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SURNAME: **KARAYANNIS**
NAME: **VAYOS**

EDUCATION

DIPLOMA IN CHEMICAL ENGINEERING (5-year-studies)
NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA), Greece
Department of Chemical Engineering

DIPLOME D'ETUDES APPROFONDIES - DEA (MSc)
"Applied Chemistry and Industrial Process Engineering"
UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6, Paris, France
Ecole Nationale Supérieure de Chimie de Paris, Paris, France

PhD

Thesis: **"Physico-mechanical properties of metal-ceramics
produced from powders recovered from scrap"**
NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA), Greece
School of Chemical Engineering / Lab. of Inorganic and Analytical Chemistry

Pedagogical Studies, Postgraduate Degree
PATES/SELETE, Thessaloniki, Greece

TEACHING PROFILE

- 2019-today. **PROFESSOR (FULL)**
UNIVERSITY OF WESTERN MACEDONIA (UOWM)
Department of Chemical Engineering, School of Engineering, Kozani, Greece
- 2017-2019. **PROFESSOR (FULL)**
- 2013-2017. **ASSOCIATE PROFESSOR**
- 2010-2013. **ASSISTANT PROFESSOR**
- 2005-2010. **LECTURER**
TECHNOLOGICAL EDUCATION INSTITUTE OF WESTERN MACEDONIA
Department of Environmental Engineering, Kozani, Greece
- ADJUNCT PROFESSOR**
HELLENIC OPEN UNIVERSITY, Greece
- 2014-Now. **POSTGRADUATE PROGRAM (MSc) "Waste Management"**
Thematic area: **Solid Waste Management**
- 2006-2008. **POSTGRADUATE PROGRAM (MSc) "Catalysis & Protection of the Environment"**
Thematic area: **Pollution - Energy - Pollution Control Technologies**
2005. **Teaching Fellow**
National Technical University of Athens (NTUA), Greece
Inter-Universitary Postgraduate Program (MSc) "Materials Science and Technology"
- 1991-2005. **Teaching as Scientific Collaborator**
Technological Education Institute of Larissa, Greece

OTHER WORK EXPERIENCE

- 1986-2005. **CHEMICAL ENGINEER** in the PRIVATE and the PUBLIC SECTOR

CURRENT RESEARCH INTERESTS

- Towards Circular Bio/economy: Characterization/processing/upgrading/valorization of industrial and agro-based solid wastes/by-products into sustainable value-added ceramic/composite products
- Development of novel photo-catalytic materials for environmental applications
- Degradation of effluents/wastewaters by advanced oxidation processes (AOPs)
- Microalgal biorefinery
- Transition to low-carbon energy technologies, socio-economic aspects & soft computing appl.

RESEARCH PROGRAMS

2024. **Project Member of the European University Alliance "INVEST: INnoVations of REgional Sustainability"**, ERASMUS+, University of Thessaly, Greece
- 2016-2017. **SCIENTIFIC COORDINATOR and Main Research Team Member** of the **Research Project** (financed by ELKE - TEI of Western Macedonia):
"Innovative valorization of industrial solid wastes/by-products in the development of new materials for the treatment & advanced oxidation of industrial effluents"
- 2012-2015. **SCIENTIFIC COORDINATOR and Main Research Team Member** of the **Research Program "ARCHIMEDES III"** (co-financed by the EU & national funds):
"Valorization of industrial and agricultural solid wastes into ceramic materials"
Technological Education Institute of Western Macedonia, Greece
- 2013-2015. **Main Research Team Member of the Research Programs "COOPERATION 2011 Partnerships of Production and Research Institutions in Focused Research and Technology Sectors"** (public expenditure: co-financed by the EU and national funds):
1. **"Novel ceramic materials"** 2. **"Algal biofuel production"**
Technological Education Institute of Thessaly, Greece
- 2013-2014. **Main Research Team Member** of the **Research Project** (financed by ELKE - TEI WM):
"Integrated management of liquid and solid waste from marble processing plants"
- 2011-2012. **Main Research Team Member** of the **Research Program**:
"Study for the development of appropriate technologies for the management of olive mill solid and liquid by-products, sewage sludge, ASF and petcoke"
Technological Education Institute of Larissa, Greece – "TERRA S.A." (Ceramic industry)
- 2005-2006. **Main Research Team Member** of the **Research Program**
"ENVIRONMENT - ARCHIMEDES II" (co-financed by the EU and national funds):
"Reinforcing ceramic materials"
Technological Education Institute of Larissa, Greece
- 2004-2006. **Main Research Team Member** of the **Research Program "ARCHIMEDES I"** (co-financed by the EU and national funds):
"Advanced oxidation processes for the treatment of industrial liquid wastes"
Technological Education Institute of Larissa, Greece
2004. **Participation in the Research Programs**:
- **"Development and application of advanced technology and materials for the degradation of pollutants in industrial effluents"**
- **"Development of new materials for use in environmental protection technology"**
Technological Education Institute of Larissa, Greece
- 1996-1998. **Participation in the Research Program**:
"Quality control of ceramic products and methods for developing and improving ceramics and composites"
Technological Education Institution of Larissa, Greece

TOTAL PUBLISHED WORK: (180)

A) PUBLICATIONS IN INTERNATIONAL PEER-REVIEWED SCIENTIFIC JOURNALS: (74)

1. S. Karakasi, Z. Frontistis, K. Moustakas, C. Tsanaktsidis, V. Karayannis
"Metal-organic frameworks (MOFs) as novel adsorbents for alternative fuel gas storage - A short review", *Technical Annals*, Under Revision (2024)
2. K. Kokkinos, V. Karayannis, N. Samaras, K. Moustakas
"Multi-scenario analysis on hydrogen production development using PESTEL and FCM models"
Journal of Cleaner Production, 419 (2023) 138251 (**Scopus Indexed**)
3. I.A. Vasiliadou, Z.A. Semizoglou, V.G. Karayannis, C.G. Tsanaktsidis
"Extraction Study of Lignite Coalbed Methane as a Potential Supplement to Natural Gas for Enhancing Energy Security of Western Macedonia Region in Greece"
Applied Sciences, 14 (1) (2023) 174 (**Scopus Indexed**)
4. K Kokkinos, E Lakioti, K Moustakas, C Tsanaktsidis, V Karayannis
"Sustainable Medical Waste Management Using an Intuitionistic Fuzzy-Based Decision Support System", *Sustainability*, 16 (1) (2023) (**Scopus Indexed**)
5. A Itziou, K Zaralis, A Theofanous, M Louloudi, G Rozos, I Vasiliadou, E. Lakioti, V. Karayannis, C. Tsanaktsidis, **"Sustainable Antioxidant Production for Hygienic Disinfection Using Bioextractants from Lavender and Oregano Distillation Process"**, *Energies*, 16 (22) (2023) 7534 (**Scopus Indexed**)
6. G. Georgiou, V. Karayannis
GIS-based approach for solid waste disposal site mapping and environmental rehabilitation
Euro-Mediterranean Journal for Environmental Integration, (2023) 1-11 (**Scopus Indexed**)
7. K. Kokkinos, E. Nathanail, V. Gerogiannis, K. Moustakas, V. Karayannis
"Hydrogen storage station location selection in sustainable freight transportation via intuitionistic hesitant decision support system"
Energy, 260 (2022) 125008 (**Scopus Indexed**)
8. S.L. Dourvatzides, A. Tsiolikas, N.D. Charisiou, M. Souliotis, V. Karayannis, N. Taousanidis
"Energy and Exergy-Based Screening of Various Refrigerants, Hydrocarbons and Siloxanes for the Optimization of Biomass Boiler–Organic Rankine Cycle (BB–ORC) Heat and Power Cogeneration Plants", *Energies*, 2022, 15 (15) (2022) 5513 (**Scopus Indexed**)
9. K. Kokkinos, V. Karayannis, E. Nathanail, K. Moustakas
"A comparative analysis of Statistical and Computational Intelligence methodologies for the prediction of traffic-induced fine Particulate Matter and NO₂"
Journal of Cleaner Production, 328C (2021) 129500 (**Scopus Indexed**)
10. E. Katsika, M. Volioti, V. Karayannis, A. Moutsatsou
"Transformation of Industrial By-Products into Composite Photocatalytic Materials"
Periodica Polytechnica Chemical Engineering, 65 (1) (2021) 12-20 (**Scopus Indexed**)

11. K. Kokkinos, V. Karayannis, K. Moustakas
"Optimizing Microalgal Biomass Feedstock Selection for Nanocatalytic Conversion into Biofuel Clean Energy, using Fuzzy Multi-Criteria Decision Making Procedures"
Frontiers in Energy Research, 8 (2021) Art. No 622210 (Scopus Indexed)
12. Z. Karavas, V. Karayannis, K. Moustakas
"Comparative study of air quality indices in the European Union towards adopting a common air quality index"
Energy and Environment, 32 (6) (2021) 959-980 (Scopus Indexed)
13. T. Papathanasiou, N. Gougoulas, V. Karayannis, C.-A. Kamvoukou
"Investigation of the total phenolic content and antioxidant capacity of three sweet pepper cultivars (*Capsicum annuum* L.) at different development and maturation stages"
Periodica Polytechnica Chemical Engineering, 65 (2) (2021) (219-228) (Scopus Indexed)
14. A. Baklavaridis, K. Vatalis, V. Karayannis, N.-P. Benetis, G. Charalampides
"Mineralogical characterization and evaluation of chromite ore in Grevena and Kozani Vourinos massif, Western Macedonia, Greece"
Mining of Mineral Deposits, 15 (1) (2021) 11-18 (Scopus Indexed)
15. K. Kokkinos, V. Karayannis, K. Moustakas
"Circular bio-economy via energy transition supported by Fuzzy Cognitive Map modeling towards sustainable low-carbon environment"
Science of the Total Environment, 721 (2020) 137754 (Scopus Indexed)
16. G. Charalampides, K. Vatalis, A. Baklavaridis, V. Karayannis, N.-P. Benetis
"Chemical and mineralogical analysis of high-purity quartz from new deposits in a Greek island, for potential exploration"
EUREKA: Physics and Engineering, 4 (2020) 29-37 (Scopus Indexed)
17. K. Kokkinos, V. Karayannis
"Supportiveness of Low-Carbon Energy Technology Policy using Fuzzy Multi-Criteria Decision Making Methodologies"
Mathematics, 8 (2020) 1178 (Scopus Indexed)
18. X. Spiliotis, V. Karayannis, S. Lamprakopoulos, K. Ntampeglitis, G. Papapolymerou
"Synthesis and characterization of greener ceramic materials with lower thermal conductivity using olive mill solid byproduct"
EUREKA: Physics and Engineering (Section: Chemical Engineering), 1 (2020) 96-106 (Scopus)
19. K. Kokkinos, V. Karayannis, E. Lakioti, K. Moustakas
"Exploring social determinants of municipal solid waste management: survey processing with fuzzy logic and self-organized maps"
Environmental Science and Pollution Research, 26 (35) (2019) 35288-35304 (Scopus Indexed)
20. A. Zabaniotou, D. Fytili, E. Lakioti, V. Karayannis
"Transition to bioenergy: Engineering and technology undergraduate students' perceptions of and readiness for agricultural waste-based bioenergy in Greece", *Global Transitions*, 1 (2019) 157-170 (Scopus Indexed)

21. G. Papapolymerou, V. Karayannis, A. Besios, A. Riga, N. Gougoulas, X. Spiliotis
"Scaling-up sustainable *Chlorella vulgaris* microalgal cultivation from laboratory to pilot-plant photobioreactor, towards biofuel"
Global Nest Journal, 21 (1) (2019) 37-42 (Scopus Indexed)
22. K. Kokkinos, E. Lakioti, P. Samaras, V. Karayannis
"Evaluation of public perception on key sustainability indicators for drinking water quality by fuzzy logic techniques"
Desalination and Water Treatment, 170 (2019) 378-393 (Scopus Indexed)
23. X. Spiliotis, V. Karayannis, S. Lamprakopoulos, S. Zaoutsos, G. Papapolymerou
"Development of reliable building bricks incorporating olive-mill wastewater focusing on thermal insulation and energy savings"
Journal of Chemical Technology and Metallurgy, 54 (5) (2019) 1028-1034 (Scopus Indexed)
24. V. Karayannis, K. Moustakas, A. Baklavaridis, A. Domopoulou
"Sustainable ash-based geopolymers"
Chemical Engineering Transactions, 63 (2018) 1-6 (Scopus Indexed)
25. E. Katsika, A. Moutsatsou, V. Karayannis, M. Volioti, D. Tsoukleris
"Synthesis and characterization of lignite fly ash ceramic substrates coated with TiO₂ slurry, and evaluation in environmental applications"
Journal of the Australian Ceramic Society, 54 (4) (2018) 711-719 (Scopus Indexed)
26. K. Kokkinos, E. Lakioti, E. Papageorgiou, K. Moustakas, V. Karayannis
"Fuzzy cognitive map-based modeling of social acceptance to overcome uncertainties in establishing waste biorefinery facilities"
Frontiers in Energy Research, 6 (OCT) Art. No 112 (2018) 1-17 (Scopus Indexed)
27. A. Baklavaridis, P. Samaras, V. Karayannis
"Recent progress in the advanced oxidation of wastewaters using recycled fly ashes as alternative catalytic agents"
Desalination and Water Treatment, 133 (2018) 292-306 (Scopus Indexed)
28. N. Gougoulas, G. Papapolymerou, V. Karayannis, X. Spiliotis, N. Chouliaras
"Effects of manure enriched with algae *Chlorella vulgaris* on soil chemical properties"
Soil and Water Research, 13 (1) (2018) 51-59 (Scopus Indexed)
29. G. Papapolymerou, V. Karayannis, D. Kantas, S. Papadopoulos, N. Gougoulas, X. Spiliotis
"Growing *Chlorella vulgaris* into bioreactors set in solar greenhouse, towards biofuel: Nutrient composition"
Journal of Applied Biotechnology & Bioengineering, 5 (2) (2018) 106-110
30. V. Karayannis, A. Moutsatsou, A. Domopoulou, E. Katsika, Ch.-A. Drosou, A. Baklavaridis
"Fired ceramics 100% from lignite fly ash and waste glass cullet mixtures"
Journal of Building Engineering, 14 (2017) 1-6 (Scopus Indexed)

31. V. Karayannis, K. Moustakas, A. Vatalis, P. Sapalidis, A. Domopoulou
"Advanced oxidation of industrial effluents under microwave irradiation: state of the art "
Desalination and Water Treatment, 91 (2017) 138-145 (**Scopus Indexed**)
32. V. Karayannis, H. Karapanagioti, A. Domopoulou, D. Komilis
"Stabilization/Solidification of hazardous metals from solid wastes into ceramics and glass-ceramics" *Waste and Biomass Valorization*, 8 (5) (2017) 1863-1874 (**Scopus Indexed**)
33. V.G. Karayannis, A.K. Moutsatsou, A. Baklavaridis, E.L. Katsika, A.E. Domopoulou
"Synergistic sintering of lignite fly ash and steel making residues towards sustainable compacted ceramics"
Advances in Materials Science and Engineering, Article ID 1735268 (2017) 1-8 (**Scopus Indexed**)
34. V. Karayannis, K. Ntampeglitis, S. Lamprakopoulos, G. Papapolymerou, X. Spiliotis
"Novel sintered ceramic materials incorporated with EAF Carbon steel slag"
Materials Research Express, 4 (1) (2017) 015505 (**Scopus Indexed**)
35. V. Karayannis, A. Domopoulou, E. Lakioti, A. Baklavaridis, G. Charalampides
"Environmental research and teaching in a university of applied sciences – Students’ awareness"
Ponte Journal, 73 (1) (2017) 1-9 (**Scopus Indexed**)
36. V. Karayannis, S. Lamprakopoulos, A. Domopoulou, P. Kyratsis, G. Papapolymerou, X. Spiliotis
"Processing of steel mill scale for manufacturing novel engineering ceramics by powder metallurgy"
Academic Journal of Manufacturing Engineering, 15 (2) (2017) 65-71 (**Scopus Indexed**)
37. A. Domopoulou, K. Moustakas, A. Baklavaridis, N. Koukouzas, V. Karayannis
"Wastewater treatment for reuse employing industrial by-products as alternative coagulants"
Desalination and Water Treatment, 91 (2017) 55-63 (**Scopus Indexed**)
38. E. Katsika, A. Moutsatsou, V. Karayannis, A. Ntziouni
"Preparation and characterization of lignite ashes coated with TiO₂ for environmental application"
Journal of Chemical Technology and Metallurgy, 52 (5) (2017) 940-949 (**Scopus Indexed**)
39. E. Lakioti, K. Moustakas, D. Komilis, A. Domopoulou, V. Karayannis
"Sustainable solid waste management: Socio-economic considerations"
Chemical Engineering Transactions, 56 (2017) 661-666 (**Scopus Indexed**)
40. V.G. Karayannis
"Development of extruded and fired bricks with steel industry byproduct towards circular economy"
Journal of Building Engineering, 7 (2016) 382-387 (**Scopus Indexed**)
41. V.G. Karayannis, A.K. Moutsatsou, E.L. Katsika
"Sintering lignite fly and bottom ashes via two-step versus conventional process"
Science of Sintering, 48 (3) (2016) 363-370 (**Scopus Indexed**)

42. V. Karayannis, A. Domopoulou, A. Baklavaridis, P. Kyratsis
"Ceramic processing via microwave irradiation"
 Academic Journal of Manufacturing Engineering, 14 (4) (2016) 54-61 (**Scopus Indexed**)
43. V. Karayannis, K. Ntampegliotis, S. Lamprakopoulos, D. Kasiteropoulou, G. Papapolymerou, X. Spiliotis
"Development of extruded and sintered clay bricks with beneficial use of industrial "scrap-soil" as admixture"
 Revista Romana de Materiale / Romanian Journal of Materials, 46 (4) (2016) 523-529 (**Scopus**)
44. C. Emmanouil, V. Karayannis
"Editorial (Special issue of Toxicological and Environmental Chemistry: 4th International Symposium Green Chemistry for Environment, Health and Development)" ('Article')
Toxicological and Environmental Chemistry, 98 (10) (2016) 1125-1126 (**Scopus Indexed**)
45. Lamprakopoulos, V. Karayannis, G. Papapolymerou, D. Kasiteropoulou, K. Ntampegliotis, X. Spiliotis
"Development of engineering ceramics 100% from lignite fly ash and steelmaking EAF mixtures"
Journal of Ceramic Processing Research, 17 (9) (2016) 985-989 (**Scopus Indexed**)
46. V. Karayannis, X. Spiliotis, E. Papastergiadis, K. Ntampegliotis, G. Papapolymerou, P. Samaras
"Contribution to the sustainable management of resources by novel combination of industrial solid residues into red ceramics"
Bulletin of Environmental Contamination and Toxicology, 94 (3) (2015) 345-351 (**Scopus**)
47. V. Karayannis, X. Spiliotis, A. Domopoulou, K. Ntampegliotis, G. Papapolymerou
"Optimized synthesis of construction ceramic materials using high-Ca fly ash as admixture"
Revista Romana de Materiale / Romanian Journal of Materials, 45 (4) (2015) 358-363 (**Scopus**)
48. V. Karayannis, G. Papapolymerou, S. Zaoutsos, S. Lamprakopoulos, K. Ntampegliotis, X. Spiliotis
"Innovative synergistic valorization of lignite fly ash and steel industry scrap-soil as secondary resources for compacted ceramics"
Key Engineering Materials, 660 (2015) 268-272 (**Scopus Indexed**)
49. A. Domopoulou, K. Gudulas, E. Papastergiadis, V. Karayannis
"Coagulation/flocculation/sedimentation applied to marble processing wastewater treatment"
Modern Applied Science, 9 (6) (2015) 137-144 (**Scopus Indexed**)
50. S. Lamprakopoulos, V. Karayannis, G. Papapolymerou, S. Zaoutsos, K. Ntampegliotis, X. Spiliotis
"Sustainable development of P/M ceramics from steel mill scale and lignite fly ash mixtures" *WIT Transactions on the Built Environment*, 168 (2015) 301-312
51. X.D. Spiliotis, K.I. Ntampegliotis, V.G. Karayannis, G.A. Papapolymerou
"Physico-mechanical properties of extruded & sintered ceramics using pet coke and sewage sludge as admixtures"
Journal of Ceramic Processing Research, 16 (1) (2015) 11-17 (**Scopus Indexed**)
52. V. Karayannis, X. Spiliotis, K. Ntampegliotis, N. Koukouzas, I. Tsianakas, N. Taousanidis, G. Papapolymerou, **"Reliability analysis of clay bricks incorporating industrial solid by-products"**
Modern Applied Science, 8 (6) (2014) 219-228 (**Scopus Indexed**)

53. V. Karayannis, G. Charalampides, E. Lakioti
"Socio-economic aspects of CCS"
Procedia Economics and Finance, 14 (2014) 295-302 (**ScienceDirect** Indexed)
54. G. Charalampides, K.I. Vatalis, S. Platias, V. Karayannis
"The contribution of industrial minerals to sustainable recovery of Greek economy"
Procedia Economics and Finance, 14 (2014) 128-136 (**ScienceDirect** Indexed)
55. A.E. Domopoulou, X.D. Spiliotis, K.I. Ntampegliotis, K.H. Gudulas, G.A.-P. Papapolymerou, V.G. Karayannis
"Compacted ceramics incorporating recycled marble processing residue"
Journal of International Scientific Publications: Materials, Methods and Technologies, 8 (2014) 786-791
56. X. Spiliotis, K. Ntampegliotis, D. Kasiteropoulou, S. Lamprakopoulos, K. Lolos, V. Karayannis, G. Papapolymerou
"Valorization of mill scale waste by its incorporation in fired clay bricks"
Key Engineering Materials, 608 (2014) 8-13 (**Scopus** Indexed)
57. N. Gougoulis, X. Spiliotis, V. Karayannis, N. Chouliaras, G. Papapolymerou
"The biodegradation of algae species *chlorella vulgaris* and *oregano* foliar tissues in soil during incubation, and their effects on soil chemical properties"
Annals of the University of Craiova, Series Biology & Environmental Engineering, V. XIX(LV) (2014) 467-474
58. G. Papapolymerou, N. Gougoulis, X. Spiliotis, V. Karayannis, D. Kantas, S. Papadopoulos, A. Kokkalis, L. Ntoufas
"Effect of different concentrations of macronutrients on the growth rate and cultivation of algae species *chlorella vulgaris*" *Annals of the University of Craiova, Series Biology & Environmental Engineering*, V. XIX(LV) (2014) 557-562
59. V.G. Karayannis, A.K. Moutsatsou, E.L. Katsika
"Synthesis of microwave-sintered ceramics from lignite fly and bottom ashes"
Journal of Ceramic Processing Research, 14 (1) (2013) 45-50 (**Scopus** Indexed)
60. V. Karayannis, A. Moutsatsou, N. Koukouzas, C. Vasilatos
"Valorization of CFB-combustion fly ashes as the raw materials in the development of value-added ceramics" *Fresenius Environmental Bulletin*, 22 (12c) (2013) 3873-3879 (**Scopus** Indexed)
61. V.G. Karayannis, A.K. Moutsatsou
"Synthesis and characterization of Nickel-Alumina composites from recycled Nickel powder"
Advances in Materials Science and Engineering, Article ID 395612 (2012) 1-9 (**Scopus** Indexed)
62. V.G. Karayannis, A.K. Moutsatsou, E.L. Katsika
"Recycling of lignite highly-calcareous fly ash into nickel-based composites"
Fresenius Environmental Bulletin, 21 (8b) (2012) 2375-2380 (**Scopus** Indexed)
63. N. Koukouzas, C. Ketikidis, G. Itskos, X. Spiliotis, V. Karayannis, G. Papapolymerou
"Synthesis of CFB-coal fly ash clay bricks and their characterisation"
Waste and Biomass Valorization, 2 (2011) 87-94 (**Scopus** Indexed)

64. K. Soutsas, V. Karayannis, I. Poullos, A. Riga, K. Ntampeglitis, X. Spiliotis, G. Papapolymerou
"Decolorization and degradation of reactive azo dyes via heterogeneous photocatalytic processes"
Desalination, 250 (1) (2010) 345-350 (Scopus Indexed)
65. V.G. Karayannis, A.K. Moutsatsou
"The contribution of waste in the construction of composite materials"
Journal of the European Ceramic Society, 27 (2007) 843-849 (Scopus Indexed)
66. A. Riga, K. Soutsas, K. Ntampeglitis, V. Karayannis, G. Papapolymerou
"Effect of system parameters and of inorganic salts on the decolorization and degradation of procion H-exl dyes. Comparison of H₂O₂/UV, Fenton, UV/Fenton, TiO₂/UV and TiO₂/UV/H₂O₂ processes"
Desalination, 211 (2007) 72-86 (Scopus Indexed)
67. V. Karayannis, A. Moutsatsou
"Fabrication of MMCs from metal and alloy powders produced from scrap"
Journal of Materials Processing Technology, 171 (2) (2006) 295-300 (Scopus Indexed)
68. V. Karayannis, C. Sotiriou, A. Moutsatsou
"Composites from scrap? The future could be bright for MMCs"
Metal Powder Report, 61 (4) (2006) 18-23 (Scopus Indexed)
69. K. Ntampeglitis, A. Riga, V. Karayannis, V. Bontozoglou, G. Papapolymerou
"Decolorization kinetics of Procion H-exl dyes from textile dyeing using Fenton-like reactions"
Journal of Hazardous Materials, 136 (2006) 75-84 (Scopus Indexed)
70. V. Karayannis, A. Moutsatsou
"Ferrous scrap yields powders for PM & MMCs"
Metal Powder Report, 55 (12) (2000) 33-36 (Scopus Indexed)
71. A. Botis, V. Karayannis, A. Papargyris, G. Papapolymerou, X. Spiliotis, D. Kasidakis
"Particle size distribution - Mechanical properties relationship of brick clays"
Key Engineering Materials, 132-136 (1997) 2164-2167 (Scopus Indexed)
72. X. Spiliotis, G. Papapolymerou, V. Karayannis, A. Papargyris, A. Botis, D. Kasidakis
"Thermal analysis and mechanical properties of brick clays"
Key Engineering Materials, 132-136 (1997) 2168-2171 (Scopus Indexed)
73. E. Balampekou, T. Koutsos, G. Menexes, A. Oikonomou, V. Karayannis
"Selection of environmental education teaching techniques from categories for raising recycling awareness in Preschool and Primary Education"
Scientific Journal «Scientific Cycle» ISSN 2241-4576, 5 (1) (2017) 7-47
74. E. Lois, S. Stournas, V. Karayannis, G. Kyriakopoulos
"Correlation between smoke point and flame emissivity of liquid hydrocarbons. I. n-parafins & 1-olefins"
Bulletin of the Panhellenic Association of Chemical Engineers, 57 (1986) 34-37

B) PUBLICATIONS IN INTERN. PEER-REVIEWED SCIENTIFIC VOLUMES (SCOPUS): (11)

1. K. Kokkinos, E. Lakioti, E. Papageorgiou, K. Moustakas, V. Karayannis
"FCMap-Based Modeling of Social Acceptance to Overcome Uncertainties in Establishing Waste Biorefinery Facilities"
In: "Waste Biorefineries: Future Energy, Green Products and Waste Treatment", Rehan, M., Nizami, A.-S., Rashid, U., Naqvi, M. R. (eds.), Lausanne: Frontiers Media S.A., 2019, ISSN 1664-8714, doi: 10.3389/978-2-88945-993-3
- SCOPUS INDEXED**
2. V.G. Karayannis
"Microwave Sintering of Ceramic Materials"
IOP Conference Series: Materials Science and Engineering, 161 (2016) 012068 6 pages
3. G. Charalampides, K. Vatalis, V. Karayannis, A. Baklavaridis
"World distribution and environmental defects of rare earth metals"
IOP Conference Series: Materials Science and Engineering, 161 (2016) 012069 6 pages
4. A. Domopoulou, X. Spiliotis, G. Charalampides, A. Baklavaridis, G. Papapolymerou, V. Karayannis
"Development of tailored ceramic microstructures using recycled marble processing residue as pore-former"
IOP Conference Series: Materials Science and Engineering, 133 (2016) 012030 9 pages
5. K. Lolos, K. Ntampegliotis, D. Kasiteropoulou, V. Karayannis, G. Papapolymerou, X. Spiliotis
"Steel making EAFC as the raw material into novel ceramics"
21st International Congress of Chemical and Process Engineering, CHISA 2014 and 17th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, PRES 2014 3, pp. 1338
6. P. Samaras, X. Spiliotis, N. Koukouzas, E. Papastergiadis, G. Papapolymerou, V. Karayannis
"Elaboration of new ceramic supports from lignite fly ash/clay mixtures using powder metallurgy processes"
21st International Congress of Chemical and Process Engineering, CHISA 2014 and 17th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, PRES 2014 4, pp. 2328
7. X. Spiliotis, G. Papapolymerou, K. Ntampegliotis, V. Karayannis
"Sewage Sludge & Pet Coke into clays: Effect on process & materials properties"
Proceedings of the 23rd International Mining Congress and Exhibition of Turkey, IMCET 2013, 1, pp. 373-380
8. V. Karayannis, A. Moutsatsou, E. Katsika
"Development of PM ceramics from steel industry and power stations by-products"
Proceedings of the Euro International Powder Metallurgy Congress and Exhibition, Euro PM 2011, 2, pp. 37-42
9. A. Moutsatsou, V. Karayannis, D. Matsas, E. Katsika, S. Tshipoura
"Microstructure analysis of sintered lignite combustion ashes"
A Global Road Map for Ceramic Materials and Technologies: Forecasting the Future of Ceramics, International Ceramic Federation – 2nd International Congress on Ceramics, ICC2008, 1-9

10. A. Moutsatsou, V. Karayannis, C. Sotiriou, S. Tsimas
"Evaluation of iron chlorides grinding in the production of iron powder"
Proceedings of the Euro Powder Metallurgy Congress and Exhibition, Euro PM 2007, 2, pp. 63-67
11. V. Karayannis, C. Sotiriou, A. Moutsatsou
"Elaboration of MMCs using powders recovered from metallic waste"
Proceedings of the Euro PM 2005: Powder Metallurgy Congress and Exhibition, 2, pp. 293-299

C) PUBLICATIONS IN REVIEWED PROCEEDINGS OF INTERNATIONAL CONGRESSES: (76)

1. V. Karayannis, P. Samaras, E. Lakioti, N. Koukouzas
"Supportiveness of Green Hydrogen energy transition towards decarbonization"
 CEMEPE 2021 – 8th International Conference on Environmental Management, Engineering, Planning & Economics, Thessaloniki, Greece, July 20-24, 2021
2. E. Lakioti, A. Itziou, I. Vasiliadou, V. Karayannis, C. Tsanaktsidis
"Social acceptance of sustainable bioenergy transition policies for public health"
 Book of Abstracts of the SUSTENG 2023 – 2nd International Conference on Sustainable Chemical and Environmental Engineering, June 14-18, Limassol, Cyprus
3. E. Lakioti, K. Kokkinos, K. Moustakas, V. Karayannis
"Sustainable health-care waste management. Public policy making and governance"
 Book of Abstracts of the CHANIA 2023 – 10th International Conference on Sustainable Solid Waste Management, June 21-24, Chania, Greece
4. G. Georgiou, V. Karayannis
"GIS-based approach for solid waste disposal site mapping and rehabilitation"
 CEMEPE 2021 – 8th International Conference on Environmental Management, Engineering, Planning & Economics, Thessaloniki, Greece, July 20-24, 2021
5. E. Lakioti, K. Kokkinos, P. Samaras, V. Karayannis
"Exploring environmental and social determinants of health using Explainable Artificial Intelligence"
 GREENCHEM6 – 6th International Symposium on Green Chemistry, Sustainable Development and Circular Economy, Thessaloniki, Greece, September 20-23, 2020
6. C. Vasilatos, I. Mitsis, M. Andreadi, S. Giannatou, V. Karayannis, N. Koukouzas, M. Stamatakis
"Valorisation of Greek lignite fly ash for the synthesis of different low cost zeolites, suitable for environmental and agricultural applications"
 PRE XV – 15th International Conference on Protection and Restoration of the Environment, Patras, Greece, 2020
7. V. Karayannis, P. Samaras, K. Kokkinos, E. Lakioti, G. Charalampides
"Water consumers' profile classification via soft computing techniques, in the framework of sustainable development"
 CEMEPE 2019 – 7th International Conference on Environmental Management, Engineering, Planning & Economics, Mykonos island, Greece, May 19-24, 2019

8. G. Iakovidou, V. Karayannis
"Natural wastewater treatment with Microalgal biomass cultivation and CO₂ capture towards value-added products, under the Biorefinery concept"
 ISCW2019 – International Symposium on Constructed Wetlands & Small Decentralized Wastewater Treatment Plants, Patras, Greece, August 29-31, 2019

9. G. Kakali, V. Karayannis, D. Kioupis
"An overview of sustainable waste-based geopolymer composites"
 CEMEPE 2019 – 7th International Conference on Environmental Management, Engineering, Planning & Economics, Mykonos island, Greece, May 19-24, 2019

10. V. Karayannis, G. Charalampides, A. Vatalis, A. Baklavaridis
"Valorization of agro-based wastes into sustainable ceramics in the transition to circular economy"
 GREENCHEM 2018 – 5th International Symposium on Green Chemistry, Sustainable Development and Circular Economy, September 30 - October 03, 2018

11. E. Katsika, M. Volioti, V. Karayannis, P. Merkos, A. Moutsatsou
"Green products development from lignite ash"
 CRETE 2018 – 6th International Conference on Industrial & Hazardous Waste Management, Chania, Crete, Greece, September 4-7, 2018

12. K. Kokkinos, E. Lakioti, P. Samaras, V. Karayannis
"Stakeholders' perception of sustainability key performance indicators for urban water quality, using soft computing methodologies"
 SWAT 2018 – 5th International Conference on Small and Decentralized Water and Wastewater Treatment Plants, Thessaloniki, Greece, August 26-29, 2018

13. M. Noulia, V. Karayannis, E. Lakioti, K. Moustakas, D. Komilis
"A questionnaire-based survey on municipal solid waste composting in an agro-industrial area"
 NAXOS 2018 – 6th International Conference on Sustainable Solid Waste Management, Naxos Island, Greece, June 13-16, 2018

14. V. Karayannis, A. Baklavaridis, P. Samaras, A. Domopoulou, E. Papastergiadis
"Transformation of biomedical waste incineration ash into sustainable ceramics"
 CEMEPE 2017 – 6th International Conference on Environmental Management, Engineering, Planning and Economics, Thessaloniki, Greece, June 25-30, 2017

15. A. Domopoulou, N. Koukouzas, P. Samaras, V. Karayannis
"Valorization of industrial powdery by-products in the advanced oxidation of wastewaters"
 CEMEPE 2017 – 6th International Conference on Environmental Management, Engineering, Planning and Economics, Thessaloniki, Greece, June 25-30, 2017

16. E.N. Lakioti, K.G. Moustakas, D.P. Komilis, A.E. Domopoulou, V.G. Karayannis
"Solid waste management: Socio-economic considerations"
 ICLCA 2016 – 2nd Int. Conf. on Low Carbon Asia, Kuala Lumpur, Malaysia, November 23-25, 2016

17. E. Katsika, A. Moutsatsou, V. Karayannis, M. Volioti, D. Tsoukleris
"Study of ceramic substrates from fly ashes, coated with TiO₂ slurry for environmental application", CONSILOX XII – 12th Conference on the Science and Engineering of Oxide Materials, Sinaia, Romania, September 16-20, 2016
18. V. Karayannis, K. Moustakas, A. Vatalis, A. Domopoulou
"A comprehensive overview of microwave-assisted oxidation of industrial wastewaters"
13th IWA Specialized Conference on Small Water and Wastewater Systems, Athens, Greece, September 14-16, 2016
19. A. Domopoulou, K. Moustakas, P. Kremezis, S. Stavridou, V. Karayannis
"Valorization of industrial by-products as coagulants in wastewater treatment"
13th IWA Specialized Conference on Small Water and Wastewater Systems, Athens, Greece, September 14-16, 2016
20. V. Karayannis, E. Lakioti, X. Spiliotis, A. Zabaniotou, A. Domopoulou, G. Papapolymerou
"Social acceptance of innovation in renewable resources and energy efficiency towards sustainable development"
International Symposium and Workshop "Circular Economy and Sustainable Management of Renewable Resources in the context of Climate Change and Social Upheavals", Nisyros, Greece, July, 20-22, 2016
21. S. Lamprakopoulos, K. Ntampegiotis, X. Spiliotis, S. Zaoutsos, G. Papapolymerou, V. Karayannis
"Physico-mechanical properties of ceramic materials made from fly ash and metallurgical wastes"
7th IC-SCCE – 7th International Conference from Scientific Computing to Computational Engineering, Athens, Greece, July 6-9, 2016
22. E. Lakioti, K. Moustakas, D. Komilis, V. Karayannis
"Socio-economic aspects of innovation in solid waste management"
CYPRUS 2016 – 4th International Conference on Sustainable Solid Waste Management, Limassol, Cyprus, June 23-25, 2016
23. A. Domopoulou, X. Spiliotis, G. Charalampides, A. Baklavaridis, G. Papapolymerou, V. Karayannis
"Development of tailored ceramic microstructures using recycled marble processing residue as pore-former",
EUROINVENT – Intern. Conference on Innovative Research Iasi, Romania, May 19-20, 2016
24. V. Karayannis, H.K. Karapanagioti, A.E. Domopoulou
"Recent advances in the stabilization of heavy metals from industrial wastes into ceramic matrices"
CEST 2015 – 14th International Conference on Environmental Science and Technology, Rhodes, Greece, September 3-5, 2015
25. V.G. Karayannis, A.K. Moutsatsou, A.E. Domopoulou, E.L. Katsika
"Recycling lignite fly ash and EAFD mixtures as the raw materials into ceramics towards sustainability"
ICEER 2015 – 2nd International Conference on Energy and Environment Research, Lisbon, Portugal, July 13-14, 2015

26. V.G. Karayannis
"Critical overview of the valorization of lignite/coal ashes into ceramics"
 CEMEPE 2015 – 5th International Conference on Environmental Management, Engineering, Planning and Economics, Mykonos island, Greece, June 14-18, 2015
27. S. Lamprakopoulos, V. Karayannis, G. Papapolymerou, D. Kasiteropoulou, K. Ntampeglitis, X. Spiliotis
"Lignite fly ash and EAFC as the raw materials for ceramics"
 CEMEPE 2015 – 5th International Conference on Environmental Management, Engineering, Planning and Economics, Mykonos island, Greece, June 14-18, 2015
28. G. Papapolymerou, An. Besios, A. Riga, N. Gougoulis, X. Spiliotis, V. Karayannis
"Comparative performance of a pilot-plant and a laboratory photobioreactor for the cultivation of the microalgae species *Chlorella vulgaris*"
 CEMEPE 2015 – 5th International Conference on Environmental Management, Engineering, Planning and Economics, Mykonos island, Greece, June 14-18, 2015
29. D. Kantas, S. Papadopoulos, G. Papapolymerou, N. Gougoulis, V. Karayannis, X. Spiliotis
"The macronutrient content of *Chlorella vulgaris* microalgae grown in laboratory and small pilot-scale bioreactors"
 CEMEPE 2015 – 5th International Conference on Environmental Management, Engineering, Planning and Economics, Mykonos island, Greece, June 14-18, 2015
30. A. Domopoulou, X. Spiliotis, A. Baklavaridis, G. Papapolymerou, V. Karayannis
"New ceramics incorporated with industrial by-products as pore formers for sorption of toxic chromium from aqueous media"
 Geophysical Research Abstracts, Vol. 17, EGU2015-15296, EGU General Assembly 2015, Vienna, Austria
31. V.G. Karayannis, E.N. Lakioti, A.E. Domopoulou
"Linking environmental research programs and teaching in a higher technological education institute"
 International Conference on New Perspectives in Science Education - 4th Edition, Florence, Italy, March, 20-21, 2015
32. V.G. Karayannis
"Extruded and sintered clay ceramics containing steel-making dust"
 ICAMS 2014 – 5th International Conference on Advanced Materials and Systems, Bucharest, Romania, October 23-25, 2014
33. V.G. Karayannis, A. Moutsatsou, A. Domopoulou, E. Katsika
"Innovative processing of lignite combustion ashes towards ceramics synthesis"
 ICAMS 2014 – 5th International Conference on Advanced Materials and Systems, Bucharest, Romania, October 23-25, 2014
34. A.E. Domopoulou, E.L. Katsika, A.K. Moutsatsou, V.G. Karayannis
"Characterization of ceramic materials made of 100% fly ash/EAFD mixtures by powder metallurgy"
 5th RoMat 2014 - International Conference on Materials Science and Technologies, University Politehnica of Bucharest, Romania, October 15-17, 2014

35. E. Katsika, A. Moutsatsou, V. Karayannis, A. Papadopoulos
"Titanium dioxide and lignite ashes, a combination towards green chemistry"
 EUROCOALASH 2014 – Coal Ash in Construction - Durable, Sustainable and Innovative (4th
 International Conference of the ECOBA – European Coal Combustion Products Association), Munich,
 Germany, Oct. 13-15, 2014
36. V. Karayannis, E. Katsika, A. Moutsatsou
"Novel transformation of lignite combustion ashes into ceramic microstructures"
 13MCCE – 13th Mediterranean Congress of Chemical Engineering, Barcelona, Spain, Sept. 30 - Oct. 3,
 2014
37. V. Karayannis
"New ceramics using recycled industrial secondary resources towards sustainable development"
 13MCCE – 13th Mediterranean Congr. of Chemical Engineering, Barcelona, Spain, Sept. 30 - Oct. 3, 2014
38. A. Domopoulou, X. Spiliotis, N. Koukouzas, K. Gudulas, G. Papapolymerou, V. Karayannis
"Innovative processing of clayey minerals towards ceramics synthesis"
 IOC 2014 – 46th International October Conference, Bor Lake, Bor, Serbia
39. V. Karayannis, X. Spiliotis, P. Samaras, N. Koukouzas, K. Ntampeglitis, A. Domopoulou, K. Gudulas,
 G. Papapolymerou
"Recycling of lignite highly-calcareous fly ash into building bricks"
 GREENCHEM4 – 4th International Symposium on Green Chemistry for Environment, Health and
 Development, Kos island, Greece, Sept. 24-26, 2014
40. E. Katsika, A. Moutsatsou, V. Karayannis, A. Ntziouni
"Investigation of lignite ash microstructure coated with Titanium dioxide (TiO₂)"
 GREENCHEM4 – 4th International Symposium on Green Chemistry for Environment, Health and
 Development, Kos island, Greece, Sept. 24-26, 2014
41. A. Domopoulou, K. Gudulas, E. Papastergiadis, V. Karayannis, P. Samaras
"Investigation of industrial residues as coagulants in wastewater treatment"
 GREENCHEM4 – 4th International Symposium on Green Chemistry for Environment, Health and
 Development, Kos island, Greece, Sept. 24-26, 2014
42. E. Lakioti, P. Samaras, A. Domopoulou, K. Gudulas, V. Karayannis
**"Social acceptance as a prerequisite for the environment, green energy and sustainable
 development"**
 GREENCHEM4 – 4th International Symposium on Green Chemistry for Environment, Health and
 Development, Kos island, Greece, Sept. 24-26, 2014
43. X. Spiliotis, K. Ntampeglitis, D. Kasiteropoulou, V. Karayannis, G. Papapolymerou
"Contribution to the management of steel industry scrap-soil by its utilization into red ceramics"
 GREENCHEM4 – 4th International Symposium on Green Chemistry for Environment, Health and
 Development, Kos island, Greece, Sept. 24-26, 2014

44. X. Spiliotis, V. Karayannis, N. Koukouzas, K. Ntampegliotis, G. Papapolymerou
"Comparative microstructural evaluation of red ceramics incorporated with inorganic secondary materials"
 IMC 2014 – 18th International Microscopy Congress, Prague, Czech Republic, September 07-12, 2014
45. V. Karayannis, D. Kasiteropoulou, K. Ntampegliotis, S. Lamprakopoulos, G. Papapolymerou, X. Spiliotis
"Valorization of steel mill scale for manufacturing innovative engineering ceramics and environmental protection"
 CHISA 2014 – 21st International Congress of Chemical and Process Engineering, Prague, Czech Republic, August, 23-27, 2014
46. V.G. Karayannis, C.-A. Drosou, E.L. Katsika, A.K. Moutsatsou
"Lignite fly ash and waste glass cullet mixtures as efficient resources for ceramics development"
 PRE XII – 12th International Conference on Protection & Restoration of the Environment, Skiathos, June 29 – July 3, 2014
47. E.N. Lakioti, P.H. Litsiou, P.E. Samaras, V.G. Karayannis
"Social acceptance of industrial solid waste recycling"
 PRE XII – 12th International Conference on Protection & Restoration of the Environment, Skiathos, June 29 – July 3, 2014
48. K. Ntampegliotis, D. Kasiteropoulou, S. Lamprakopoulos, V. Karayannis, G. Papapolymerou, X. Spiliotis
"EAFC beneficial utilization in extruded clay bricks fabrication"
 PRE XII – 12th International Conference on Protection & Restoration of the Environment, Skiathos, June 29 – July 3, 2014
49. V. Karayannis, X. Spiliotis, G. Charalampides, K. Ntampegliotis, N. Koukouzas, G. Papapolymerou
"Use of class-C fly ash into construction bricks produced by extrusion and sintering"
 2nd International ROMCEN Conference (Production and use of fly ash in construction industry - Present situation and perspectives), Calimanesti-Cozia, Romania, June 24-25, 2014
50. X. Spiliotis, N. Gougoulas, V. Karayannis, D. Kasiteropoulou, G. Papapolymerou
"Effect of pH on the growth rate and productivity of wild algal species"
 ICOEST 2014 – 2nd International Conference on Environmental Science and Technology, Side-Antalya, May 14-17, 2014
51. V. Karayannis, P. Samaras, K. Gudulas, E. Papastergiadis
"Recent trends in microwave-assisted oxidation of pollutants"
 SWAT4 – 4th International Conference on Small and Decentralized Water and Wastewater Treatment Plants, Volos, Greece, October 25-27, 2013
52. V.G. Karayannis
"Recycling of steel-industry waste byproducts into extruded clay bricks"
 MESAEP 2013 – 17th Int. Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Konstantinopolis, Sept. 28 - Oct. 1, 2013
53. E. Katsika, C.-A. Drosou, A. Moutsatsou, V. Karayannis
"Utilizing lignite and agricultural ashes in the design of ceramics"
 2nd Edition of the International Conference and Exhibition WASTES: Solutions, Treatments and Opportunities, Braga, Portugal, September 11-13, 2013

54. V. Karayannis, X. Spiliotis, K. Ntampeglitis, N. Koukouzas, G. Papapolymerou
"Enhancing the thermal insulation of clay bricks using fly ash as pore-forming agent"
 ELCAS3 – 3rd International Exergy, Life Cycle Assessment, and Sustainability Workshop & Symposium, Nisyros island, Greece, July, 7-9, 2013

55. P. Samaras, V. Karayannis, X. Spiliotis, K. Ntampeglitis, G. Papapolymerou
"Sustainable use of resources into fired clay bricks"
 SDIMI 2013 – 6th International Conference on Sustainable Development in the Minerals Industry, Milos island, Greece, June 30 - July 3, 2013

56. V. Karayannis, P. Samaras, X. Spiliotis, V. Tsiridis, A. Domopoulou, K. Gudulas, G. Papapolymerou
"Leaching behavior of bricks produced from extruded clay/industrial solid by-product mixtures"
 CEMEPE 2013 – 4th Int. Conference on Environmental Management, Engineering, Planning and Economics, Mykonos island, Greece, June 24-28, 2013

57. G. Papapolymerou, X. Spiliotis, V. Karayannis, N. Gougoulis, D. Kasiteropoulou
"Microalgal cultivation and biofuel production – Effect of nitrogen restriction"
 CEMEPE 2013 – 4th International Conference on Environmental Management, Engineering, Planning and Economics, Mykonos island, Greece, June 24-28, 2013

58. X.D. Spiliotis, K.I. Ntampeglitis, V.G. Karayannis, N.K. Koukouzas, G.A. Papapolymerou
"Weibull analysis and flexural strength of clay-based bricks containing powdery industrial by-products"
 10th HSTAM 2013 – International Congress on Mechanics, Chania, Greece, May, 25-27, 2013

59. A. Moutsatsou, G. Charalampides, E. Katsika, V. Karayannis
"Synergistic behavior of power station and steel industry by-products during sintering"
 UKIERI Concrete Congress: Innovations in Concrete Construction Conference (3), Jalandhar – (Punjab) India, March 5-8, 2013

60. V. Karayannis, A. Moutsatsou, N. Koukouzas, G. Itskos, C. Vasilatos, G. Raftopoulos
"Valorization of CFB-combustion fly ashes as the raw materials for the development of value-added ceramics"
 GREENCHEM3 – 3rd International Symposium on Green Chemistry for Environment, Health and Development, Skiathos, Greece, October 3-5, 2012

61. V. Karayannis, E. Katsika, A. Moutsatsou
"Effect of sintering conditions on the production of ceramics from lignite fly and bottom ashes"
 EUROCOALASH 2012 – 3rd International Conference of the ECOBA (European Coal Combustion Products Association), Thessaloniki, Greece, Sept. 25-27, 2012

62. A. Moutsatsou, V. Karayannis, E. Katsika, C.-A. Drosou
"The effect of sintering processes of lignite calcareous ashes on the production of ceramics"
 EUROCOALASH 2012 – 3rd International Conference of the ECOBA (European Coal Combustion Products Association), Thessaloniki, Greece, Sept. 25-27, 2012

63. V. Karayannis, A. Moutsatsou, E. Katsika
"Microwave rapid sintering of lignite combustion ashes"
 CEMEPE 2011 – 3rd International Conference on Environmental Management, Engineering, Planning & Economics, p. 124, Skiathos, Greece, 06/2011

64. V. Karayannis, A. Moutsatsou, E. Katsika
"Recycling of lignite combustion fly ash into nickel-based composites"
 GREENCHEM2 – 2nd International Symposium on Green Chemistry for Environment and Health, pp. 1-6,
 Mykonos, Greece, 09/2010
65. A. Moutsatsou, D. Matsas, E. Katsika, V. Karayannis
"Production of ceramics from HCFA" in: **"Current research in fly ashes"**
 EuroCoalAsh 2010 – 2nd International Conference of the ECOBA (European Coal Combustion Products
 Association), Copenhagen, Denmark, 05/2010
66. V.G. Karayannis, A.K. Moutsatsou
"Valorization of recycled material into Ni-based composites"
 CEMEPE 09 – 2nd International Conference on Environmental Management, Engineering, Planning &
 Economics, Vol. II, pp. 1057-1064, Mykonos, Greece, 06/2009
67. A. Riga, I. Poulis, V. Karayannis, V. Bontozoglou, G. Papapolymerou
"Degradation of Drimarene dyes using UVC/H₂O₂ – Effect of stepwise addition of the reactant"
 CEMEPE 09 – 2nd Int. Conference on Environmental Management, Engineering, Planning & Economics,
 Vol. II, pp. 1517-1523, Mykonos, Greece, 06/2009
68. X. Spiliotis, V. Karayannis, N. Koukouzas, K. Ntampeglitis, G. Papapolymerou
**"Sintering process optimization in the production of clay bricks containing recycled particulate fly
 ash"**
 CHISA 2008 – 18th International Congress of Chemical and Process Engineering, CD-ROM, Paper No
 1501, Prague, Czech Republic, 08/2008
69. V.G. Karayannis, A.K. Moutsatsou
"Mechanical behavior of Ni-Al₂O₃ metal-ceramics obtained from recycled material"
 ECerS-2007 – 10th International Conference of the European Ceramic Society, Berlin, Germany, 06/2007
70. X. Spiliotis, V. Karayannis, N. Koukouzas, D. Kassidakis, D. Papanikolaou, A. Riga, G. Papapolymerou
"Physico-mechanical properties of clay bricks containing recycled lignite fly ash"
 ECerS-2007 – 10th International Conference of the European Ceramic Society, CD-ROM, Paper No 1227,
 pp. 1757-1762, Berlin, Germany, 06/2007
71. K.Soutsas, V. Karayannis, A.Riga, K.Ntampeglitis, X.Spiliotis, G.Papapolymerou
"Decolorization kinetics of reactive azo dyes via photochemical and photocatalytic processes"
 CEMEPE 07 – 1st International Conference on Environmental Management, Engineering, Planning &
 Economics, Vol. III, 13 - Industrial Waste, Paper No F580, pp. 1833-1838, Skiathos, Greece, 06/2007
72. A. Moutsatsou, V. Karayannis, C. Sotiriou
**"Optimization of ferrous scrap dissolution for the recovery of Fe, Ni, Cr and Mo powders by a
 hydrometallurgical process"**
 Hydrometallurgy '07 – 3rd International Symp. on Bio- & Hydrometallurgy, Vol. "Hydromet. Treatment
 of Wastes", Falmouth, UK, 05/2007
73. V.G. Karayannis, A.K. Moutsatsou
"The contribution of waste in the construction of composite materials"
 ECerS-2005 – IX International Conference of the European Ceramic Society, Portorož, Slovenia, 06/2005

74. A. Riga, K. Soutsas, K. Ntampegliotis, V. Karayannis, G. Papapolymerou
"Effect of system parameters, on the decolorization kinetics of Procion Hexl dyes. Comparison of H₂O₂/UV, Fenton and TiO₂/UV-A processes"
 CEST 2005 – 9th International Conference on Environmental Science & Technology, Vol. A, pp. 1241-1246, Rhodes, Greece, 09/2005
75. X. Spiliotis, A. Riga, K. Ntampegliotis, V. Karayannis, I. Domazinaki, G. Papapolymerou
"Application of advanced oxidation methods for the decolorization of Remazol type dyes. Comparison of the decolorization kinetics and efficiencies between Fenton & TiO₂/UV-A processes"
 2nd International Exergy, Energy & Environment Symposium (IEEES2), Kos, 07/2005
76. V. Karayannis, A. Moutsatsou
"Ni-Al₂O₃ composites prepared using Ni powder from ferrous scrap"
 Metal Matrix Composites VII Conference,
 The Institute of Materials, London, UK, 12/1999

D) PUBLICATIONS IN GREEK SCIENTIFIC JOURNALS AND PROC. OF CONFERENCES: (19)

REVIEWER OF SCIENTIFIC JOURNALS

Journal of Cleaner Production, Environmental Research, Journal of Hazardous Materials, Energy, Desalination, Waste and Biomass Valorization, Construction & Building Materials, Journal of Materials Processing Technology, Desalination & Water Treatment, Environmental Technology, Toxicological and Environmental Chemistry, Journal of Advanced Oxidation Technologies

SCIENTIFIC COMMITTEES MEMBER

International Scientific Committee Member of the CEMEPE 2024 – 11th International Conference on Environmental Management, Engineering, Planning & Economics, Lefkada, Greece, 06/2024

International Scientific Committee Member of the CEMEPE 2023 – 10th International Conference on Environmental Management, Engineering, Planning & Economics, Skiathos, Greece, 06/2024

International Scientific Committee Member of the CEMEPE 2022 – 9th International Conference on Environmental Management, Engineering, Planning & Economics, Mykonos, Greece, 06/2022

International Scientific Committee Member of the CEMEPE 2021 – 8th International Conference on Environmental Management, Engineering, Planning & Economics, Thessaloniki, Greece, 07/2021

International Scientific Committee Member of the GREENCHEM6 – 6th International Symposium on Green Chemistry, Sustainable Development and Circular Economy, Thessaloniki, Greece, 09/2020

International Scientific Committee Member of the CEMEPE 2019 – 7th International Conference on Environmental Management, Engineering, Planning & Economics, Mykonos, Greece, 05/2019

Chairman of the Session “Natural Resources Management” of the CEMEPE 2019 – 7th International Conference on Environmental Management, Engineering, Planning & Economics, Mykonos, Greece, 05/2019

International Scientific Committee Member of the GREENCHEM5 – 5th International Symposium on Green Chemistry, Sustainable Development and Circular Economy, Skiathos, Greece, 09/2018

Chairman of the Session “Environmental Scores and Measures” of the GREENCHEM5 – 5th International Symposium on Green Chemistry, Sustainable Development and Circular Economy, Skiathos, Greece, 09/2018

International Scientific Committee Member of the SWAT5 – 5th Int. Conference on Small and Decentralized Water and Wastewater Treatment Plants, Thessaloniki, Greece, 08/2018

Chairman of the Session “Resource Recovery and Circular Economy” of the SWAT5 – 5th International Conference on Small and Decentralized Water and Wastewater Treatment Plants, Thessaloniki, Greece, 08/2018

International Scientific Committee Member of the CEMEPE 2017 – 6th International Conference on Environmental Management, Engineering, Planning & Economics, Thessaloniki, Greece, 06/2017

International Scientific Committee Member of the IManEE 2016 – 20th Innovative Manufacturing Engineering and Energy Conference, Kallithea, Chalkidiki, Greece, 09/2016

International Scientific Committee Member of the CEMEPE 2015 – 5th International Conference on Environmental Management, Engineering, Planning & Economics, Mykonos, Greece, 06/2015

Chairman of the Session “Industrial Waste I” of the CEMEPE 2015 – 5th International Conference on Environmental Management, Engineering, Planning & Economics, Mykonos, Greece, 06/2015

International Scientific Committee Member of the GREENCHEM4 – 4th International Symposium on Green Chemistry for Environment, Health and Development, Kos, Greece, 09/2014

Chairman of the Session “Industry, Environment and Health” of the GREENCHEM4 – 4th Int. Symposium on Green Chemistry for Environment, Health & Development, Kos, Greece, 09/2014

International Scientific Committee Member of the SWAT4 – 4th Int. Conference on Small and Decentralized Water and Wastewater Treatment Plants, Volos, Greece, 10/2013

International Scientific Committee Member of the CEMEPE 2013 – 4th International Conference on Environmental Management, Engineering, Planning & Economics, Mykonos, Greece, 06/2013

Chairman of the Session “Renewable Energy Sources” of the CEMEPE 2013 – 4th Int. Conf. on Environmental Management, Engineering, Planning & Economics, Mykonos, Greece, 06/2013

International Scientific Committee Member of the GREENCHEM3 – 3rd Int. Symposium on Green Chemistry for Environment, Health & Development, Skiathos, Greece, 10/2012

Chairman of the Session “Pollution Control Technologies II” of the CEMEPE 2011 – 3rd International Conference on Environmental Management, Engineering, Planning & Economics, Skiathos, Greece, 06/2011

Chairman of the Session “Environmentally Benign Processes and Products” of the GREENCHEM2 - 2nd International Symposium on Green Chemistry for Environment and Health, Mykonos, 09/2010

International Scientific Committee Member of the SWAT3 – 3rd Int. Conference on "Small & decentralized water & Wastewater Treatment Plants", Skiathos, Greece, 05/2010

MAJOR CONTRIBUTIONS TO THE EARLY CAREERS OF EXCELLENT RESEARCHERS

- **(4) PhDs: Member of the Supervising Committee,**
 - National Technical University of Athens (NTUA), School of Chemical Engineering, Greece
 - University of Western Macedonia (UOWM), Department of Chemical Engineering, Greece
 - International Hellenic University (IHU), School of Geosciences, Drama, Greece
- **(3) PhDs: 7member Committee**
 - National Technical University of Athens (NTUA), School of Chemical Engineering, Greece
 - Aristotle University of Thessaloniki (AUTH), School of Chemical Engineering, Greece
- **(>20) MSc Thesis: Supervisor,** Hellenic Open University, Greece
- **(>30) Bachelor Thesis: Supervisor,** University and Technological Education Institute of Western Macedonia, Greece