Curriculum Vitae – Dimitrios Kalderis

Name and Surname	: Dimitrios Kalderis
Date of birth	: 6th of September 1975
Family status	: Married, 1 daughter
Nationality	: Greek
E-mail:	: kalderis@hmu.gr

---

1. Professional status

May 2021 – now: Associate Professor in Solid Waste Management and Valorization. Department of Electronic Engineering, Hellenic Mediterranean University, Crete, Greece

September 2016 – May 2021: Assistant Professor in Solid Waste Management and Valorization. Department of Environmental and Natural Resources Engineering, Hellenic Mediterranean University, Crete, Greece

January 2011 – September 2016: Lecturer in Solid Waste Management and Valorization. Department of Environmental and Natural Resources Engineering, Hellenic Mediterranean University, Crete, Greece

Scientific expertise/research interests

Processing of biomass/agricultural waste for the production of added-value materials

Hydrothermal carbonization of industrial wastewaters and solid waste

Remediation of soils contaminated with organic substances

Teaching Courses at undergraduate level

Municipal Solid Waste Management

Processing of Toxic Industrial Waste

Biomass valorization

Management and valorization of WEEE

2. Education:

School of Chemistry, University of Leeds, UK – B.Sc. Chemistry 2:1, 1994-1997

School of Chemistry, University of Leeds, UK – Ph.D. Environmental Chemistry, 1997-2001

Ph.D. Thesis: Soil remediation using subcritical and supercritical water

3. Professional experience in funded projects:

1/2021 – 1/2024	GREEN waste management new edUcation System for recycling and environmental protection in Asia. Funding: Erasmus+ EACEA Key Action 2 (Role: WP Leader)
9/2020 – 9/2021	Development of a multi-disciplinary geological and environmental risk prevention strategy for the protection of the petroleum exploration and production activities. Funding: Research Capability Grant - Ministry of Education – Saudi Arabia (Role: Co-PI)
3/2019 – 3/2022	DEcision support system For Irrigation in Crete based on Innovative Technologies – DEFICIT (RIS3Crete). Funding: European Regional Development Funds – Partnership Agreement 2014-2020 (Role: Researcher)
1/2018 – 6/2019	IUPAC Project #2015-056-3-600, Environment Division (VI) "Glossary of Terms used in biochar research". Role: Coordinator
7/2013 – 11/2015	Archimedes III – Risk assessment of the urban stormwater polluting load threatening the coast of the Chania municipality. Funding from the Greek Ministry of Education. (Role: Researcher)
1/2012 – 12/2016	COST Action TD1107 - Biochar as option for sustainable resource management (Networking project) - Prof. Kalderis was National Representative for Greece
1/2009 – 8/2009	Investigation, assessment and remediation of sites contaminated with industrial and hazardous waste. Funding from the Greek Ministry of Environment. (Role: Researcher)
1/2008 – 1/2010	IUPAC Project #2007-026-2-600, Environment Division VI «Soils contaminated with explosives: Environmental Risk Assessment and Evaluation of state-of-the-art treatment processes». Role: Coordinator.
1/2008 – 5/2008	Case study: Management options for the bio-degradable waste of the municipality of Eleusina, Greece. Funding from the Municipality of Eleusina (Role: Researcher)
5/2007 – 10/2007	Case study: Management options for the sewage sludge of the Crete Prefecture. Funding by the Prefecture of Crete. (Role: Researcher)
7/2005 – 1/2007	Project HARMONICA: Production of added value materials for environmental applications from India's agricultural waste – Production of activated carbons from rice husk and sugarcane bagasse (EUROPEAN UNION-INDIA CROSS CULTURAL PROGRAMME (ALA/95/23/2003/077-124). (Role: Researcher)
8/2004 – 3/2005	Project ERIS – Smart environmental systems: Application in olive mill wastewater treatment (EU Support Framework 2000-2006 – Competitiveness Action). (Role: Researcher)
2/2004 – 6/2005	Project HIVALUE: Production of added value materials from coal gasification by-products (EU COAL AND STEEL ECONOMIC COMMUNITY ECSC 7220-PR/145). (Role: Researcher)

4. Publications up to 1st of January 2024

h-index: 33

Citations: 5920 (Google Scholar)

Publications in peer-reviewed international journals (83)

1. Vidakis, N., Kalderis, D., Petousis, M., Maravelakis, E., Mountakis, N., Bolanakis, N., Papadakis, V. Biochar filler in MEX and VPP additive manufacturing: characterization and reinforcement effects in polylactic acid and standard grade resin matrices (2023) Biochar, 5 (1), art. no. 39
2. Kalderis, D., Görmez, Ö., Saçlı, B., Çalhan, S.D., Gözmen, B. Valorization of loquat seeds by hydrothermal carbonization for the production of hydrochars and aqueous phases as added-value products (2023) Journal of Environmental Management, 344, art. no. 118612
3. Kalderis, D., Seifi, A., Kieu Trang, T., Tsubota, T., Anastopoulos, I., Manariotis, I., Pashalidis, I., Khataee, A. Bamboo-derived adsorbents for environmental remediation: A review of recent progress (2023) Environmental Research, 224, art. no. 115533
4. Petrović, J., Ercegović, M., Simić, M., Kalderis, D., Koprivica, M., Milojković, J., Radulović, D. Novel Mg-doped pyro-hydrochars as methylene blue adsorbents: Adsorption behavior and mechanism (2023) Journal of Molecular Liquids, 376, art. no. 12142
5. Afmataj, D., Kordera, O., Maragkaki, A., Tzanakakis, V.A., Pashalidis, I., Kalderis, D., Anastopoulos, I. Adsorption of Reactive Red 120 Dye by Polyamide Nylon 6 Microplastics: Isotherm, Kinetic, and Thermodynamic Analysis (2023) Water (Switzerland), 15 (6), art. no. 1137
6. Philippou, M., Pashalidis, I., Kalderis, D. Removal of ^{241}Am from Aqueous Solutions by Adsorption on Sponge Gourd Biochar (2023) Molecules, 28 (6), art. no. 2552
7. Çalhan, S.D., Meryemoğlu, B., Eroğlu, P., Saçlı, B., Kalderis, D. Subcritical Water Extraction of Onosma mutabilis: Process Optimization and Chemical Profile of the Extracts (2023) Molecules, 28 (5), art. no. 2314
8. Zafeiriou, I., Karadendrou, K., Ioannou, D., Karadendrou, M.-A., Detsi, A., Kalderis, D., Massas, I., Gasparatos, D. Effects of Biochars Derived from Sewage Sludge and Olive Tree Prunings on Cu Fractionation and Mobility in Vineyard Soils over Time (2023) Land, 12 (2), art. no. 416
9. Nikolopoulos, C.D., Baklezos, A.T., Kapetanakis, T.N., Vardiambasis, I.O., Tsubota, T., Kalderis, D. Characterization of the Electromagnetic Shielding Effectiveness of Biochar-based Materials (2023) IEEE Access, doi: 10.1109/ACCESS.2023.3237327
10. Bilias, F., Kalderis, D., Richardson, C., Barbayiannis, N., Gasparatos, D. Biochar application as a soil potassium management strategy: A review (2023) Science of the Total Environment, 858, art. no. 159782

11. Geçgel, C., Görmez, Ö., Gözmen, B., Turabik, M., Kalderis, D. A dual-purpose aluminum-based metal organic framework for the removal of chloramphenicol from wastewater (2022) Chemosphere, 308, art. no. 136411
12. Görmez, Ö., Saçlı, B., Çağlayan, U., Kalderis, D., Gözmen, B. Hydrothermal Synthesis of Siderite and Application as Catalyst in the Electro-Fenton Oxidation of p-Benzoquinone (2022) Molecules, 27 (22), art. no. 8056
13. Kourgialas, N.N., Hliaoutakis, A., Argyriou, A.V., Morianou, G., Voulgarakis, A.E., Kokinou, E., Daliakopoulos, I.N., Kalderis, D., Tzerakis, K., Psarras, G., Papadopoulos, N., Manios, T., Vafidis, A., Soupios, P. A web-based GIS platform supporting innovative irrigation management techniques at farm-scale for the Mediterranean island of Crete (2022) Science of the Total Environment, 842, art. no. 156918.
14. Karatas, O., Khataee, A., Kalderis, D. Recent progress on the phytotoxic effects of hydrochars and toxicity reduction approaches (2022) Chemosphere, 298, art. no. 134357
15. Kwiatkowski, M., Kalderis, D., Tono, W., Tsubota, T. Numerical analysis of the micropore structure of activated carbons focusing on optimum CO_2 adsorption (2022) Journal of CO_2 Utilization, 60, art. no. 101996
16. Görmez, Ö., Akay, S., Gözmen, B., Kayan, B., Kalderis, D. Degradation of emerging contaminant coumarin based on anodic oxidation, electro-Fenton and subcritical water oxidation processes (2022) Environmental Research, 208, art. no. 112736.
17. Spyridakis, I., Tzanakakis, V.A., Pashalidis, I., Kalderis, D., Anastopoulos, I. Polyamide nylon 6 as a potential carrier of nitrate anions in aqueous environments (2022) Journal of Molecular Liquids, 352, art. no. 118706.
18. Kinigopoulou, V., Pashalidis, I., Kalderis, D., Anastopoulos, I. Microplastics as carriers of inorganic and organic contaminants in the environment: A review of recent progress (2022) Journal of Molecular Liquids, 350, art. no. 118580
19. Anastopoulos, I., Pashalidis, I., Kayan, B., Kalderis, D. Microplastics as carriers of hydrophilic pollutants in an aqueous environment (2022) Journal of Molecular Liquids, 350, art. no. 118182.
20. Kulaksız, E., Kayan, B., Gözmen, B., Kalderis, D., Oturan, N., Oturan, M.A. Comparative degradation of 5-fluorouracil in aqueous solution by using H_2O_2-modified subcritical water, photocatalytic oxidation and electro-Fenton processes (2022) Environmental Research, 204, art. no. 111898.
21. Kirmizakis, P., Tawabini, B., Siddiq, O.M., Kalderis, D., Ntarlagiannis, D., Soupios, P. Adsorption of Arsenic on Fe-Modified Biochar and Monitoring Using Spectral Induced Polarization (2022) Water (Switzerland), 14 (4), art. no. 563.
22. Zafeiriou, I., Gasparatos, D., Ioannou, D., Kalderis, D., Massas, I. Selenium Biofortification of Lettuce Plants (*Lactuca sativa* L.) as Affected by Se Species, Se Rate, and a Biochar Co-Application in a Calcareous Soil (2022) Agronomy, 12 (1), art. no. 131.

23. Çatlıoğlu, F., Akay, S., Turunç, E., Gözmen, B., Anastopoulos, I., Kayan, B., Kalderis, D. Preparation and application of Fe-modified banana peel in the adsorption of methylene blue: Process optimization using response surface methodology (2021) Environmental Nanotechnology, Monitoring and Management, 16, art. no. 100517.
24. Siddiq, M.O., Tawabini, B., Kirmizakis, P., Kalderis, D., Ntarlagiannis, D., Soupios, P. Combining geophysics and material science for environmental remediation: Real-time monitoring of Fe-biochar arsenic wastewater treatment (2021) Chemosphere, 284, art. no. 131390.
25. Anastopoulos, I., Ighalo, J.O., Adaobi Igwegbe, C., Giannakoudakis, D.A., Triantafyllidis, K.S., Pashalidis, I., Kalderis, D. Sunflower-biomass derived adsorbents for toxic/heavy metals removal from (waste) water (2021) Journal of Molecular Liquids, 342, art. no. 117540.
26. Çalışkan, M., Akay, S., Kayan, B., Baran, T., Kalderis, D. Preparation and application of a hydrochar-based palladium nanocatalyst for the reduction of nitroarenes (2021) Molecules, 26 (22), art. no. 6859.
27. Tsubota, T., Tsuchiya, S., Kusumoto, T., Kalderis, D. Assessment of biochar produced by flame-curtain pyrolysis as a precursor for the development of an efficient electric double-layer capacitor (2021) Energies, 14 (22), art. no. 7671.
28. Georgiou, E., Mihajlović, M., Petrović, J., Anastopoulos, I., Dosche, C., Pashalidis, I., Kalderis, D. Single-stage production of miscanthus hydrochar at low severity conditions and application as adsorbent of copper and ammonium ions (2021) Bioresource Technology, 337, art. no. 125458.
29. Bilias, F., Nikoli, T., Kalderis, D., Gasparatos, D. Towards a soil remediation strategy using biochar: Effects on soil chemical properties and bioavailability of potentially toxic elements (2021) Toxics, 9 (8), art. no. 184.
30. Alidokht, L., Anastopoulos, I., Ntarlagiannis, D., Soupios, P., Tawabini, B., Kalderis, D., Khataee, A. Recent advances in the application of nanomaterials for the remediation of arsenic-contaminated water and soil (2021) Journal of Environmental Chemical Engineering, 9 (4), art. no. 105533.
31. Akay, S., Öztürk, S., Kalderis, D., Kayan, B. Degradation, solubility and chromatographic studies of Ibuprofen under high temperature water conditions (2021) Chemosphere, 277, art. no. 130307.
32. Turunç, E., Akay, S., Baran, T., Kalderis, D., Tsubota, T., Kayan, B. An easily fabricated palladium nanocatalyst on magnetic biochar for Suzuki-Miyaura and aryl halide cyanation reactions (2021) New Journal of Chemistry, 45 (28), pp. 12519-12527.
33. Kapetanakis, T.N., Vardiambasis, I.O., Nikolopoulos, C.D., Konstantaras, A.I., Trang, T.K., Khuong, D.A., Tsubota, T., Keyikoglu, R., Khataee, A., Kalderis, D. Towards engineered hydrochars: Application of artificial neural networks in the hydrothermal carbonization of sewage sludge (2021) Energies, 14 (11), art. no. 3000.
34. Birer, A.M., Gözmen, B., Sönmez, Ö., Kalderis, D. Evaluation of sewage sludge biochar and modified derivatives as novel SPE adsorbents for monitoring of bisphenol A (2021) Chemosphere, 268, art. no. 128866.

35. Khataee, A., Kalderis, D., Motlagh, P.Y., Binas, V., Stefa, S., Konsolakis, M. Synthesis of copper (I, II) oxides/hydrochar nanocomposites for the efficient sonocatalytic degradation of organic contaminants (2021) Journal of Industrial and Engineering Chemistry, 95, pp. 73-82.
36. Sewu, D.D., Lee, D.S., Woo, S.H., Kalderis, D. Decolorization of triarylmethane dyes, malachite green, and crystal violet, by sewage sludge biochar: Isotherm, kinetics, and adsorption mechanism comparison (2021) Korean Journal of Chemical Engineering, 38 (3), pp. 531-539.
37. Akay, S., Baran, T., Kayan, B., Kalderis, D. Assessment of a Pd–Fe_3O_4-biochar nanocomposite as a heterogeneous catalyst for the solvent-free Suzuki-Miyaura reaction (2021) Materials Chemistry and Physics, 259, art. no. 124176.
38. Kayan, B., Gizir, A.M., Kalderis, D. Ultrasonic-assisted extraction of 10-deacetylbaccatin III from *Taxus baccata* L.: optimization using response surface methodology (2021) Journal of the Iranian Chemical Society, 18 (1), pp. 37-45.
39. Vardiambasis, I.O., Kapetanakis, T.N., Nikolopoulos, C.D., Trang, T.K., Tsubota, T., Keyikoglu, R., Khataee, A., Kalderis, D. Hydrochars as emerging biofuels: Recent advances and application of artificial neural networks for the prediction of heating values (2020) Energies, 13 (17), art. no. en13174572.
40. Ali, S., Abbas, Z., Seleiman, M.F., Rizwan, M., Yavaş, İ., Alhammad, B.A., Shami, A., Hasanuzzaman, M., Kalderis, D. Glycine betaine accumulation, significance and interests for heavy metal tolerance in plants (2020) Plants, 9 (7), art. no. 896, pp. 1-23.
41. Kwiatkowski, M., Kalderis, D. A complementary analysis of the porous structure of biochars obtained from biomass (2020) Carbon Letters, 30 (3), pp. 325-329.
42. Kirmizakis, P., Kalderis, D., Ntarlagiannis, D., Soupios, P. Preliminary assessment on the application of biochar and spectral-induced polarization for wastewater treatment (2020) Near Surface Geophysics, 18 (2), pp. 109-122.
43. Çatlıoğlu, F.N., Akay, S., Gözmen, B., Turunc, E., Anastopoulos, I., Kayan, B., Kalderis, D. Fe-modified hydrochar from orange peel as adsorbent of food colorant Brilliant Black: process optimization and kinetic studies (2020) International Journal of Environmental Science and Technology, 17 (4), pp. 1975-1990.
44. Ali, S., Abbas, Z., Rizwan, M., Zaheer, I.E., Yavas, I., Ünay, A., Abdel-Daim, M.M., Bin-Jumah, M., Hasanuzzaman, M., Kalderis, D. Application of floating aquatic plants in phytoremediation of heavy metals polluted water: A review (2020) Sustainability (Switzerland), 12 (5), art. no. 1927.
45. Kalderis, D., Tsuchiya, S., Phillipou, K., Paschalidou, P., Pashalidis, I., Tashima, D., Tsubota, T. Utilization of pine tree biochar produced by flame-curtain pyrolysis in two non-agricultural applications (2020) Bioresource Technology Reports, 9, art. no. 100384.
46. Khataee, A., Kalderis, D., Gholami, P., Fazli, A., Moschogiannaki, M., Binas, V., Lykaki, M., Konsolakis, M. Cu_2O-CuO@biochar composite: Synthesis, characterization and its

efficient photocatalytic performance (2019) Applied Surface Science, 498, art. no. 143846.

47. Muter, O., Khroustalyova, G., Rimkus, A., Kalderis, D., Ruchala, J., Sibirny, A., Rapoport, A. Evaluation of the enhanced resistance of Ogataea (Hansenula) polymorpha to benzalkonium chloride as a resource for bioremediation technologies (2019) Process Biochemistry, 87, pp. 157-163.
48. Kalderis, D., Papameletiou, G., Kayan, B. Assessment of Orange Peel Hydrochar as a Soil Amendment: Impact on Clay Soil Physical Properties and Potential Phytotoxicity (2019) Waste and Biomass Valorization, 10 (11), pp. 3471-3484.
49. Görmez, F., Görmez, Ö., Gözmen, B., Kalderis, D. Degradation of chloramphenicol and metronidazole by electro-Fenton process using graphene oxide-Fe_3O_4 as heterogeneous catalyst (2019) Journal of Environmental Chemical Engineering, 7 (2), art. no. 102990.
50. Rad, T.S., Khataee, A., Kayan, B., Kalderis, D., Akay, S. Synthesis of pumice-TiO_2 nanoflakes for sonocatalytic degradation of famotidine (2018) Journal of Cleaner Production, 202, pp. 853-862.
51. Khataee, A., Gholami, P., Kayan, B., Kalderis, D., Dinpazhoh, L., Akay, S. Synthesis of ZrO_2 nanoparticles on pumice and tuff for sonocatalytic degradation of rifampin (2018) Ultrasonics Sonochemistry, 48, pp. 349-361.
52. Khataee, A., Gholami, P., Kalderis, D., Pachatouridou, E., Konsolakis, M. Preparation of novel CeO_2-biochar nanocomposite for sonocatalytic degradation of a textile dye (2018) Ultrasonics Sonochemistry, 41, pp. 503-513.
53. Khataee, A., Kayan, B., Gholami, P., Kalderis, D., Akay, S., Dinpazhoh, L. Sonocatalytic degradation of Reactive Yellow 39 using synthesized ZrO_2 nanoparticles on biochar (2017) Ultrasonics Sonochemistry, 39, pp. 540-549.
54. Khataee, A., Kayan, B., Gholami, P., Kalderis, D., Akay, S. Sonocatalytic degradation of an anthraquinone dye using TiO_2-biochar nanocomposite (2017) Ultrasonics Sonochemistry, 39, pp. 120-128.
55. Akay, S., Kayan, B., Kalderis, D., Arslan, M., Yagci, Y., Kiskan, B. Poly(benzoxazine-co-sulfur): An efficient sorbent for mercury removal from aqueous solution (2017) Journal of Applied Polymer Science, 134 (38), art. no. 45306.
56. Kalderis, D., Kayan, B., Akay, S., Kulaksiz, E., Gözmen, B. Adsorption of 2,4-dichlorophenol on paper sludge/wheat husk biochar: Process optimization and comparison with biochars prepared from wood chips, sewage sludge and hog fuel/demolition waste (2017) Journal of Environmental Chemical Engineering, 5 (3), pp. 2222-2231.
57. Kwiatkowski, M., Kalderis, D., Diamadopoulos, E. Numerical analysis of the influence of the impregnation ratio on the microporous structure formation of activated carbons, prepared by chemical activation of waste biomass with phosphoric(V) acid (2017) Journal of Physics and Chemistry of Solids, 105, pp. 81-85.

58. Kayan, B., Akay, S., Gözmen, B., Gizir, A.M., Demirel, M., Kalderis, D. Degradation of nitroaromatic compounds in subcritical water: Application of response surface methodology (2017) Desalination and Water Treatment, 77, pp. 237-246.
59. Kulaksiz, E., Gözmen, B., Kayan, B., Kalderis, D. Adsorption of Malachite Green on Fe-modified biochar: Influencing factors and process optimization (2017) Desalination and Water Treatment, 74, pp. 383-394.
60. Khataee, A., Kayan, B., Kalderis, D., Karimi, A., Akay, S., Konsolakis, M. Ultrasound-assisted removal of Acid Red 17 using nanosized Fe_3O_4-loaded coffee waste hydrochar (2017) Ultrasonics Sonochemistry, 35, pp. 72-80.
61. Kayan, B., Akay, S., Kulaksız, E., Gözmen, B., Kalderis, D. Acid Red 1 and Acid Red 114 decolorization in H_2O_2-modified subcritical water: Process optimization and application on a textile wastewater (2017) Desalination and Water Treatment, 59, pp. 248-261.
62. Şener, M., Kayan, B., Akay, S., Gözmen, B., Kalderis, D. Fe-modified sporopollenin as a composite biosorbent for the removal of Pb^{2+} from aqueous solutions (2016) Desalination and Water Treatment, 57 (58), pp. 28294-28312.
63. Bachmann, H.J., Bucheli, T.D., Dieguez-Alonso, A., Fabbri, D., Knicker, H., Schmidt, H.-P., Ulbricht, A., Becker, R., Buscaroli, A., Buerge, D., Cross, A., Dickinson, D., Enders, A., Esteves, V.I., Evangelou, M.W.H., Fellet, G., Friedrich, K., Gasco Guerrero, G., Glaser, B., Hanke, U.M., Hanley, K., Hilber, I., Kalderis, D., Leifeld, J., Masek, O., Mumme, J., Carmona, M.P., Calvelo Pereira, R., Rees, F., Rombolà, A.G., De La Rosa, J.M., Sakrabani, R., Sohi, S., Soja, G., Valagussa, M., Verheijen, F., Zehetner, F. Toward the Standardization of Biochar Analysis: The COST Action TD1107 Interlaboratory Comparison (2016) Journal of Agricultural and Food Chemistry, 64 (2), pp. 513-527.
64. Chakrabarti, S., Dicke, C., Kalderis, D., Kern, J. Rice husks and their hydrochars cause unexpected stress response in the nematode *Caenorhabditis elegans*: reduced transcription of stress-related genes (2015) Environmental Science and Pollution Research, 22 (16), pp. 12092-12103.
65. Kirmizakis, P., Tsamoutsoglou, C., Kayan, B., Kalderis, D. Subcritical water treatment of landfill leachate: Application of response surface methodology (2014) Journal of Environmental Management, 146, pp. 9-15.
66. Agrafioti, E., Kalderis, D., Diamadopoulos, E.Ca and Fe modified biochars as adsorbents of arsenic and chromium in aqueous solutions (2014) Journal of Environmental Management, 146, pp. 444-450.
67. Kalderis, D., Kotti, M.S., Méndez, A., Gascó, G. Characterization of hydrochars produced by hydrothermal carbonization of rice husk (2014) Solid Earth, 5 (1), pp. 477-483.
68. Agrafioti, E., Kalderis, D., Diamadopoulos, E. Arsenic and chromium removal from water using biochars derived from rice husk, organic solid wastes and sewage sludge (2014) Journal of Environmental Management, 133, pp. 309-314.

69. Agrafioti, E., Bouras, G., Kalderis, D., Diamadopoulos, E. Biochar production by sewage sludge pyrolysis (2013) Journal of Analytical and Applied Pyrolysis, 101, pp. 72-78.
70. Pellera, F.-M., Giannis, A., Kalderis, D., Anastasiadou, K., Stegmann, R., Wang, J.-Y., Gidarakos, E. Adsorption of Cu(II) ions from aqueous solutions on biochars prepared from agricultural by-products (2012) Journal of Environmental Management, 96 (1), pp. 35-42.
71. Kalderis, D., Juhasz, A.L., Boopathy, R., Comfort, S. Soils contaminated with explosives: Environmental fate and evaluation of state-of the-art remediation processes (IUPAC technical report) (2011) Pure and Applied Chemistry, 83 (7), pp. 1407-1484.
72. Daskalaki, V.M., Timotheatou, E.S., Katsaounis, A., Kalderis, D. Degradation of Reactive Red 120 using hydrogen peroxide in subcritical water (2011) Desalination, 274 (1-3), pp. 200-205.
73. Kalderis D. and Diamadopoulos E. Valorization of solid waste residues from olive oil mills: A review, Terrestrial and Aquatic Environmental Toxicology 4 (Special Issue 1), 2010, 7-20
74. Panakoulias, T., Kalatzis, P., Kalderis, D., Katsaounis, A. Electrochemical degradation of Reactive Red 120 using DSA and BDD anodes (2010) Journal of Applied Electrochemistry, 40 (10), pp. 1759-1765.
75. Kalderis, D., Aivalioti, M., Gidarakos, E. Options for sustainable sewage sludge management in small wastewater treatment plants on islands: The case of Crete (2010) Desalination, 260 (1-3), pp. 211-217.
76. Anastasakis, K., Kalderis, D., Diamadopoulos, E. Flocculation behavior of mallow and okra mucilage in treating wastewater (2009) Desalination, 249 (2), pp. 786-791.
77. Koumantakis, E., Anastasiadou, K., Kalderis, D., Gidarakos, E. Asbestos pollution in an inactive mine: Determination of asbestos fibers in the deposit tailings and water (2009) Journal of Hazardous Materials, 167 (1-3), pp. 1080-1088.
78. Kalderis, D., Hawthorne, S.B., Clifford, Anthony.A., Gidarakos, E. Interaction of soil, water and TNT during degradation of TNT on contaminated soil using subcritical water (2008) Journal of Hazardous Materials, 159 (2-3), pp. 329-334.
79. Kalderis, D., Koutoulakis, D., Paraskeva, P., Diamadopoulos, E., Otal, E., Valle, J.O.d., Fernández-Pereira, C. Adsorption of polluting substances on activated carbons prepared from rice husk and sugarcane bagasse (2008) Chemical Engineering Journal, 144 (1), pp. 42-50.
80. Kalderis, D., Bethanis, S., Paraskeva, P., Diamadopoulos, E. Production of activated carbon from bagasse and rice husk by a single-stage chemical activation method at low retention times (2008) Bioresource Technology, 99 (15), pp. 6809-6816.
81. Kalderis, D., Tsolaki, E., Antoniou, C., Diamadopoulos, E. Characterization and treatment of wastewater produced during the hydro-metallurgical extraction of germanium from fly ash (2008) Desalination, 230 (1-3), pp. 162-174.

82. Paraskeva, P., Kalderis, D., Diamadopoulos, E. Production of activated carbon from agricultural by-products (2008) Journal of Chemical Technology and Biotechnology, 83 (5), pp. 581-592.
83. Hawthorne, S.B., Lagadec, A.J.M., Kalderis, D., Lilke, A.V., Miller, D.J. Pilot-scale destruction of TNT, RDX, and HMX on contaminated soils using subcritical water (2000) Environmental Science and Technology, 34 (15), pp. 3224-3228.

Book chapters (4)

1. Koutsougera, D., Zafeiriou, I., Giannakopoulou, F., Ipsilantis, I., Kalderis, D., Gasparatos, D., Bilias, F. Biostimulants: an introduction (2023) Biostimulants in Alleviation of Metal Toxicity in Plants: Emerging Trends and Opportunities, pp. 21-50. ISBN 978-032399600-6, 978-032399601-3
2. Doğaroğlu Zeynep Görkem, Uysal Yağmur, Kalderis Dimitrios, Investigation of the viability of biochar-doped hydrogels in the fight against drought (2022), Scientific Researches v.2, Researchers Publications, pp. 17-30. ISBN: 978-625-8405-70-5
3. Anastopoulos, I., Giannopoulos, G., Islam, A., Ighalo, J.O., Iwuchukwu, F.U., Pashalidis, I., Kalderis, D., Giannakoudakis, D.A., Nair, V., Lima, E.C. Potential environmental applications of *Helianthus annuus* (sunflower) residue-based adsorbents for dye removal in (waste)waters (2022) Biomass-Derived Materials for Environmental Applications, pp. 307-318.
4. Philippou, K., Anastopoulos, I., Pashalidis, I., Hosseini-Bandegharaei, A., Usman, M., Kornaros, M., Omirou, M., Kalderis, D., Milojković, J.V., Lopičić, Z.R., Abatal, M. The application of pine-based adsorbents to remove potentially toxic elements from aqueous solutions (2021) Sorbents Materials for Controlling Environmental Pollution: Current State and Trends, pp. 113-133.

Publications in Conferences (30)

1. Tsoli B., Zafeiriou I., Bilias F., **Kalderis D**., Chlouveraki E., Gasparatos D. Biochar and biostimulant effect on soil properties and on nutrient status of lettuce plants grown on a saline soil. 16th Greek Soil Science Conference, Athens, 4th-6th of December, 2023.
2. Giannopoulos G., Pasvantoglou E., Kourtidis G., Elsgaard L., Zanakis G., Anastopoulos I., Tzanakakis V., Barouhas P., **Kalderis D**., Litskas V., Monokrousos N., and Polydoros A.N, Could N_2O emissions offset the C storage benefits of organic soil amendments in agricultural soils? 16th Greek Soil Science Conference, Athens, 4th-6th of December, 2023.
3. Kieu Trang Trinh, **Dimitrios Kalderis**, Minh Ngoc Nguyen, Thinh Thi Hong Nguyen and Toshiki Tsubota, Rice Straw Pyrolysis for Nutrient Recovery: Investigating Silicon and Phosphorus Co-Release as Alternative Fertilizer Components. RETASTE Conference Abstracts Vol. 3 RETASTE-NRF-495-Oral, Athens, Greece, 27-29th of September, 2023.

4. Ngoc-Thuy Vu, Tuyet T. A. Nguyen and **Dimitrios Kalderis**, Biosorption of diesel oil using hydrochar derived from low temperature hydrothermal carbonization of Aloe vera leaf bark. RETASTE Conference Abstracts Vol. 3 RETASTE-NOV-352-Oral Athens, Greece, 27-29th of September, 2023
5. Athanasios Balidakis, Georgios Giannopoulos, **Dimitrios Kalderis**, Ioannis Ipsilantis, Theodora Matsi, Sewage sludge stabilization with clay minerals and biochar, 8th International Conference on Sustainable Solid Waste Management, 23-25th of June 2021, Thessaloniki, Greece
6. Zeynep Görkem DOĞAROĞLU, Yağmur UYSAL, **Dimitrios Kalderis**, Investigation of the viability of biochar-doped hydrogels in the fight against drought, 7th International Mardin Artuklu Scientific Researches Conference, 10-12th of December 2021, Mardin, Turkey
7. Toshiki Tsubota, Shion Tsuchiya, **Dimitrios Kalderis**, Ioannis Pashalidis, Daisuke Tashima, Qualitative assessment of biochar produced from low technology pyrolysis towards non-agricultural applications, IBI Biochar World Congress, 10-14th of November 2019, Seoul, South Korea.
8. E. Syrganides, I. Ipsilantis, D. Gasparatos, **D. Kalderis**, Do Biochar and arbuscular mycorrhizal fungi cooperate in improving lettuce (*Lactuca sativa* L.) growth and nutrition in a saline soil? 8th Conference of the Hellenic Scientific Society of Mikrobiokosmos, 18-20th of April 2019, Patras, Greece.
9. O. Muter, G. Khroustalyova, **D. Kalderis**, A. Sibirny, A. Rapoport. Tools for utilization of distillery industry waste-yeast biomass in bioremediation technologies, 6th International Conference on Sustainable Solid Waste Management, 13-16th of June 2018, Naxos, Greece.
10. **D. Kalderis**, G. Papameletiou, B. Kayan, G. Stavroulakis, The effect of orange peel hydrochar on clay soil physical properties. 3rd Asia Pacific Biochar Conference, 19-22nd of October 2016, Chuncheon, South Korea
11. Effects of rice husks and their chars from hydrothermal carbonization on the germination rate and root length of *Lepidium sativum*. Jürgen Kern, Irina Mukhina, Christiane Dicke, Giacomo Lanza, and **Dimitrios Kalderis**. Geophysical Research Abstracts, Vol. 17, EGU2015-10002, 2015 - EGU General Assembly 2015 (C14).
12. Stavroulakis G., **Kalderis D**. and Papafilippaki A. 2015. Temporal examination of urban water runoff quality in Chania, Greece. Proceedings of the 14th International Conference on Environmental Science and Technology, CEST 2015. 3-5th of September 2015, Rhodes, Greece.
13. Stavroulakis G., **Kalderis D**. and Papafilippaki A. and Minou A. 2015. Distribution of sea water pollution in the Venetian Harbour Chania, Greece. Proceedings of the 14th International Conference on Environmental Science and Technology, CEST 2015. 3-5th September 2015, Rhodes, Greece.
14. **Kalderis D**., Stavroulakis G., and Diamadopoulos E. 2015. Urban run-off management in a Greek coastal city: Citizens' awareness, attitudes and proposed solutions.

Proceedings of the International Conference 'Science in Technology' SCinTE 2015. 5-7th November 2015, Athens, Greece.

15. As(V), Cr(III) and Cr(VI) sorption on biochars and soil. Evan Diamadopoulos, Evita Agrafioti, and **Dimitrios Kalderis.** Geophysical Research Abstracts Vol. 16, EGU2014-9816, 2014 - EGU General Assembly 2014 (C13).
16. Synthesis of Zeolite type 'A' from Greek chrysotile asbestos in subcritical water, K. Anastasiadou, F. Simantiraki, **D. Kalderis**, E. Gidarakos, Protection and Restoration of the Environment XI – Solid Waste Management, 3-6th of July 2012, Thessaloniki, Greece.
17. Production of synthetic zeolite from treated asbestos waste, K. Anastasiadou, **D. Kalderis**, E. Gidarakos, 3rd International Conference on Industrial and Hazardous Waste Management – Crete 2012, 2-5th of September 2012, Chania, Crete, Greece.
18. Copper adsorption using biochars generated by pyrolysis. Pellera F., Giannis A., **Kalderis D**., Gidarakos E. Proceedings Venice 2010, 3rd International Symposium on Energy from Biomass and Waste, Venice, Italy, 8-11th of November 2010 (C10).
19. Soil contaminated by explosives – environmental fate and evaluation of state-of-the art remediation processes. **Kalderis D**., Juhasz A., Boopathy R., Comfort S. 11th International UFZ-Deltares/TNO Conference on Management of Soil, Groundwater and Sediment, Salzburg 22-24th of September 2010 (C15).
20. Electrochemical Degradation of Reactive Red 120 Using DSA and BDD Anodes, T. Panakoulias, P. Kalatzis, **D. Kalderis** and A. Katsaounis, 61st International Society of Electrochemistry Annual Meeting, Nice, France, 27/9-1/10 2010 (C16).
21. Adsorption of Cu(II) ions from aqueous solutions using biochar prepared from agricultural byproducts. Pellera F., Giannis A., Anastasiadou K., **Kalderis D**., Pentari D., Gidarakos E. 2nd International Conference on Hazardous Waste Management, Chania, Crete, Greece, 5 – 8th of October, 2010 (C11).
22. Water pollution level of the groundwater and surface water in the lake Kournas, Crete-Greece. G. Stavroulakis, A. Papafilippaki, and **D. Kalderis**. 2010. In the Proceedings of the "Protection and Restoration of the Environment X" 05-09/7/2010 Corfu (C09).
23. Hydrothermal conversion of chrysotile asbestos using supercritical steam. Axiotis D., Anastasiadou K., **Kalderis D**., Gidarakos E. 2nd International Conference on Hazardous Waste Management, 5-8th of October 2008, Chania, Crete, Greece (C12).
24. Subcritical Water Degradation of HMX and RDX on soil at low temperatures. **D. Kalderis** and E. Gidarakos. 1st International Conference on Hazardous Waste Management, 1-3th of October 2008, Chania, Crete, Greece (C05).
25. Application of the EVAPASSOLD model to the inactive landfills of Kouroupitos and Mesomouri. **D. Kalderis**, E.Gidarakos and R. Stegmann. 1st International Conference on Hazardous Waste Management, 1-3th of October 2008, Chania, Crete, Greece (C06).

26. Activated Carbon from Bagasse and Rice Husks by a single stage pyrolysis activation method (poster). **D. Kalderis**, S. Bethanis, D. Koutoulakis, P. Paraskeva, E. Diamadopoulos, C. Fernandez-Pereira, J. Olivares del Vale, M. Balakrishnan, R. Johri, A. Gosh. Protection and Restoration of the Environment VIII, Chania (Greece), 3-7th of July 2006.
27. The kinetics of high-pressure subcritical water degradation of TNT, HMX and RDX on contaminated soil. Anthony A. Clifford, **Dimitrios Kalderis**, John F. Griffiths, Steven B. Hawthorne and David J. Miller. Proceedings of the 12th Symposium on Chemical Problems Connected with the Stability of Explosives, Swedish Section for Detonics and Combustion, Stockholm, 2004, 77-90 (C03).
28. Subcritical Water Remediation of Soils contaminated with TNT, RDX and HMX. **D. Kalderis**, S. B. Hawthorne, A. J. M. Lagadec, A. V. Lilke, D. J. Miller, and N. Lydakis – Simantiris. 2nd International Workshop of Integrated Soil and Water Protection: Risks from Diffuse Pollution, Prague, 28-29th of June 2004 (C04).
29. Non-oxidative Destruction of TNT, RDX and HMX on Contaminated Soil Using Subcritical (Hot/Liquid) Water. Steven B. Hawthorne, Arnaud J.M. Lagadec, **Dimitrios Kalderis**, Alan V. Lilke, and David J. Miller. Proceedings of the 1st Annual Conference and Exhibition on Natural Gas Technologies, Gas Technology Institute, September 30 – October 2, 2002, Orlando, FL, USA.
30. Degradation of Pesticides and Explosives on Highly-Contaminated Soils in Subcritical Water. Yuji Takao, **Dimitrios Kalderis**, Arnaud J.M. Lagadec, Carol. B. Grabanski, David J. Miller and Steven B. Hawthorne. Abstracts of the 32nd American Chemical Society Great Lakes Regional Meeting, June 5, 2000, Fargo