

Ioannis Anastopoulos

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A. Executive Profile

Ph.D. Soil Scientist-Agricultural Engineer with two post-graduate degrees in Agricultural Engineering-Agricultural Science and Soil Science (Edafology)-Soil resources management, specialized in a) sorption-desorption of different pollutants from inorganic and organic materials, b) in application of soil amendments to polluted soils and c) in the use of soils amendments in a relation with climate change. Familiar with equilibrium batch experiments, incubation experiments, Sequential Extraction Procedures (such as Tessier, modified BCR) and measurements of microbial respiration, greenhouse gases (like N₂O, CO₂) in soil environment. Expertise in physicochemical properties of different (organic and inorganic) materials (such as C, N, cation exchange capacity, pH, FTIR spectra), isotherms interpretation, kinetics, and thermodynamic models. Experienced in handling instruments such as atomic absorption, gas chromatography (GC), nitrous oxide analyzer and spectrophotometer. Been kept up-to-date on adsorption-biosorption science, on the effect of soil amendments on greenhouse gas emissions and how the amendments affect the bioavailability of toxic pollutants in soil environment. The agricultural waste management via composting process is also among my scientific interests. Experienced in writing scientific papers and book chapters. Very good knowledge of MS Office (Word, PowerPoint, and Excel), SPSS and Statistica. High reviewing contribution in scientific journals.

B. Academic Qualifications

(2010-2015) Ph.D. in Agricultural Engineering (Doctorate Thesis: Use of recyclable biomass derived from olive tree pruning material to control pollution by Pb and Ni in soil and water. Investigation of physical and microbial processes. Department of Natural Resources Management and Agricultural Engineering of Agriculture University of Athens). Supervisors: Prof. Konstantinos Ehaliotis.

(2007-2009) M.Sc. - Specialization in Soil science (Edaphology)–Soil Resources Management in Agricultural University of Athens (GPA 8.91 / 10). (Master Thesis: Use of raw and modified clinoptilolite for the removal of Zn, Cu, Ni and Cd from aqueous solutions. Department of Natural Resources Management and Agricultural Engineering of Agriculture University of Athens)

(2001-2007) Bachelor and M.Sc. in Agricultural Engineering and Agricultural Science (Department of Natural Resources Management and Agricultural Engineering of Agriculture, Specification: Soil Science and Agricultural Chemistry, Agricultural University of Athens) (GPA 7.65 / 10).

C. Employment

C1) **(28-07-21) – (present):** Assistant Professor in Soil Science, Department of Agriculture, University of Ioannina, Arta, Greece.

C2) **(01-12-2020) – (27-07-21):** Post-doctoral researcher at Department of Electronics Engineering, School of Engineering, Hellenic Mediterranean University, Chania, Crete, Greece, for the project 'Utilization of wastes to produce materials for environmental applications'. Supervisor Prof. Dimitrios Kalderis.

C3) **(01-02-2019) – (30-11-2020)**: Post-doctoral researcher at Radioanalytical and Environmental Chemistry Group, Department of Chemistry, University of Cyprus, Cyprus, for the project ‘Closing the water loop: Biochar-nano-composites for removal and recovery of metals from water and wastewater’. Supervisor Prof. Ioannis Pashalidis.

C4) **(15-06-2018) – (31-12-2018)**: Post-doctoral researcher at Laboratory of Biochemical Engineering & Environmental Technology (LBEET), Department of Chemical Engineering, University of Patras, Greece, for the project ‘Waste4Think’. <http://waste4think.eu/> (Horizon 2020). Supervisor Prof. Michael Kornaros.

C5) **(01-11-2016) – (30-05-2018)**: Post-doctoral researcher at Agricultural Research Institute, Nicosia, Cyprus, for the project ‘Revamping organic farming and its products in the context of climate change mitigation strategies’. <http://organikolife.com/el/> (LIFE). Supervisor Dr. Michalis Omirou.

C6) **(01-11-2009) – (01-01-2015)**: **Agricultural University of Athens**

Laboratory staff in Natural Resources Development and Agricultural Engineering department – Laboratory of Soils and Agricultural Chemistry. Preparation of experimental studies and teaching in the following subjects: a) Soil fertility, b) Soil Science and c) Fertility and fertilizers.

C7) **(01-02-2011) – (01-06-2011)**: **Technological Educational Foundation of Kalamata: Dpt. of Biological Greenhouse Crops and Floriculture**

Laboratory Assistant for the lab. lesson “Soil science”.

D. Scientific publications (published)

D74) Y. Vieira, M. S. Netto, É. C. Lima, **I. Anastopoulos**, M. L. S. Oliveira, G. L. Dotto, An overview of geological originated materials as a trend for adsorption in wastewater treatment, *Geoscience Frontiers*, 101150

D73) C.A. Igwegbe*, J. O. Ighalo*, O. D. Onukwuli, I. A. Obiora-Okafo, **I. Anastopoulos***, Coagulation-Flocculation of Aquaculture Wastewater Using Green Coagulant from *Garcinia kola* Seeds: Parametric Studies, Kinetic Modelling and Cost Analysis, *Sustainability* 13 (16) (2021), 9177

D72) D. Janiszewska, R. Olchowski, A. Nowicka, M. Zborowska, K. Marszałkiewicz, M. Shams, D. A. Giannakoudakis, **I. Anastopoulos**, M. Barczak, Activated biochars derived from wood biomass liquefaction residues for effective removal of hazardous hexavalent chromium from aquatic environments, *GCB Bioenergy*, 13(8) (2021), 1247-1259.

D71) M. Usman*, M. Farooq, M. Farooq, **I. Anastopoulos***, Exposure to SARS-CoV-2 in Aerosolized Wastewater: Toilet Flushing, Wastewater Treatment, and Sprinkler Irrigation, *Water* 13 (4), 436

D70) F. Çatlıoğlu, S. Akay, E. Turunç, B. Gözmen, **I. Anastopoulos**, B. Kayan, D. Kalderis*, Preparation and application of Fe-modified banana peel in the adsorption of methylene blue: Process optimization using response surface methodology, *Environmental Nanotechnology, Monitoring & Management*, 16 (2021), 100517.

D69) M. Shams*, H. Balouchi, H. Alidadi, F. Asadi, E. K. Goharshadi, S. Rezaia*, S. Rtimi, **I. Anastopoulos**, Z. Bonyadi, K. Mehrazamir, D. A. Giannakoudakis*, Coupling electrocoagulation and solar photocatalysis for electro-and photo-catalytic removal of carmoisine by Ag/graphitic carbon nitride: Optimization by process modeling and kinetic studies, *Journal of Molecular Liquids*, 340 (2021), 116917.

D68) E. Georgiou, M. Mihajlović, J. Petrović, **I. Anastopoulos**, C. Dosche, I. Pashalidis, D. Kalderis, Single-stage production of miscanthus hydrochar at low severity conditions and application as adsorbent of copper and ammonium ions, *Bioresource Technology*, 337 (2021), 125458.

- D67)** I. C. Ioannidis, **I. Anastopoulos***, I. Pashalidis*, Single-use Surgical Face Masks as Radionuclide (U-232 and Ra-226) Carriers, *Journal of Molecular Liquids*, (2021), 117578.
- D66)** I. **Anastopoulos***, J. O. Ighalo, C. A. Igwegbe, D. A. Giannakoudakis, K. S. Triantafyllidis, I. Pashalidis, Dimitrios Kalderis*, Sunflower-biomass derived adsorbents for toxic/heavy metals removal from wastewater, *Journal of Molecular Liquids*, 342 (2021), 117540.
- D65)** D. A. Giannakoudakis^{*1}, **I. Anastopoulos***^{*1}, M. Barczak^{*1}, E. Antoniou, K. Terpiłowski, E. Mohammadi, M. Shams, E. Coy, A.s Bakandritsos, I. A. Katsoyiannis, J. C. Colmenares, I. Pashalidis*, Enhanced uranium removal from acidic wastewater by phosphonate-functionalized ordered mesoporous silica: Surface chemistry matters the most, *Journal of Hazardous Materials*, 413 (2021) 125279 (**1=Equal contribution: DAG, IA, MB**).
- D64)** M. Baziar, H. R. Zakeri, Z. D. Nejad*, M. Shams*, **I. Anastopoulos**, D. A. Giannakoudakis, E. C Lima*, Metal-organic and Zeolitic imidazole frameworks as cationic dye adsorbents: physicochemical optimizations by parametric modeling and kinetic studies, *Journal of Molecular Liquids*, 332 (2021) 115832.
- D63)** F. Alakhras*, F. Ouachtak*, H. Alhajri*, E. Rehman, R. Al-Mazaideh, **I. Anastopoulos**, E. C Lima, Adsorptive removal of Cationic Rhodamine B Dye from Aqueous Solutions Using Chitosan-Derived Schiff Base. *Separation Science and Technology*, (2021), 1-13.
- D62)** M. Abatal*, M.T. Olguin, **I. Anastopoulos**, D. A. Giannakoudakis, E. C. Lima, J. Vargas, C. Aguilar, Comparison of Heavy Metals Removal from Aqueous Solution by Moringa oleifera Leaves and Seeds, *Coatings*, 11(5) (2021), 508.
- D61)** L. Alidokht, **I. Anastopoulos**, D. Ntarlagiannis, P. Soupios, B. Tawabini, D. Kalderis*, A. Khataee*, Recent advances in the application of nanomaterials for the remediation of arsenic-contaminated water and soil, *Journal of Environmental Chemical Engineering*, 9(4) (2021), 2021105533.
- D60)** L. Li, D. Zou, X. Zeng, L. Zhang, Y. Zhou, **I. Anastopoulos**, A. Wang, Q. Zeng, Z. Xiao*, (2021). Enhancing cadmium extraction potential of Brassica napus: Effect of rhizosphere interactions. *Journal of Environmental Management*, 284 (2021), 112056.
- D59)** **I. Anastopoulos***, I. Pashalidis*, Single-use surgical face masks, as a potential source of microplastics: Do they act as pollutant carriers?, *Journal of Molecular Liquids*, in press (2021).
- D58)** E.C Lima*, F. Sher, A. Guleria, M.R. Saeb, **I. Anastopoulos**, H.N. Tran, A. Hosseini-Bandegharai, Is one performing the treatment data of adsorption kinetics correctly?, *Journal of Environmental Chemical Engineering*, in press (2020), (Elsevier, IF: 4.3).
- D57)** G.E. de Souza dos Santos, P.V. dos Santos Lins, L.M.T. de Magalhães Oliveira, E.O. da Silva, **I. Anastopoulos**, A. Erto, D.A. Giannakoudakis, A.R.F. de Almeida, J.L. da Silva Duarte, L. Meili*, Layered double hydroxides/biochar composites as adsorbents for water remediation applications: recent trends and perspectives, *Journal Of Cleaner Production*, in press (2020).
- D56)** Z. Bonyadi, F.A. Noghani, A. Dehghan, J.P. van der Hoek, D.A. Giannakoudakis*, S.K. Ghadiri*, **I. Anastopoulos**, M. Sarkhosh, J.C. Colmenares, M. Shams*, Biomass-derived porous aminated graphitic nanosheets for removal of the pharmaceutical metronidazole: Optimization of physicochemical features and exploration of process mechanisms, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, in press (2020).
- D55)** **I. Anastopoulos***, J.V. Milojković, K. Tsigkou, C. Zafiri, Z.R. Lopičić, M. Kornaros, I. Pashalidis, A nappies management by-product for the treatment of uranium-contaminated waters, *Journal of Hazardous Materials*, 404 (2021) 124147.
- D54)** M. Riaz, M. Kamran, Y. Fang, Q. Wang, H. Cao, G. Yang, L. Deng, Y. Wang, Y. Zhou, **I. Anastopoulos**, X. Wang*, Arbuscular mycorrhizal fungi-induced mitigation of heavy metal phytotoxicity in metal contaminated soils: A critical review, *Journal of Hazardous Materials*, 402 (2021) 123919.
- D53)** A. Alahabadi, P. Singh, P. Raizada, **I. Anastopoulos**, S. Sivamani, G.L. Dotto, M. Landarani, A.i Ivanets, G.Z. Kyzas*, A. Hosseini-Bandegharai*, Activated carbon from wood wastes for the

removal of uranium and thorium ions through modification with mineral acid, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 607 (2020) 125516.

D52) I. Anastopoulos*, I. Pashalidis*, Environmental applications of *Luffa cylindrica*-based adsorbents, *Journal of Molecular Liquids*, 319 (2020) 114127.

D51) M.H. Saghi, M. Qasemi, H. Alidadi, A. Alahabadi, A. Rastegar, M.H. Kowsari, M. Shams*, M. Aziznezhad, E. Goharshadi, M. Barczak, I. Anastopoulos*, D.A. Giannakoudakis*, Vanadium oxide nanoparticles for methylene blue water remediation: Exploring the effect of physicochemical parameters by process modeling, *Journal of Molecular Liquids*, 318 (2020) 114046.

D50) G.A. Haghighat, S. Sadeghi, M.H. Saghi, S.K. Ghadiri, I. Anastopoulos*, D.A. Giannakoudakis*, J.C. Colmenares, M. Shams*, Zeolitic imidazolate frameworks (ZIFs) of various morphologies against eriochrome black-T (EBT): optimizing the key physicochemical features by process modeling, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 606 (2020) 125391

D49) M.A. Barakat, A.Q. Selim, M. Mobarak, R. Kumar, I. Anastopoulos, D. Giannakoudakis, A. Bonilla-Petriciolet, E.A. Mohamed*, M.K. Seliem*, S. Komarneni, Experimental and Theoretical Studies of Methyl Orange Uptake by Mn-Rich Synthetic Mica: Insights into Manganese Role in Adsorption and Selectivity, *Nanomaterials* 10 (2020) 1464.

D48) M.A.E. Barakat*, R. Kumar, M.K. Seliem, A.Q. Selim, M. Mobarak, I. Anastopoulos, D. Giannakoudakis, M. Barczak, A. Bonilla-Petriciolet, E.A. Mohamed, Exfoliated Clay Decorated with Magnetic Iron Nanoparticles for Crystal Violet Adsorption: Modeling and Physicochemical Interpretation, *Nanomaterials*, 10 (2020) 1454.

D47) A. Núñez-Delgado*, Y. Zhou, I. Anastopoulos, M. Shaaban, Editorial: New Research on Soil Degradation and Restoration, *Journal of Environmental Management*, 269 (2020) 1108510301.

D46) G.A. Haghighat, M.H. Saghi*, I. Anastopoulos*, A. Javid, A. Roudbari, S.S. Talebi, S.K. Ghadiri*, D.A. Giannakoudakis, M. Shams*, Aminated graphitic carbon derived from corn stover biomass as adsorbent against antibiotic tetracycline: Optimizing the physicochemical parameters, *Journal of Molecular Liquids*, 313 (2020) 113523.

D45) M. Omirou*, I. Anastopoulos, D.A. Fasoula, I.M. Ioannides*, The effect of chemical and organic N inputs on N₂O emission from rainfed crops in Eastern Mediterranean, *Journal of Environmental Management*, 270 (2020), 110755.

D44) M.K. Seliem, M. Mobarak, A.Q. Selim, E. Mohamed, R.A. Halfaya, H.K. Gomaa, I. Anastopoulos, D.A. Giannakoudakis, E.C. Lima, A. Bonilla-Petriciolet, G.L. Dotto, A novel multifunctional adsorbent of pomegranate peel extract and activated anthracite for Mn(VII) and Cr(VI) uptake from solutions: Experiments and theoretical treatment, *Journal of Molecular Liquids*, 2020, accepted(15-04-2020). doi.org/10.1016/j.molliq.2020.113169.

D43) M.K. Seliem*, M. Barczak, I. Anastopoulos, D.A. Giannakoudakis, A new composite of Fe₃O₄ nanoparticles/H₂O₂-activated serpentine for rapid and effective adsorption of hazardous cationic dyes: Kinetics and equilibrium studies, *Nanomaterials*, accepted.

D42) R. Olchowski, E. Zięba, D.A. Giannakoudakis, I. Anastopoulos, R. Dobrowolski, M. Barczak*, Tailoring Surface Chemistry of Sugar-Derived Ordered Mesoporous Carbons towards Efficient Removal of Diclofenac from Aquatic Environments, *Materials*, 13(7) 2020, 1625. <https://doi.org/10.3390/ma13071625>.

D41) Z. Ajmal, M. Usman*, I. Anastopoulos, A. Qadeer, R. Zhu, D. Aboagye, A. Wakeel, Use of nano-/micro-magnetite for abatement of cadmium and lead contamination, *Journal of Environmental Management*, 264, (2020), 110477.

D40) M. Abatal*, I. Anastopoulos, D.A. Giannakoudakis, M.T. Olguin, Carbonaceous material obtained from bark biomass as adsorbent of phenolic compounds from aqueous solutions, *Journal of Environmental Chemical Engineering*, 8 (2020) 103784.

D39) E. Al-Abbad, F. Alakhras*, I. Anastopoulos, D. Das, A. Al-Arfaj, N. Ouerfelli, A. Hosseini-Bandegharaei, Low-cost chitosan-based materials for the removal of nickel ions from aqueous solutions, *accepted (published in 2020)*, Russian Journal of Physical Chemistry A.

- D38) I. Anastopoulos***, I. Pashalidis, A.G. Orfanos, I. Manariotis, T. Tatarchuk, L. Sellaoui, A. Bonilla-Petriciolet, A. Mittal, A. Núñez-Delgado, Removal of caffeine, nicotine and amoxicillin from (waste)waters by various adsorbents. A review, *Journal of Environmental Management*, 2020, 261 (2020) 110236.
- D37) I. Anastopoulos***, A. Katsouromalli, I. Pashalidis, Oxidized biochar obtained from pine needles as novel adsorbent to remove caffeine from aqueous solutions. *Journal of Molecular Liquids*, 304 (2020) 112661.
- D36) I. Anastopoulos***, I. Pashalidis, A.-H. Bandegharaei*, D.A. Giannakoudakis, A. Robalds*, M. Usman, L.B. Escudero*, J.C. Colmenares, A. Núñez-Delgado, Éder C. Lima Agricultural biomass/waste as adsorbents for toxic metal decontamination of aqueous solutions, *Journal of Molecular Liquids*, 295 (2019), 111684.
- D35) L. Bulgariu***, L.B. Escudero*, O.S. Bello*, M. Iqbal*, J. N., K.A. Adegoke, F. Alakhras*, M. Kornaros*, **I. Anastopoulos***, The utilization of leaf-based adsorbents for dyes removal: A review *Journal of Molecular Liquids*, 276 (2019), 728-747.
- D34) I. Anastopoulos*** and I. Pashalidis, The application of oxidized carbon derived from *Luffa Cylindrica* for caffeine removal. Equilibrium, thermodynamic, kinetic and mechanistic analysis, *Journal of Molecular Liquids*, 296 (2019) 112078.
- D33) E.C. Lima***, A. Hosseini-Bandegharaei*, J. Moreno, **I. Anastopoulos**, A critical review on the estimation of the thermodynamic parameters on adsorption equilibria. Wrong use of equilibrium constant in the Van't Hoof equation for calculation of thermodynamic parameters of adsorption. *Journal of Molecular Liquids*, 273(2019), 425-434.
- D32) E.C. Lima***, A. Hosseini-Bandegharaei*, J. Moreno, **I. Anastopoulos**, Response to "Some remarks on A critical review on the estimation of the thermodynamic parameters on adsorption equilibria. Wrong use of equilibrium constant in the Van't Hoff equation for calculation of thermodynamic parameters of adsorption". *Journal of Molecular Liquids*, 280 (2019), 298 – 300.
- D31) E. Nicolaou**, K. Philippou*, **I. Anastopoulos**, I. Pashalidis, Copper adsorption by magnetized pine-needle biochar, *Processes*, 7 (2019), 903.
- D30) A. Rahmani-Sani**, P. Singh, P. Raizada, E. Claudio Lima, **I. Anastopoulos**, D.A. Giannakoudakis, S. Sivamani, T.A. Dontsova, A. Hosseini-Bandegharaei*, Use of chicken feather and eggshell to synthesize a novel magnetized activated carbon for sorption of heavy metal ions, *Bioresource Technology*, 297 (2019) 122452.
- D29) K. Philippou**, **I. Anastopoulos***, C. Dosche, I. Pashalidis, Synthesis and characterization of a novel Fe₃O₄-loaded oxidized biochar from pine needles and its application for uranium removal. Kinetic, thermodynamic, and mechanism analysis, *Journal of Environmental Management*, 252 (2019) 109677.
- D28) F.N. Çatlıoğlu**, S. Akay, B. Gözmen, E. Turunc, **I. Anastopoulos**, B. Kayan*, D. Kalderis*, Fe-modified hydrochar from orange peel as adsorbent of food colorant Brilliant Black: Process optimization and kinetic studies, *accepted, International Journal of Environmental Science and Technology*, 2019, accepted. <https://doi.org/10.1007/s13762-019-02593-z>
- D27) I. Anastopoulos**, E.-E. Pogka, I. Massas, I. Chatzipavlidis, C. Ehalotis*, Organic materials may greatly enhance Ni and Pb progressive immobilization into the oxidisable soil fraction, acting as providers of sorption sites and microbial substrates, *Geoderma*, 353 (2019), 482-492.
- D26) I. Anastopoulos**, M. Omirou*, C. Stephanou, A. Oulas, M.A. Vasiliades, A.M. Efstathiou, I.M. Ioannides*, Valorization of agricultural wastes could improve soil fertility and mitigate soil direct N₂O emissions, 250 (2019), *Journal of Environmental Management*, 250 (2019), 15 109389.
- D25) E. Christodoulou**, A. Agapiou*, **I. Anastopoulos**, M. Omirou*, I.M. Ioannides, The effects of different nutrient soil management schemes in nitrogen cycling, *Journal of Environmental Management*, 243 (2019), 168-176.

- D24)** S.-A. Sajjadi, A. Meknati, E.C. Lima*, G.L. Dotto, D.I. Mendoza-Castillo, **I. Anastopoulos***, F. Alakhras, E.I. Unuabonah, P. Singh, A. Hosseini-Bandegharaei*, A novel route for preparation of chemically activated carbon from Pistachio wood for highly efficient Pb(II) sorption, *Journal of Environmental Management*, 236 (2019), 34 – 44.
- D23)** J.V. Milojković*, Z.R. Lopičić, **I.P. Anastopoulos**, J.T. Petrović, S.Z. Milićević, M.S. Petrović, M. D. Stojanović, Performance of aquatic weed - Waste *Myriophyllum spicatum* immobilized in alginate beads for the removal of Pb(II), *Journal of Environmental Management*, 232 (2019), 97-109.
- D22)** **I. Anastopoulos***, A. Mittal*, M. Usman*, J. Mittal*, G. Yu*, A. Núñez-Delgado*, M. Kornaros*, A review on halloysite-based adsorbents to remove pollutants in water and wastewater. *Journal of Molecular Liquids*, 269 (2018), 855-868.
- D21)** S.-A. Sajjadi, A. Mohammadzadeh, H.N. Tran*, **I. Anastopoulos**, G.L. Dotto, Z.R. Lopičić, S. Sivamani, A. Rahmani-Sani, A. Ivanets, A. Hosseini-Bandegharaei*, Efficient mercury removal from wastewater by pistachio wood wastes-derived activated carbon prepared by chemical activation using a novel activating agent, *Journal of Environmental Management*, 223 (2018), 1001-1009.
- D20)** **I. Anastopoulos***, A. Robalds, H.N. Tran*, D. Mitrogiannis, D.A. Giannakoudakis, A. Hosseini-Bandegharaei, G.L. Dotto, Removal of heavy metals by leaves-derived biosorbents, *Environmental Chemistry Letters*, 2018, 1 – 12.
- D19)** A. Hosseini-Bandegharaei*, R. Khamirch, S. Sivamani, A. Rahmani-Sani, T. Shahryari, **I. Anastopoulos**, H. Tran*, Study of sorption properties of Br-PADAP impregnated multi-walled carbon nanotubes towards U(VI) ion and its performance in the selective separation and determination of uranium in different environmental samples, *Ecotoxicology and Environmental Safety*, 150 (2018), 136–143.
- D18)** D.A. Giannakoudakis*, A. Hosseini-Bandegharaei*, P. Tsafrakidou, K.S. Triantafyllidis, M. Kornaros, **I. Anastopoulos***, *Aloe vera* waste biomass-based adsorbents for the removal of aquatic pollutants: A Review, *Journal of Environmental Management*, 227 (2018), 354-364.
- D17)** **I. Anastopoulos***, A. Hosseini-Bandegharaei, J. Fu, A.C. Mitropoulos, G.Z. Kyzas, Use of nanoparticles for dye adsorption: Review, *Journal Of Dispersion Science And Technology*, 39 (2018), 836-847.
- D16)** **I. Anastopoulos***, I. Margiotoudis, I. Massas, The use of olive tree pruning waste compost to sequester methylene blue dye from aqueous solution, *International Journal of Phytoremediation*, 20 (2018), 831–838.
- D15)** **I. Anastopoulos***, A. Bhatnagar, B.H. Hameed, Y.S. Ok, M. Omirou, A review on waste-derived adsorbents from sugar industry for pollutant removal in water and wastewater, *Journal of Molecular Liquids*, 240 (2017), 179–188.
- D14)** **I. Anastopoulos***, V.A. Anagnostopoulos, A. Bhatnagar, A.C. Mitropoulos, G.Z. Kyzas*, A review for chromium removal by carbon nanotubes, *Chemistry and Ecology*, 33 (6) (2017), 572–588 1 – 17.
- D13)** **I. Anastopoulos***, A. Bhatnagar, D.N. Bikiaris, G.Z. Kyzas*, Chitin Adsorbents for Toxic Metals: A Review. *International Journal of Molecular Sciences*, 18 (2017), 114.
- D12)** A. Bhatnagar*, **I. Anastopoulos**. Adsorptive removal of bisphenol A (BPA) from aqueous solution: A review. *Chemosphere*, 168 (2017), 885–902.
- D11)** **I. Anastopoulos***, M. Karamesouti*, A.C. Mitropoulos, G.Z. Kyzas*. A review for coffee adsorbents. *Journal of Molecular Liquids*, 229 (2016) 555–565.
- D10)** **I. Anastopoulos***, A. Bhatnagar, E.C. Lima, Adsorption of Rare Earth Metals. A review of recent literature. *Journal of Molecular Liquids*, 221 (2016) 954-962.
- D9)** **I. Anastopoulos*** and G.Z. Kyzas*, Are the thermodynamic parameters correctly estimated in liquid-phase adsorption phenomena? *Journal of Molecular Liquids*, 218 (2016) 174 - 185.
- D8)** **I. Anastopoulos**, M. Panagiotou, C. Ehaliotis, P.A.Tarantilis, I. Massas*, NaOH pretreatment of compost derived from olive tree pruning waste biomass greatly improves biosorbent

characteristics for the removal of Pb²⁺ and Ni²⁺ from aqueous solutions, *Chemistry and Ecology*, 31 (2015) 724-740.

D7) I. Anastopoulos and G.Z. Kyzas*, Progress in batch biosorption of heavy metals onto algae, *Journal of Molecular Liquids*, 29 (2015) 77–86.

D6) I. Anastopoulos and G.Z. Kyzas*, Composts as materials for decontamination of various pollutants: A review, *Water Air Soil Pollution*, 226 (2015) 1–16.

D5) I. Anastopoulos, I. Massas, C. Ehaliotis*, Use of residues and by-products of the olive-oil production chain for the removal of pollutants from environmental media. A review of batch biosorption approaches, *Journal of Environmental Science and Health, Part A*, 50 (2014) 677–718.

D4) I. Anastopoulos and G.Z. Kyzas*, Agricultural peels for dye adsorption: A review of recent literature, *Journal of Molecular Liquids*, 200 B (2014) 381–389. (Elsevier, IF: 4.561).

D3) I. Anastopoulos, I. Massas*, C. Ehaliotis, Composting improves biosorption of Pb²⁺ and Ni²⁺ by renewable lignocellulosic materials. Characteristics and mechanisms involved, *Chemical Engineering Journal*, 231 (2013) 245–254.

D2) P. Dousis, I. Anastopoulos, D. Gasparatos, C. Ehaliotis, I. Massas*, Effects of time and glucose-C on the fractionation of Zn and Cu in a slightly acidic soil, *Communications in Soil Science and Plant Analysis*, 44 (2013) 722-732.

D1) I. Anastopoulos*, D. Ioannou, Ch. Kallianou, Removal of heavy metals from aqueous solutions through natural Greek clay. Selectivity order and isotherms studies. *Agrochimica* LVI, (2012) 98-111.

E. Book chapters

E7) I. Anastopoulos, G. Giannopoulos, A. Islam, J. O. Ighalo, F. U. Iwuchukwu, I. Pashalidis, D. Kalderis, D. A. Giannakoudakis, V. Nair, E. C. Lima, Potential environmental applications of *Helianthus annuus* (sunflower) residue - based adsorbents for dye removal in (waste)waters, book "Biomass-Derived Materials for Environmental Applications", published by Elsevier. Editors: I. Anastopoulos, E. C. Lima, L. Meili, D. A. Giannakoudakis.

E6) J. O. Ighalo*, Y. Zhou, Y. Zhou, C. A. Igwegbe, **I. Anastopoulos**, M. A. Raji, K. O. Iwuozor A review of pine-based adsorbents for the adsorption of dyes, book "Biomass-Derived Materials for Environmental Applications", published by Elsevier. Editors: I. Anastopoulos, E. C. Lima, L. Meili, D. A. Giannakoudakis.

E5) J. O. Ighalo*, B. Yao, Y. Zhou, K. O. Iwuozor, **I. Anastopoulos**, C. O. Aniagor, S. Rangabhashiyam, Utilisation of avocado (*Persea americana*) adsorbents for the elimination of pollutants from water: A review, book "Biomass-Derived Materials for Environmental Applications", published by Elsevier. Editors: I. Anastopoulos, E. C. Lima, L. Meili, D. A. Giannakoudakis.

E4) I. Anastopoulos* and I. Pashalidis*, Title: "Magnetic Biochar Fibers for Copper Removal", book "Advanced Magnetic Adsorbents for Water Treatment", book series "Environmental Chemistry for a Sustainable World", published by Springer. Editors: Prof. Guilherme Dotto and Prof. Lucas Meili.

E3) K. Philippou, I. Anastopoulos*, I. Pashalidis, A. Hosseini-Bandegharaei, M. Usman, M. Kornaros, M. Omirou, D. Kalderis, J.V. Milojković, Z.R. Lopičić, M. Abatal, Title: "The application of pine-based biomass to adsorb potentially toxic elements from aqueous solutions", book "Sorbents materials for controlling environmental pollution: current state and trends", published by Elsevier. Editor: Prof. Avelino Núñez-Delgado.

E2) I. Anastopoulos*, A. Robalds, H.N. Tran*, D. Mitrogiannis, D.A. Giannakoudakis, A. Hosseini-Bandegharaei, G.L. Dotto, "Leaf adsorbents for the removal of heavy metals", In: G. Crini and E. Lichtfouse (Eds.), "Green Adsorbents for Pollutant Removal. Environmental Chemistry for a Sustainable World, vol 19", Chapter 3, pp. 87 – 126, Springer, Cham, 2018.

E1) I. Anastopoulos*, G.Z. Kyzas, "Citrus residues as super-adsorbents", In: D. Simmons (Ed.), "Citrus Fruits: Production, Consumption and Health Benefits", Chapter 5, pp. 119-134, Nova Science Publishers, ISBN 978-1-63484-078-1, U.S.A., 2016.

F. Citations

F1) Google Scholar (until 06-10-21)

Citations = 3388

h-index = 28

i10-index = 45

F2) Scopus (until 06-10-21)

Citations = 2837

Citations (exclude self-citations of all authors) = 2446

h-index = 26

F3) Co-authors: 209

G. Teaching book

E1) Participation in team cooperation for the official translation of the book «The Nature and Properties of Soils, 14th Edition (Nyle C. Brady, Ray R. Weil)» for the teaching needs of the course «Edaphology-Soil Science» (greek version).

http://www.embryopub.gr/index.php?target=products&product_id=1175

H. Teaching experience

H4) (13-01-2020) – (31-05-2020): Environmental Chemistry (standalone course at Bachelor degree program of Department of Chemistry of University of Cyprus.

H3) (20-12-2017 and 21-12-2017, total hours: 6) "Physicochemical soil processes and interpretation of soil data" as researcher fellow in cooperation with Assistant professor Ioannis Massas in the M.Sc. programme (Soil, water resources and environmental management –Dpt. of Nat. Res. Manag. and Agr. Engin.-AUA).

H2) (01-11-2015 - 01-02-2015, total hours: 9) "Physicochemical soil processes and interpretation of soil data" as researcher fellow in cooperation with Assistant professor Ioannis Massas in the M.Sc. programme (Soil, water resources and environmental management –Dpt. of Nat. Res. Manag. and Agr. Engin.-AUA).

H1) (28-02-2011 - 27-06-2011) "Soil science" as Lab Assistant in Technological Educational Foundation of Kalamata: Dpt. of Biological Greenhouse Crops and Floriculture.

I. International conferences

I8) **I. Anastopoulos***, I. Pashalidis, A. Robalds, (2020, May). Removal of caffeine by oxidized biochar. In EGU General Assembly Conference Abstracts (p. 3937)

I7) **I. Anastopoulos***, P. Hadjiyiannis, I. Pashalidis, Preparation of biochar obtained from *Opuntia cladodes* and its application for copper(II) removal from aqueous solutions, 17th International Conference on Chemistry and the Environment - 16-20 June 2019 Thessaloniki, Greece.

I6) I.M. Ioannides*, C. Stephanou, L. Philippot, **I. Anastopoulos**, M. Omirou, The effects of tetracycline on bacterial communities responsible for denitrification and nitrous oxide production in agricultural soils, 7th International Conference on Sustainable Solid Waste Management Crete Island, Greece, 26–29 June 2019.

I5) **I. Anastopoulos***, M. Omirou, I.M. Ioannides, The effect of agricultural wastes on soil bacterial communities and on greenhouse, Climate Change in the Mediterranean and the Middle East: Challenges and Solutions, 8th and 19th May 2018, Nicosia, Cyprus.

14) E. Christodoulou, A. Agapiou, **I. Anastopoulos**, M. Omirou, I.M. Ioannides, Nitrogen cycling in soils under different nutrient management schemes 6th International Conference on Sustainable Solid Waste Management, 13-16 June 2018, Naxos, Greece.

13) M. Omirou, **I. Anastopoulos**, E. Christodoulou, A. Agapiou, I.M. Ioannides, Different nutrient management strategies reduce soil N₂O emissions in olive orchards, Climate Changing Agriculture, International Conference, 29 August – 2 September, 2017, Chania Greece.

12) I.M. Ioannides, A. Kavadia, **I. Anastopoulos**, M.A. Vasiliades, A.M. Efstathiou, M. Omirou, Does the application of post-harvest industry wastes reduce direct soil fluxes of N₂O in organic farming?, Climate Changing Agriculture, International Conference, 29 August – 2 September, 2017, Chania Greece.

11) P. Dousis, **I. Anastopoulos**, D. Gasparatos, C. Ehaliotis and I. Massas, Effects of time and glucose-C on the fractionation of Zn and Cu in a slightly acidic soil, 12th International Symposium on Soil and Plant Analysis: Chania, Crete, Greece, June 5-10, 2011

J. Greek conferences

J7) I.M. Ioannides, **I. Anastopoulos**, D. Neocleous, P. Dalias, M. Omirou, The application of agricultural wastes in alkaline soil and the influence on greenhouse gas emissions, 7th Mikrobiokosmos conference, Athens, Greece, April 7 – 9 2017.

J6) M. Panagiotou, **I. Anastopoulos**, C. Ehaliotis, I. Massas, Adsorption of Pb²⁺ and Ni²⁺ by modified with 0.1 M NaOH compost of olive tree pruning waste. 15th Greek Soil Science conference, Patra, 26-28 November 2015.

J5) E. Poga, **I. Anastopoulos**, I. Massas, C. Ehaliotis, The effect of an easily biodegradable substrate (glucose) in the bioavailability of heavy metals in Alfisols. 15th Greek Soil Science conference, Patra, 26-28 November 2015.

J4) **I. Anastopoulos**, C. Ehaliotis, I. Massas, Adsorption of Pb and Ni by a slightly acidic soil. 14th Greek Soil Science Conference, Thessalonica, 1-2 November.

J3) **I. Anastopoulos**, D. Ioannou and C. Kallianoy. Removal of Zn(II) και Cu(II) by natural and modified clinoptilolite. 4th Environmental Conference of Macedonia, Thessalonica, 18-20 March 2011. 222

J2) **I. Anastopoulos**, D. Ioannou and C. Kallianoy. Prediction of optimum isotherm. Comparison of linear and non-linear methods. 7th Greek Agricultural Engineering Conference, Athens, 24-27 November 2011. 1-9.

J1) **I. Anastopoulos**, D. Ioannou and C. Kallianoy. Removal of Cd(II) και Ni(II) by natural and modified clinoptilolite. 13th Greek Soil Science Conference, Larissa, 20-22 October 2010, 417-424.

K. Languages

K1) Greek (native speaker)

k2) English (Diploma of First Certificate)

L. Personal Grants-Scholarships- Awards

L1) State Scholarships Foundation (2010 – 2013) during Ph.D. studies in the Agricultural University of Athens.

L2) Panagiotis Triantafyllidis Foundation (2010 – 2012) during Ph.D. studies in the Agricultural University of Athens.

L3) Panagiotis Triantafyllidis Foundation (2007 – 2009) during M.Sc. studies in the Agricultural University of Athens.

L4) State Scholarships Foundation (2004 – 2005) during B.Sc. studies in Agricultural University of Athens.

L5) Agricultural University of Athens (2004 – 2005) during B.Sc. studies.

O. Other information (Editorial board, Guest Editor, Reviewer for Manuscript and Book Proposals, co-convener, Member for Cost proposals, Evaluator for Grand Proposals)

O1. Editorial board member:

K1.1) Journal of Applied Surfaces and Interfaces <https://revues.imist.ma/?journal=jasi>

K1.2) Chemistry International <https://bosajournals.com/chemint/index.php/login>

O2. Guest editor:

O2.5) Molecules (MDPI, IF: 3.060), Special Issue "Engineered gels for environmental applications", Guest Editors: Prof. Dr. Luísa Durães, Prof. Dr. Artur J.M. Valente, **Dr. Ioannis Anastopoulos**, Dr. Nicolas Brun

O2.4) Nanomaterials (MDPI, IF: 4.034), Special Issue "Nanoparticles for Dye Adsorption", Guest Editor: **Dr. Ioannis Anastopoulos**.

https://www.mdpi.com/journal/nanomaterials/special_issues/dye_adsorption

O2.3) Coatings (MDPI, IF: 2.330), Special Issue "Research Progress on the Interaction of Metal Ions with Colloids and Surfaces", Guest Editors: Prof. Ioannis Pashalidis and **Dr. Ioannis Anastopoulos**.

O2.2) Journal of Environmental Management (Elsevier IF: 4.865), Special Issue "New Research on Soil Degradation and Restoration" (Lead Guest Editor: Dr. Avelino Núñez-Delgado, Guest Editors: Dr. Yaoyu Zhou, **Dr. Ioannis Anastopoulos**, and Dr. Muhammad Shaaban). <https://www.journals.elsevier.com/journal-of-environmental-management/call-for-papers/call-for-papers-for-the-virtual-special-issue-new-research>

O2.1) Journal of Chemistry (Hindawi IF: 1.727), Special Issue "Advanced Materials for Clean Water: Removal of Pollutants and Biological Assessment of Water" (Lead Guest Editor: Dr. Hassan Ait Ahsaine, Guest Editors: Dr. Abdeljalil Benhachemi, Dr. Mohamed Zbair, and **Dr. Ioannis Anastopoulos**). <https://www.hindawi.com/journals/jchem/si/430287/>

O3. Member for Cost Action Proposal: OC-2019-1-23983 "EcoPolys - Polysaccharides-based circular economy".

O4. Member of Cost Action: CA18125 – AERoGELS. <https://cost-aerogels.eu/>

O5. Co-convener for the section: Soil System Sciences: subsection: 'Novel sorbent materials for environmental remediation', 2020 European Geosciences Union (EGU) General Assembly, Vienna, Austria, 3 – 8 May 2020.

<https://meetingorganizer.copernicus.org/EGU2020/session/35078>

O6. Co-convener for the section: Soil System Sciences: subsection: 'Novel sorbent materials for environmental remediation', 2021 European Geosciences Union (EGU) General Assembly, Vienna, Austria, 19 – 30 April 2021, <https://meetingorganizer.copernicus.org/EGU21/session/39184>

O6. Manuscript referee for:

- 1) Water Research (Elsevier), (1)
- 2) Environmental Pollution (Elsevier), (2)
- 3) Journal of Hazardous Materials (Elsevier), (9)
- 4) Journal of Cleaner Production (Elsevier), (4)
- 5) Science of the Total Environment (Elsevier), (10)
- 6) Industrial Crops and Products (Elsevier), (1)
- 7) Journal of Environmental Chemical Engineering (Elsevier), (38)
- 8) Ecotoxicology and Environmental Safety (Elsevier), (1)
- 9) Journal of Molecular Liquids (Elsevier), (17)
- 10) Critical Reviews in Environmental Science and Technology (Taylor and Francis), (1)
- 11) Environmental Science and Pollution Research (Springer), (3)
- 12) Clean-Soil Air Water (Willey), (3)

- 13) Research on Chemical Intermediates (Springer), (1)
- 14) Chemistry and Ecology (Taylor and Francis), (2)
- 15) Sustainability (MDPI), (1)
- 16) Euro-Mediterranean Journal for Environmental Integration (Springer), (1)
- 17) Global Nest Journal, (1)
- 18) Adsorption Science & Technology (SAGE), (2)
- 19) Journal of Water Reuse and Desalination (IWA), (1)
- 20) Sustainable Chemistry and Pharmacy (Elsevier), (2)
- 21) Data in Brief (Elsevier), (1)
- 22) Journal of Environmental Management (Elsevier), (9)
- 30) Surfaces and Interfaces (Elsevier), (2)
- 31) Acta Chimica Slovenica, (1)
- 32) Mediterranean Journal of Chemistry, (1)
- 33) Journal of Water Process Engineering (Elsevier), (1)
- 34) Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (Elsevier), (2)
- 35) Chemosphere, (Elsevier), (4)
- 36) Water, Air, & Soil Pollution, (Springer), (1)
- 37) Desalination and water treatment, (Taylor and Francis), (3)
- 38) Environmental Research, (Elsevier), (5)
- 39) Bioresource Technology Reports, (Elsevier), (1)

Sum: =**131**

O7. External reviewer to evaluate grant proposals.

K5.1) Narodowe Centrum Nauki, Poland, (1)

O8. External reviewer to evaluate book proposals.

K6.1) Elsevier, (3)

O9. included in the 2% top world scientists for the year 2019 (Baas, Jeroen; Boyack, Kevin; Ioannidis, John P.A. (2020), "Data for "Updated science-wide author databases of standardized citation indicators", Mendeley Data, V2, DOI: 10.17632/btchxktzyw.2#file-dd0904a8-0eba-4cf3-be4a-c6092261fed5)

O10. Military obligations: fulfilled