Microplastics and Nanoplastics in the Marine Environment", 15th International Symposium on Persistent Toxic Substances, Basel, Switzerland, 6-9 Nov 2018.
6. "Plastics degradation processes in the marine environment", Plastic Litter in Mediterranean Sea: Problems and Solutions, ECOMONDO-2018, Rimini, Italy, Nov 6-9, 2018.
7. "Management and Bioremediation of Marine Oil Spills", Sustainable Source Zone Remediation, ECOMONDO-2018, Rimini, Italy, Nov 6-9, 2018.
8. "Biodegradation of mesoplastics and microplastics by indigenous marine microbes and generation of nanoplastics due to biodegradation", 4th International Conference on Environmental Pollution and Health, Tianjin, China, 18-20 May 2018

9. *"Mitigation measures for pollution in the marine environment"*, International Conference on Environmental Pollution, Risk Assessment and Remediation, Mahdia – Tunisia, 19-20 April 2018
10. *"Can biodegradation of plastics and microplastics be an effective solution for marine litter?"*, ECOMONDO-2017, Rimini, Italy, Nov 7-10, 2017.
11. *"Bio-degradation of PE and PS films in the marine environment: Any hope for clean oceans?"*, 9th International Conference on Environmental Engineering & Management, Bologna, Italy, Sept 6-9, 2017.
12. *"Biodegradation Kinetics of Weathered Marine Litter – Polyethylene and Polystyrene Plastic Films"*, 6th Intl Symposium on Biosorption, Biodegradation/bioremediation, Prague, Czech Republic, June 25 – 29, 2017.
13. *"Innovations needed for a Litter-free Mediterranean Sea"*, European Commission - BLUEMED – A basin of research and innovation for sustainable growth, Sliema, Malta, April 18-19, 2017.
14. *"Combating Marine Oil Spills Employing Biotechnological Methods"*, 7th Conference of the Scientific Society "Mikrobiokosmos", Athens, Greece, April 7-9, 2017.
15. *"Bio-degradation of plastic debris in the marine environment: Any hope for a clean Med Sea?"*, Tackling marine litter from research to action, European Parliament, Brussels, Belgium, Feb 1, 2017.
16. *"The role of endophytic bacteria in phytoremediation"*, State-of-the-art technologies: challenge for the research in Agricultural and Food Sciences, Belgrade, Serbia, April 18-20, 2016.
17. *"Biotechnologies for marine oil spills"*, Environment & Natural Materials Research Institute at SRTA-City, Alexandria, Egypt, April 4-6, 2016.
18. *"Integrated biotechnological solutions for combating marine oil spills"*, 1st Applied Biotechnology, Biodegradation & Environmental Management (ABBEM) Conference, Agrinio, Greece, Jan 28-29, 2016.

Conference Organization

Conference Chair of the European Bioremediation Conferences series (I to VII) held in Chania, Crete Greece (2001-2018). First two conferences funded by EU's Marie Curie - High Level Conferences (2001 & 2003).

Conference Chair of 11th International Phytotechnologies Conference, Heraklion, Crete, Greece (2014)

Member of Scientific Committee of many International Conferences held in Europe, Canada & North Africa.

Chair of upcoming conferences:

8th European Bioremediation Conference (EBC-VIII), Chania, Greece, June 12-17, 2022.

17th International Symposium on Persistent and Toxic Substances and Health (ISPTS-2022), Chania, Greece, Sept 26-Oct 1, 2022.