

CURRICULUM VITAE

Vagelis G. Papadakis

Chemical Engineer, PhD
Professor - University of Patras, Greece

- 2025 -

PERSONAL

Name : Vagelis (Evangelos)
Surname : Papadakis
Father Name : George
Mother Name : Garyfalia
Date of Birth : January 5, 1964
Place of Birth : Elika, Municip. of Monemvasia, Laconia, Greece
Nationality : Greek
Marital Status : Married, 2 children
Office Address : Department of Civil Engineering, University of Patras
 University Campus, GR-26500, Rio, Patras, GREECE
 Tel: +30 2610 996582
 e-mail: vgpapadakis@upatras.gr
<http://scholar.google.gr/citations?user=JwrvSEoAAAAJ&hl=el&oi=ao>

EDUCATION – CAREER

1975 - 1981 : Completion of a six-year high school program in the 1st High-school of Piraeus, Greece (grade: 18.6/20)
1981 - 1986 : Completion of a five-year program of study in the Department of Chemical Engineering, University of Patras-Greece
July 1986 : B.S. (Diploma) in Chemical Engineering (grade: 8.26/10)
November 1986 : Technical Chamber of Greece (TCG) permission for practice of Chemical Engineer's profession
1986 - 1990 : Graduate study towards Ph.D. degree in the Department of Chemical Engineering, University of Patras and in the Institute of Chemical Engineering and High Temperature Chemical Processes (ICE/HT), Patras, Greece
September 1990 : PhD degree in Chemical Engineering (grade: excellent)
1990 - 1992 : Fulfillment of two years military service requirement in the Hellenic Navy (Hellenic Naval Academy)
1992 - 1996 : Post-Doctoral Fellow - Researcher of ICE/HT
1994 - 1996 : Teaching Staff of the Department of Chemical Engineering,

- University of Patras
- 1997 - 1999 : Researcher of Danish Technological Institute (DTI)-
Division of Building Technology, Concrete Centre- Denmark
- 1999 - 2000 : Head of Concrete Technology Laboratory, Division of Research & Quality,
TITAN Cement Co. S.A., Eleusis, Greece
- 2000 - 2001 : Researcher of National Technical University of Athens,
Department of Chemical Engineering, Athens, Greece
- 2001 - 2006 : Teaching Staff of University of Patras & University of Ioannina
- 2003 - 2007 : R&D Consultant & Research Fellow, Patras Science Park S.A.
- 4/2007 – 3/2016 : Associate Professor, Department of Environmental and Natural Resources
Management, School of Engineering, University of Patras, Agrinio, Greece
- 3/2016 – 9/2022 : Professor, Department of Environmental Engineering, School of Engineering,
University of Patras, Greece.
- 9/2022 – today : **Professor in “Physical and Chemical Environmental Processes, Durability
and Sustainability of Constructions”, Department of Civil Engineering,
School of Engineering, University of Patras, Greece.**

AWARDS & DISTINCTIONS

- 1982 - 1985 : Greek State Scholarship for undergraduate studies
- 1986 : Technical Chamber of Greece' Prize for distinction in
undergraduate studies among all Greek Universities
- 1986 - 1990 : ICE/HT Fellowship for graduate studies
- 1993 : **International Prize (Wason Medal for Materials Research)**
of American Concrete Institute (ACI) for the work:
Papadakis, V.G., C.G. Vayenas, and M.N. Fardis,
"Fundamental Modeling and Experimental Investigation
of Concrete Carbonation",
ACI Materials Journal, **88**(4), 363-373 (1991).
Ref.: *Concrete International*, **15**(4), 15, April 1993.
TCG Bulletin, **1768**, 77, July 12, 1993.
- 1997 - 1999 : **Marie Curie Research Training Grant**
Quality of applicant: 38/40 (Average selected 34/40)
- 2000 - 2001 : **Marie Curie Return Grant**
- Prof. V.G. Papadakis is ranked among **Top 2% Scientists** Worldwide by Stanford University, USA

PROFESSIONAL SOCIETIES

1. Technical Chamber of Greece - Member No. 48740 (1986)
2. Greek Association of Chemical Engineers (1986)
3. Greek Concrete Department, FIP-CEB-RILEM Member (1988)
4. American Concrete Institute (ACI) - Member No. 130682 (1993)

5. Marie Curie Fellowship Association (MCFA) – Member. Nr. 1836 (1997)
6. Industrial By-Products Research and Development Association (EVIPAR) - Founding member (2001)
7. Institute for Innovation & Sustainable Development (AEIPLOUS) – Founding member (2009)
8. International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM) – Member. Nr. 7730 (2017)
9. Institute of Circular Economy & Environment – Founding member (2019)

LANGUAGES

1. *Greek* - Mother Language
2. *English* - Very good; advanced study and practice during the Education
3. *French* - Good; private study

PARTICIPATION IN COMMITTEES, REVIEWS, BOARDS

1. National Representative, 7th Framework Programme, European Committee, Specific programme CAPACITIES “Research for the benefit of SMEs”, 2006-2009.
2. Expert Evaluator of Research Programmes: *CIP-EIP ECO-INNOVATION of European Commission*, HORIZON EUROPE Cluster 5: Climate, Energy & Mobility, *Greek General Secretariat of Research & Innovation*, *Hellenic Foundation for Research and Innovation*, *Qatar National Research Fund (QNRF)*, and *panel member for the programmatic evaluation*, *FWO Belgium*, *Austria*, *Switzerland*, *Netherlands*, *Finland*, *Romania*, *Poland*, *Jordan*, *Cyprus*, etc. **Coach** of European Commission for SME Instrument – H2020.
3. Regional Innovation Pole of Western Greece, Coordinator & Member of BoD (2006-2009).
4. European Committee CEMBUREAU- Project Group 1.6: “European Concrete Standard EN 206” (TITAN Cement Co. representative, 1999-2000).
5. Greek Committee ELOT- TE 51: “Cement” (TITAN Cement Co. repress., 1999-2000).
6. Technical Committees of TCG; wording of specifications; TCG expert.
7. Organization committee of the 6th CANMET/ACI International Conference on Durability of Concrete, Thessaloniki, June 2003. International Scientific Committee member of the iconBM - International Conference on Bio Mass, Florence, Italy, 4-7 May, 2014. International Advisory Committee Member of the 2014 Int'l Conference on Advances in Concrete Construction (ICAC14), 24-29 August 2014, Busan, Korea. Member of the *Scientific Committee*: 18th Greek Conference for Concrete, TEE, Athens, 29-31/3/2018. Member of the *Scientific Committee* for the segment *Durability, Monitoring and Repair of Structures/ RILEM Spring Convention and International Conference on Sustainable Materials, Systems and Structures, SMSS2019*. Member of the *Scientific Committee* of the Workshop “CO₂ storage in concrete” - CO2STO-2019, June 2019, Marne la Vallée, France. Chair of the Organization committee of the 8th International Conference on Biorefinery and Biomanufacturing (ICB 2023), Athens, Greece, 23-27 July 2023. Member of the

- organization committee: 9th International Conference on Biorefinery and Biomanufacturing (ICB 2025), Sao Paulo, Brazil, 13-17 January 2025.
8. Reviewer of scientific papers of the international journals: *ACI Materials Journal*, *Applied Catalysis B: Environmental, Cement and Concrete Composites*, *Cement and Concrete Research*, *Chemical Engineering Science*, *Construction & Building Materials*, *IES Journal Part A: Civil & Structural Engineering*, *Journal of Materials Science*, *Journal of Hazardous Materials*, *Materials & Structures*, *Computers & Concrete*, *Waste and Biomass Valorization*, etc.
 9. Member of the Editorial Board of the International Scientific Journals: “*Advances in Concrete Construction*”, “*Bioresources and Bioprocessing* (Springer)”
 10. Lead Guest Editor of the “*International Journal of Corrosion*” for the *Special Issue on Initiation Mechanisms, Propagation and Consequences of Concrete Reinforcement Corrosion*.
 11. Member of RILEM TC 281-CCC - Carbonation of concrete with supplementary cementitious materials and of RILEM TC -GDP – Test methods of gas diffusion in porous media
 12. Head of the Greek side in the Memorandum of Cooperation between the University of Patras and the Beijing University of Chemical Technology (BUCT).

PROFESSIONAL-RESEARCH-TEACHING EXPERIENCE

- Summer 1984* : Practical exercise, Hellenic Refineries of Aspropyrgos
- 1984 - 1986* : Diploma Thesis work in the subject: "Theoretical and Experimental Investigation of Macroscopical Behavior of Deep Bed Filters".
Construction of a pilot unit for experimental investigation of deep bed filtration process, applied at the water cleaning and waste water treatment. Mathematical simulation of the process and computer solution.
Supervisor: Prof. A.C. Payatakes
Dept. of Chemical Engineering, University of Patras
- 1986 - 1990* : Ph.D. Thesis work in the subject: "Investigation of Physicochemical Processes of Hardened Cement Paste Carbonation and of the Effects on the Reinforced Concrete Durability".
Design and construction of experimental apparatuses for investigation of concrete carbonation and gas effective diffusivity measurement.
Characterization of porous media. Experience in analytical laboratory apparatuses and methods. Mathematical models development of physicochemical processes of concrete carbonation and solution by computer.
Recommendations for engineers.
Supervisors: Professors:
C.G. Vayenas, Dept. of Chemical Engineering, Univ. of Patras
M.N. Fardis, Dept. of Civil Engineering, Univ. of Patras
- 1986 - present* : Supervision of Diplomatic works of students (about 60) of Chemical Engineering Dept., Univ. of Patras
- 1986 - 1990* : Teaching Assistant for the following courses in the Dept. of Chemical Engineering, Univ. of Patras:

1. "Introduction to Chemical Engineering"
 2. "Energy Subjects"
 3. "Chemical Engineering Practical Exercises"
- 1992 - 1996 : Post-doctoral research work in the subject: "Development of Improved Automotive Catalytic Converters".
Design and construction of an experimental apparatus for measurements of catalytic activity and durability of catalytic systems for car exhaust emissions conversion. Experience in a laboratory of catalysis, chemical processes and environmental engineering. Construction and testing of automotive catalytic converter. Study for industrial production.
Supervisors: Professors:
C.G. Vayenas, Dept. of Chemical Engineering, Univ. of Patras
X.E. Verykios, Dept. of Chemical Engineering, Univ. of Patras
- 1994 - 1996 : Autonomous Teaching of the course: "Chemical Industries" of the Dept. of Chemical Engineering, Univ. of Patras.
- 1995 - 1997 : Autonomous Teaching of the course: "Plant Design & Economics for Chemical Engineers" of the Dept. of Chemical Engineering, Univ. of Patras.
- 1997 - 1999 : Research & Training in DTI - Division of Building Technology - Concrete Centre (DK) in the following subjects:
- a. Development of high durability and performance concrete by using pozzolans and optimum material synthesis.
 - b. Prediction of the concrete properties from the knowledge (quality and quantity) of its composition materials.
 - c. Material assessment during construction of the fixed link across Øresund, connecting Denmark-Sweden, and solution of problems related to the bridge durability.
- Cooperation with Technical University of Denmark (DTU), Geological Survey of Denmark (GEUS) large constructive firms (Rambøll, Cowi).
- 1999 - 2000 : Head of Concrete Technology Laboratory, Division of Research & Quality, TITAN Cement Co. S.A., Elefsis, Greece
Consultancy of Group TITAN clients. Development of quality assurance system according to EN 45001. Industrial research programs towards new application for cement and concrete quality improvement.
- 2000 - 2001 : Researcher of National Technical University of Athens, Department of Chemical Engineering, Athens, Greece
Use of Greek supplementary cementing materials for sustainable building-sector growth, in cooperation with Prof. Stamatis Tsimas
- 2001 - 2006 : Teaching the course: "Conceptual Design of Chemical Processes", Department of Chemical Engineering, University of Patras.
"Construction Materials", Department of Materials Science, Un. of Patras.
"Environmental Economics", Department of Environment and Natural Resources, University of Ioannina

- 2003 - 2007** : R&D Consultant, Patras Science Park S.A.
Consultancy for cement and concrete industry and constructive firms.
Applications in recycling and exploitation of industrial wastes.
Concrete technology, design and durability. Development, promotion and exploitation of Innovation.
- 2007 - 2022** : Professor (2016-9/2022) in *Physical and Chemical Environmental Processes, Durability and Sustainability of Constructions*, (Associate Professor, 2007-2015) Department of Environmental Engineering, School of Engineering, University of Patras, Agrinio:
- Teaching the undergraduate courses: “Construction Materials”, “Transport Phenomena”, “Unit Operations”, “Plant Design and Economics”, “Environmental Economics”, “Materials & Environment” and “Environmental Impact Issues”.
 - Teaching the post-graduate courses: “Environmental Impact Issues – Specific Environmental Studies – Planning & Implementation in Protected Areas” in MSc Programme “Sustainable Management of Protected Areas”.
 - Teaching the post-graduate courses: “Green Environmental Technologies” and “Management & Communication in Environmental Projects” in MSc Programme “Applications of Environmental Protection & Management”.
 - Supervisor of 2 Post-doctoral Works.
 - Supervisor of 8 PhD Theses (all completed and presented successfully).
Member of the supervising committee for more than 15 PhD Theses.
 - Supervisor of 15 MSc Theses.
 - Supervisor of more than 100 Diploma Works.
 - Member in various Committees of the Department: Professional rights for graduates, Organization of Post-graduate syllabus, Department’s rename to Environmental Engineering, Events & Communication, etc., and of the University: Supply of IT equipment, etc. Vice-President of the Department, 2017-18.
- 9/2022 - today** : Professor in *Physical and Chemical Environmental Processes, Durability and Sustainability of Constructions*, Department of Civil Engineering, Division of Structural Engineering, University of Patras, Greece.
- Teaching the undergraduate courses: “Building Materials”, “Principles of Sustainable Construction”.

SCIENTIFIC AREAS OF INTEREST

1. *Cement, Concrete and Building Materials Technology*: Chemistry of cement and additives, concrete technology, concrete durability, environmental effect on buildings and constructions, protection and restoration of building materials and constructions, cement production industries and concrete production plants consultancy. Extended use of industrial by-products (fly ash, slags, biomass ashes, etc.) for a sustainable development of the building sector. Environmental cost and life cycle analysis. Software development and applications.

2. *Physicochemical Processes & Environment*: Mathematical modeling and experimental investigation of physical and chemical processes: Porous media characterization, drying, diffusion, reaction engineering, design and analysis of chemical reactors. Heterogeneous catalysis and environmental management: Catalyst preparation, catalytic reaction kinetics, car catalytic converters, catalyst rejuvenation and recycling, management of gas emissions, environmental control and quality. Recycling & exploitation of by-products. Industrial ecology. Techno-economical analysis. Computer simulation.
3. *Development & Management of Innovation*: Development, promotion and exploitation of Innovation. Innovation and regional development. Creativeness and Innovation. Research on benefit of SMEs. Technology transfer. Enterprise incubators. Social enterprises and urban development. Industrial history and cultural - urban development. Techno-economical analysis and business plan. Creation and growth of clusters. Technology foresight.

RESEARCH PROGRAMS

- | | |
|--|--|
| <p><i>Hellenic Secret. of Res. & Tech. PROPE progr.</i>
 <i>Start: 1/1987</i>
 <i>End: 6/1990</i></p> | <p>: "Investigation of Physicochemical Processes of Hardened Cement Paste Carbonation and of the Effects on the Reinforced Concrete Durability"
 Organization: University of Patras / Research Committee
 Project leaders: Prof. M.N. Fardis, Prof. C.G. Vayenas
 Position: Researcher</p> |
| <p><i>Hell. Ministry of Public Works GSPW/D1 progr.</i>
 <i>Start: 3/1991</i>
 <i>End: 8/1992</i></p> | <p>: "Investigation of Physicochemical Parameters of Seawater and its Biological Pollution Potential on Underwater Construction in the Area of Rion-Antirion for the Bridge Project"
 Organization: Civil Engineering Dept., University of Patras
 Project leader: Prof. I. Antonopoulos
 Position: Researcher</p> |
| <p><i>Commission of Europ. Commun. STRIDE progr.</i>
 <i>Start: 1/1992</i>
 <i>End: 12/1993</i></p> | <p>: "Development of Automotive Exhaust Catalytic Converters"
 Organizations: ICE/HT, CERECO S.A., University of Patras, Patras Scientific Park S.A.
 Project leader: Prof. X.E. Verykios
 Position: Researcher and <u>Project Manager</u></p> |
| <p><i>Hellenic Secret. of Res. & Tech. PENED progr.</i>
 <i>Start: 1/1994</i>
 <i>End: 12/1995</i></p> | <p>: "Durability of Reinforced Concrete: Environmental Effects and Protection"
 Organisation: University of Patras / Research Committee
 Project leader: Prof. C.G. Vayenas
 Position: Researcher and <u>Project Manager</u></p> |
| <p><i>Hellenic Secret. of Res. & Tech. EPET-II progr.</i>
 <i>Start: 1/1995</i>
 <i>End: 12/1997</i></p> | <p>: "Optimization, Quality Control and Production of Automotive Exhaust Catalytic Converters"
 Organizations: ICE/HT, AUT, Citroen- Hellas, CERECO, ELVO, Patras Scientific Park, Ideal Standard
 Project leader: Prof. X.E. Verykios
 Position: Researcher and <u>Project Manager</u></p> |
| <p><i>EC DG XI LIFE progr.</i>
 <i>Start: 12/1994</i></p> | <p>: "Collection and Recycling of Spent Autocatalysts"
 Organizations: TECHNODYNAMICS, INDELEC EUROPE, University of Patras, Automobile Import. Assoc.
 Project leader: Dr. V.G. Papadakis</p> |

- End: 11/1997* Position: Project Leader & Manager
- EC* : “Development of High Durability and Performance Concrete by
DG XII using Pozzolans and Optimum Material Synthesis”
TMR progr. Organization: Danish Technological Institute
Start: 2/1997 Project leader: C. Munch-Petersen
End: 1/1999 Position: Researcher and Project Manager
- EC* : “Use of Supplementary Cementing Materials for Sustainable
DG XII Building-Sector Growth”
IHP-MCIF Organization: National Technical University of Athens
Start: 5/2000 Project leader: Prof. S. Tsimas
End: 5/2001 Position: Researcher and Project Manager
- GROWTH* : “European Standard Tests to Prevent Alkali Reactions in Aggregates”
2001 Organizations: 25 Industries and Research Institutes across Europe
EC Project Leader: P. Nixon (British Research Establishment)
DG XII Start: 3/2002 End: 3/2006
 Position: Researcher (TITAN Cement Co.)
- PRAXE* : “Production and Exploitation of Structural Fly Ash”
2001 Organization: National Technical University of Athens
GSRT Project leader: Prof. S. Tsimas
1st Phase Start: 6/2002 End: 11/2003
 Position: Researcher and Project Manager
- CRAFT* : “A Cost-Effective System Development for Complete Exploitation
2002 of Olive-mill Wastewater”
EC Organ.: ICEHT, Shielco, Hydro Air Research (I), Papaeconomou SA
DG XII Scientific officer: Dr. C.A. Paraskeva
Coop. Resear. Start: 1/2003 End: 12/2004
 Position: Researcher and Project Manager
- PRAXE* : “Software Development for Concrete Design and
2003 Prediction of Strength and Durability”
GSRT Organization: Patras Science Park S.A.
1st Phase Scientific officer: Dr. V.G. Papadakis
 Start: 9/2003 End: 2/2005
 Position: Researcher and Project Manager
- KETA* : “Follow-up of the Competitiveness - Sector and individual Benchmarking of
2006 innovative enterprises and enterprises of foods and drinks in the RWG”
YPAN Partners: PSP, KETA
 Scientific officer: Dr. V.G. Papadakis
 Start: 5/2005 End: 12/2006
 Position: Project Manager
- EKT* : “Implement actions of the Hellenic Relay Centre for the Research and
 Innovations via the Patras Science Park”
2006 Organization: PSP
IRC Scientific officer: Dr. V.G. Papadakis
Hellenic Start: 3/2006 End: 3/2007
 Position: Researcher and Project Manager
- International* : «Investigation for development of high-added value materials
Cooperation form rice husk ash (PYRICE)»
2006 Partners: AGRINO SA, NTUA, Univ. of Porto, Univ. of Dundee
GSRT Scientific officer: Athanasia Kyritsi
 Start: 7/2006 End: 12/2007
 Position: Project Manager

<i>ARCHIMED 2006 Interreg III B EU</i>	«Human Resources and Development Planning on both sides of Ionian Sea - Partners: PSP SA, RWG, Region Ionian Islands, Agricultural Univ. Athens, University of Lecce, Town of Tricase, Munic. of Sanarica, S&T Park of Sicily Scientific officer: Prof. P. Groumpos Start: 6/2006 End: 12/2007 Position: Coordinator of Operational Committee for SMEs
<i>Regional Innovation Pole Western Greece 2006 GSRT</i>	«Regional Innovation Pole of Western Greece» 47 Partners (SMEs, Universities, Research Centres, etc.) Coordinating Organization: PSP SA Scientific officer: Prof. P. Groumpos Start: 11/2006 End: 11/2008 Position: Project Manager

“Urban Nose – Network of Social Enterprises”, URBACT II ERDF EU, Coordinator: Municipality of Gela, 12 partners- EU Municipalities, Duration: 6/2008 – 6/2011, Position: Coordinator of Municipality of Agrinio.

“Techno-Economical Design and Pilot Production of Advanced and High-Added Value Materials from Rice Husk Ash (PYRICE II)”, CIP-EIP-Eco-Innovation-2008 EU, Coordinator: AGRINO EVGE Pistiolas SA, Duration: 7/2009 - 7/2012, Position: Manager & Scientific Responsible.

“Sustainable Innovation and Treatment in Industrial Waste Water Clusters (STinno)”, FP7-Regions-2009-1 EU, Partners: Lahti Science and Business Park, Pääjät-Häme, (Finland) (Coordinator), Regional Council of Pääjät-Häme (FI), Lahti University Consortium/ Lappeenranta University of Technology, Lahti University Consortium/ Helsinki University of Technology, Regional Council of Kalmar (Sweden), University of Kalmar or Linköping (Sweden), Sustainable Sweden South East (Sweden), Patras Science Park (Greece), Regional Council of Western Greece, Foundation of Research and Technology of Hellas / ICE-HT, Italy: International Association of Mediterranean Agro-Industrial Waste, United Kingdom: N8 Water Group/EnviroLink, Duration: 11/2009 - 11/2012, Position: Coordinator of the Greek side.

“Increasing the Regional Competitiveness and Economic Growth through the R&TD&I on Sustainable Water Management (SWAM)”, FP7-Regions-2009-1 EU, Partners: Directorate-General for Universities and Science Policy- Region of Murcia, Spain (Coordinator), University of Murcia (Spain), Technological Centre for Energy and Environment (Spain), Machinery Manufacturers Association -Region of Murcia (Spain), Eastern-Galilee Municipalities Association (Israel), Galilee Technology Centre (Israel), Galilee Metal Companies Association (Israel), Patras Science Park (Greece), Regional Council of Western Greece, FORTH / ICE-HT (Greece), ENBIO Ltd (Greece), Duration: 3/2010 - 6/2012, Position: Coordinator of the Greek side.

“Architecture of Totalitarian Regimes of the XX^o Century in Urban Management (ATRIUM)”, South-East Europe SEE Transnational Cooperation Programme EU, Φορείς: Municipality of Forlì/Italy (Coordinator), Province of Forlì-Cesena/Italy, University of Ljubljana, Faculty of Architecture, Ljubljana/Slovenia, Municipality of Velenje/Slovenia, The National Institute of Immoveable Cultural Heritage, Sofia/Bulgaria, Municipality of Dimitrovgrad/Bulgaria, Szechenyi Istvan University, Gyor/Hungary, Local Government of Gyor with County Rank/Hungary, Institute of Construction and Architecture of the Slovak Academy of Sciences, Bratislava/Slovakia, Metropolitanate of Moldavia and Bukovina – Archdiocese of Iasi/Romania, Institute for Innovation & Sustainable Development AEIPLOUS, Patras/Greece, Cultural & Educational Technology Institute ATHENA - Research & Innovation Centre in Information, Communication and Knowledge Technologies, Xhanti/Greece, Town of Labin/Croatia, Fund of microregional tourism cluster Subotica-Palic/Serbia, Municipality of Tirana/Albania, Rotor – organization for development of tourism of region Doboj/Bosnia-Herzegovina, Ministry of Culture, Sofia/Bulgaria, Municipality of Rasa/Croatia. Duration: 1/2011 - 9/2013, Position: Coordinator of the Greek side.

“Development and Implementation of Decentralised Solar-Energy-Related Innovative Technologies for Public Buildings, in the Mediterranean Basin Countries (DIDSOLIT-PB)”, ENPI CBCMED, EU

Programme, Partners: Autonomous University of Barcelona, Spain (Coordinator), Institute for Innovation & Sustainable Development- AEIPLOUS (Greece), Egyptian Association for Energy and Environment (Egypt), Al-Balqa' Applied University (Jordan), Alexandria University (Egypt), Mediterranean Agronomic Institute of Chania (Greece), Eco-System Europa SL (Spain). Duration: 12/2013 - 12/2015, Position: Coordinator of the Greek side.

“Collaborative Digitization of Natural and Cultural Heritage (CD-ETA)”, Interreg Europe, EU Programme, Φορείς: Euroregion PlevenOlt, Bulgaria (Coordinator), Harghita County Council (Romania), University of Patras (Greece), ASSOCIATION OF MUNICIPALITIES OF THE RIBERA ALTA REGION (Spain), FOUNDATION FOR RESEARCH AND INNOVATION (Italy), Regional Development Agency of Gorenjska (Slovenia), Foundation Saint Mary the Royal of Historic Heritage (Spain), Estonian War Museum General Laidoner Museum (Estonia). Duration: 4/2016 - 4/2021, Position: Coordinator of the Greek side.

“Integrated management and exploitation of multi-dispersed agricultural residues – application to energy production (SYNAGRON)”, *Greek-China bilateral R&D Cooperation*, GSRT. Partners: University of Patras – Dept of Environmental Engineering (Coordinator), University of Western Macedonia – Chemical Engineering Dept, SIRMET Tech SA, Beijing University of Chemical Technology – BUCT (China), Beijing United Pioneer Environmental Engineering Co. Ltd. (China), Nanjing Benran Environmental Technology Co. Ltd. (China), Khalifa University of Science and Technology (United Arab Emirates) Duration: 14/10/2019 – 13/10/2022, Position: Coordinator of the Greek side.

“Circular Innovation and Resilient City Labs in the Adriatic Region (CIRCLE)”, INTERREG V-B Adriatic-Ionian ADRIAN Programme 2014-2020. Partners: Municipality of Forlì, Italy (Coordinator), Romagna Tech (Italy), School Center Velenje (Slovenia), RDA of Northern Primorska Ltd. Nova Gorica (Slovenia), Regional development agency Međimurje REDEA Ltd. (Croatia), Energo-data (Croatia), Anatoliki S.A Development Agency of Eastern Thessaloniki's Local Authorities (Greece), Institute for Innovation & Sustainable Development- AEIPLOUS (Greece), Environmental Protection and Energy Efficiency Fund of the Republic of Srpska (Bosnia-Herzegovina), Municipality of Laktasi (Bosnia-Herzegovina), Faculty of Applied Ecology - Futura (Serbia), Regional Agency for Socio – Economic Development – Banat Ltd (Serbia), Municipality of Ulcinj (Montenegro), Municipality of Tirana (Albania). Duration: 1/2/2020 – 31/7/2022, Position: Regional Project Manager.

“Circular design: Skills for future people (CIRCES)”, ERASMUS+, EU Programme, KA220 - VET - Cooperation partnerships in vocational education and training. Organisations: Romagna Tech, Italy (Coordinator), Pannon Business Network Association (Hungary), Argo Srl (Italy), Liceul Tehnologic "Valeriu Braniste" (Romania), Institute for Innovation & Sustainable Development- AEIPLOUS (Greece), University of Bologna (Italy), Predict CSD Consultancy (Romania). Duration: 1/11/2022 – 30/4/2025, Position: Local Project Coordinator.

"ADRION transnational master in renewable energy (TRAINEE)", INTERREG V-B Adriatic-Ionian ADRIAN Program 2014-2020. Bodies: University of Patras, Department of Chemical Engineering, Greece (Coordinator), Alma Mater Studiorum University of Bologna, Department of Electrical, Electronic and Information Engineering, (Italy), IUAV University of Venice, Department of Architecture and Arts (Italy), University of Zagreb, Faculty of Electrical Engineering and Computing (Croatia), Algebra University College (Croatia), University of Novi Sad, Faculty of Technical Science (Serbia), International University of Sarajevo (Bosnia-Herzegovina), University of Tirana, Department of Industrial Chemistry (Albania), Green Technologies LTD (Greece), Energo-data (Croatia), Solar Info Community srl (Italy). Duration: 1/1/2023 – 30/9/2023, Position: Project Quality Manager.

“SMEs & European Original Geographical Indications – (SMEOrigin)”, Interreg Europe, EU Programme, Partners: Styrian Economic Development Corporation (Austria, Coordinator), Stara Zagora Regional Economic Development Agency (Bulgaria), Opolskie Centre for Economy Development/ Opolskie Voivodeship, (Poland), Savonlinna Development Services, (Finland), University of Patras (Greece), Municipality of Calasparra (Spain), INTERBIO Aquitaine/ Limousin/ Poitou-Charentes (France). Duration: 3/2023 - 2/2027. Position: Principal Investigator & Local Project Coordinator.

"Tackling depopulation challenges to improve environmental resilience in rural areas (Down-to-Earth)", Interreg Europe, EU Programme, Partners: Galician Rural Development Agency (Spain, Coordinator), Fundación Juana de Vega (Spain), Municipality of Campobasso (Italy), National Meteorological Administration (Romania), Neckar-Alb Regional Association (Germany), University of Patras (Greece), ISOCARP Institute (Netherlands, as advisory partner), BSC, Business support centre Ltd., Kranj (Slovenia). Duration: 3/2023 - 2/2027. Position: Principal Investigator & Local Project Coordinator.

"Scaling up eWASTE circular economy in Adriatic region (CIRCLEWASTE)", INTERREG VI-B IPA Adriatic-Ionian ADRION Programme 2021-2027. Partners: Association of Municipalities ZOS, Slovenia, (Coordinator), Reuse Centre (Slovenia), Agency for Sustainable Development (Italy), Institute for Innovation & Sustainable Development (Greece), Regional Development Agency (Croatia), LINK Entrepreneurship Centre - (Bosnia-Herzegovina), UET Centre (Albania), Municipality of Mirdita (Albania), Municipality of Kicevo (North Macedonia), Association for Youth Development – EYA (North Macedonia), Zero Waste Montenegro (Montenegro), Municipality of Tuzi (Montenegro). Duration: 1/9/2024 – 31/8/2027. Position: Local Project Coordinator.

"The European University of Islands, Ports and Coastal Territories (EUNICoast)", European Universities – Development of deep institutional transnational cooperation (ERASMUS-EDU-2024-EUR-UNIV-1). Partners: Université Le Havre Normandie (Συντονιστής, France), Åland University of Applied Sciences (Finland), Burgas Free University (Bulgaria), EMUNI University (Slovenia), Université des Antilles (France), University of Sassari (Italy), University of the Azores (Portugal), University of the Balearic Islands (Spain), University of Dubrovnik (Croatia), University of Patras (Greece), Stralsund University of Applied Sciences (Germany), West Pomeranian University of Technology in Szczecin (Poland). Διάρκεια: 1/11/2024 – 31/10/2028, Position: Project Team Member.

RESEARCH PUBLICATIONS AND PRESENTATIONS

A. Publications in International Journals

- A1. Papadakis, V.G., C.G. Vayenas, and M.N. Fardis, "A reaction engineering approach to the problem of concrete carbonation", *American Institute of Chemical Engineers Journal (AIChE J.)*, **35**(10), 1639-1650 (1989).
- A2. Papadakis, V.G., C.G. Vayenas, and M.N. Fardis, "Physical and chemical characteristics affecting the durability of concrete", *American Concrete Institute Materials Journal (ACI Mat. J.)*, **88**(2), 186-196 (1991).
- A3. Papadakis, V.G., C.G. Vayenas, and M.N. Fardis, "Experimental investigation and mathematical modeling of the concrete carbonation problem", *Chemical Engineering Science (Chem. Eng. Sci.)*, **46**(5/6), 1333-1338 (1991).
- A4. Papadakis, V.G., C.G. Vayenas, and M.N. Fardis, "Fundamental modeling and experimental investigation of concrete carbonation", *ACI Mat. J.*, **88**(4), 363-373 (1991).
- A5. Papadakis, V.G., M.N. Fardis, and C.G. Vayenas, "Hydration and carbonation of pozzolanic cements", *ACI Mat. J.*, **89**(2), 119-130 (1992).
 ➤ See also: Discussion: *ACI Mat. J.*, **90**(1), 102-103 (1993).
- A6. Papadakis, V.G., M.N. Fardis, and C.G. Vayenas, "Effect of composition, environmental factors and cement-lime mortar coating on concrete carbonation", *Materials and Structures*, **25**, 293-304 (1992).
- A7. Angelidis, T.N., V.G. Papadakis, and E. Pavlidou, "Causes of deactivation and regeneration of an industrial Pt-NiO/Al₂O₃ nitrogen oxides reduction catalyst", *Applied Catalysis B: Environmental*, **4**(4), 301-313 (1994).
- A8. Yentekakis, I.V., C.A. Pliangos, V.G. Papadakis, X.E. Verykios, and C.G. Vayenas, "Support and NEMCA induced promotional effects on the activity of automotive exhaust catalysts", *Studies in Surface Science and Catalysis*, **96**, 375-385, (1995).

- A9. Papadakis, V.G., M.N. Fardis, and C.G. Vayenas, "Physicochemical processes and mathematical modeling of concrete chlorination", *Chem. Eng. Sci.*, **51**(4), 505-513 (1996).
- A10. Papadakis, V.G., C.A. Pliangos, I.V. Yentekakis, X.E. Verykios, and C.G. Vayenas, "Development of high performance, Pd-based, three-way catalysts", *Catalysis Today*, **29**(1-4), 71-75 (1996).
- A11. Angelidis, T.N. and V.G. Papadakis, "Partial regeneration of an aged commercial automotive catalyst", *Applied Catalysis B: Environmental*, **12**(2/3), 193-206 (1997).
- A12. Pliangos, C.A., I.V. Yentekakis, V.G. Papadakis, C.G. Vayenas and X.E. Verykios, "Support-induced promotional effects on the activity of automotive exhaust catalysts: I. The case of oxidation of light hydrocarbons (C_2H_4)", *Applied Catalysis B: Environmental*, **14**(3/4), 161-173 (1997).
- A13. Angelidis, T.N., M.M. Koutlemani, S.A. Sklavounos, Ch.B. Lioutas, A. Voulgaropoulos, V.G. Papadakis, and H. Emons, "Causes of deactivation and an effort to regenerate a commercial spent three-way catalyst", *Studies in Surface Science and Catalysis*, **116**, 155-164 (1998).
- A14. Papadakis, V.G., "Experimental investigation and theoretical modeling of silica fume activity in concrete", *Cement and Concrete Research*, **29**(1), 79-86 (1999).
- A15. Papadakis, V.G., E.J. Pedersen, and H. Lindgreen, "An AFM-SEM investigation of the effect of silica fume and fly ash on cement paste microstructure", *Journal of Materials Science*, **34**(4), 683-690 (1999).
- A16. Papadakis, V.G., "Effect of fly ash on Portland cement systems. Part I: Low-calcium fly ash", *Cement and Concrete Research*, **29**(11), 1727-1736 (1999).
- A17. Papadakis, V.G., "Effect of supplementary cementing materials on concrete resistance against carbonation and chloride ingress", *Cement and Concrete Research*, **30**(2), 291-299 (2000).
- A18. Papadakis, V.G., "Effect of fly ash on Portland cement systems. Part II: High-calcium fly ash", *Cement and Concrete Research*, **30**(10), 1647-1654 (2000).
- A19. Mira, P., V.G. Papadakis, and S. Tsimas, "Effect of lime putty addition on structural and durability properties of concrete", *Cement and Concrete Research*, **32**(5), 683-9 (2002).
- A20. Papadakis, V.G. and S. Tsimas, "Supplementary cementing materials in concrete - Part I: Efficiency and design", *Cement and Concrete Research*, **32**(10), 1525-1532 (2002).
- A21. Papadakis, V.G., S. Antiohos, and S. Tsimas, "Supplementary cementing materials in concrete - Part II: A fundamental estimation of the efficiency factor", *Cement and Concrete Research*, **32**(10), 1533-8 (2002).
- A22. Papadakis, V.G. and S. Tsimas, "Supplementary cementing materials in construction for economic and environmental benefits", *International Association of Concrete Technology Journal*, **1** (1), 51-59 (2003).
- A23. Badogiannis, E., V.G. Papadakis, E. Chaniotakis, and S. Tsimas, "Exploitation of poor Greek kaolins: Strength development of metakaolin concrete and evaluation by means of k-value", *Cement and Concrete Research*, **34**(6), 1035-1041 (2004).
- A24. Papadakis, V.G. and S. Tsimas, "Greek supplementary cementing materials and their incorporation in concrete", *Cement and Concrete Composites*, **27**(2), 223-230 (2005).
- A25. Paraskeva, C.A., V.G. Papadakis, D.G. Kanellopoulou, P.G. Koutsoukos, and K.C. Angelopoulos, "Membrane filtration of olive mill wastewater and exploitation of its fractions", *Water Environment Research*, **79**, 421-429 (2007).
- A26. Paraskeva, C.A., V.G. Papadakis, E. Tsarouchi, D.G. Kanellopoulou, and P.G. Koutsoukos, "Membrane processing for olive mill wastewater fractionation", *Desalination*, **213**, 218-229 (2007).
- A27. Papadakis, V.G., M.P. Efstathiou, and C.A. Apostolopoulos, "Computer-aided approach of parameters influencing concrete service life and field validation", *Computers & Concrete*, **4**(1), 1-18 (2007).
- A28. Antiohos, S.K., V.G. Papadakis, E. Chaniotakis, and S. Tsimas, "Improving the performance of ternary blended cements by mixing different types of fly ashes", *Cement and Concrete Research*, **37**(6), 877-885 (2007).

- A29. Apostolopoulos, C.A. and V.G. Papadakis, "Mechanical behavior of reinforcement stirrups BSt 500s at corrosive environment", *Journal of Materials Engineering and Performance (JMEP)*, **16**(2), 236-241 (2007).
- A30. Antiohos, S.K., A. Papageorgiou, V.G. Papadakis, and S. Tsimas, "Influence of quicklime addition on the mechanical properties and hydration degree of blended cements containing different fly ashes", *Construction and Building Materials*, **22**(6), 1191-1200 (2008).
- A31. Apostolopoulos, C.A. and V.G. Papadakis, "Consequences of steel corrosion on the ductility properties of reinforcement bar", *Construction and Building Materials*, **22**(12), 2316-2324 (2008).
- A32. Antonopoulos, C.N., V.G. Papadakis, C.D. Stylios, M.P. Efstathiou, and P.P. Groumpos, "Mainstreaming innovation policy in less favoured regions: the case of Patras Science Park, Greece", *Science and Public Policy*, **36**(7), 511-521 (2009).
- A33. Antonopoulos, C.N. and V.G. Papadakis, "Learning from past investment incidents in peripheral regions: Semiconductors in Patras, Greece", *International Journal of Innovation and Regional Development*, **3**(3/4), 417-440 (2011).
- A34. Arvaniti, E.C., D.P. Zagklis, V.G. Papadakis, and C.A. Paraskeva, "High-added value materials production from OMW – A technical and economical optimization", *International Journal of Chemical Engineering*, vol. 2012, Article ID 607219, 7 pages, doi:10.1155/2012/607219, (2012).
- A35. Demis, S. and V.G. Papadakis, "A software-assisted comparative assessment of the effect of cement type on concrete carbonation and chloride ingress", *Computers & Concrete*, **10**(4), 373-389 (2012).
- A36. Apostolopoulos, C.A., S. Demis, and V.G. Papadakis, "Chloride-induced corrosion of steel reinforcement – Mechanical performance and pit depth analysis", *Construction and Building Materials*, **38**, 139-146 (2013).
- A37. Zagklis, D.P., E.C. Arvaniti, V.G. Papadakis, and C.A. Paraskeva, "Sustainability analysis and benchmarking of olive mill wastewater treatment methods", *Journal of Chemical Technology & Biotechnology*, **88**, 742-750 (2013).
- A38. Papadakis, V.G. and S. Demis, "Predictive modeling of concrete compressive strength based on cement strength class", *Computers & Concrete*, **11**(6), 587-602 (2013).
- A39. Antiohos, S.K., J.G. Tapali, M. Zervaki, J. Sousa-Coutinho, S. Tsimas, and V.G. Papadakis, "Low-embodied energy cement containing untreated RHA: A strength development and durability study", *Construction and Building Materials*, **49**, 455-463 (2013).
- A40. Papadakis, V.G., "Service life prediction of a reinforced concrete bridge exposed to chloride induced deterioration", *Advances in Concrete Construction*, **1**(3), 201-213 (2013).
- A41. Tapali, J.G., S. Demis, and V.G. Papadakis, "Sustainable concrete mix design for a target strength and service life", *Computers & Concrete*, **12**(6), 755-774 (2013).
- A42. Bhatnagar, A., F. Kaczala, W. Hogland, M. Marques, C.A. Paraskeva, V.G. Papadakis, M. Sillanpää, "Valorization of solid waste products from olive oil industry as potential adsorbents for water pollution control - A review", *Environmental Science and Pollution Research*, **21**(1), 268-298 (2014).
- A43. Demis, S., M.P. Efstathiou, and V.G. Papadakis, "Computer-aided modelling of concrete service life", *Cement and Concrete Composites*, **47**, 9-18 (2014).
- A44. Antiohos, S.K., V.G. Papadakis, and S. Tsimas, "Rice husk ash effectiveness in cement and concrete as a function of reactive silica and fineness", *Cement and Concrete Research*, **61-62**, 20-27 (2014).
- A45. Demis, S., J.G. Tapali, and V.G. Papadakis, "An Investigation of the Effectiveness of the Utilization of Biomass Ashes as Pozzolanic Materials", *Construction and Building Materials*, **68**, 291-300 (2014).
- A46. Charisiou, N.D., C.A. Paraskeva, M.A. Goula and V.G. Papadakis, "Techno-economical & sustainability analyses for multilateral exploitation of olive tree cultivation residues", *Journal of Environmental Science and Technology Research*, **1**, 1-6 (2014).

- A47. Badogiannis, E., E. Aggeli, V.G. Papadakis, and S. Tsivilis, "Evaluation of chloride-penetration resistance of metakaolin concrete by means of a diffusion – binding model and of the k-value concept", *Cement and Concrete Composites*, **63**, 1-7 (2015).
- A48. Demis, S., J.G. Tapali, and V.G. Papadakis, "Plant design & economics of rice husk ash exploitation as pozzolanic material", *Waste & Biomass Valorization*, **6**(5), 843-853 (2015).
- A49. Charisiou, N.D., A. Baklavaridis, V.G. Papadakis and M.A. Goula, "Synthesis gas production via the biogas reforming reaction over Ni/MgO-Al₂O₃ and Ni/CaO-Al₂O₃ catalysts", *Waste & Biomass Valorization*, **7**(4), 725-736 (2016).
- A50. Charisiou, N.D., P.P. Konstantakou, and V.G. Papadakis, "Exploitation of olive tree prunings as raw material for the production of high quality compost", *Environmental Engineering and Management Journal*, **15**(12), 2709-2717 (2016).
- A51. Rezagholilou, A., V.G. Papadakis, and H. Nikraz, "Rate of carbonation in cement modified base course material", *Construction and Building Materials*, **150**, 646-652 (2017).
- A52. Katrivesis, F.K., A.D. Karela, V.G. Papadakis, and C.A. Paraskeva, "Revisiting of coagulation-flocculation processes in the production of potable water", *Journal of Water Process Engineering*, **27**, 193-204 (2019).
- A53. Demis, S. and V.G. Papadakis, "Durability design process of reinforced concrete structures - Service life estimation, problems and perspectives", *Journal of Building Engineering*, **26**, 1-11 (2019).
- A54. Tsiaras, E., D.N. Papadopoulos, C.N. Antonopoulos, V.G. Papadakis and F.A. Coutelieres, "Planning and assessment of an off-grid power supply system for small settlements", *Renewable Energy*, **149**, 1271-1281 (2020). <https://doi.org/10.1016/j.renene.2019.10.118>
- A55. Charisiou, N.D., G.I. Siakavelas, V. Sebastian, S.J. Hinder, M.A. Baker, V.G. Papadakis, W. Wang, K. Polychronopoulou, and M.A. Goula, "Structural investigation of the carbon deposits on Ni/Al₂O₃ catalyst modified by CaO-MgO for the biogas dry reforming reaction", *Chemistry Proceedings*, 2(1), 15 (2020). [doi:10.3390/ECCS2020-07569](https://doi.org/10.3390/ECCS2020-07569)
- A56. Katrivesis, F.K., V. Sygouni, C.A. Paraskeva, and V.G. Papadakis, "A performance comparison of pilot-scale sand filtration and membrane filtration of Glafkos River water", *Journal of Marine Science and Engineering*, **9**, 203 (2021) <https://doi.org/10.3390/jmse9020203>
- A57. Zhao, Q., S.G. Arhin, Z. Yang, H. Liu, Z. Li, N. Anwar, V.G. Papadakis, G. Liu, and W. Wang, "pH regulation of the first phase could enhance the energy recovery from two-phase anaerobic digestion of food waste", *Water Environment Research*, 1-11 (2021). <https://onlinelibrary.wiley.com/doi/10.1002/wer.1527>
- A58. Sun, H., Z. Yang, G. Shi, S.G. Arhin, V.G. Papadakis, M.A. Goula, L. Zhou, Y. Zhang, G. Liu, and W. Wang, "Methane production from acetate, formate and H₂/CO₂ under high ammonia level: Modified ADM1 simulation and microbial characterization", *Science of the Total Environment*, **783**, 1-12 (2021) <https://doi.org/10.1016/j.scitotenv.2021.147581>
- A59. Ramézani, H., J. Jeong, S.K. Bhatia, and V.G. Papadakis, "Assessment of CO₂ adsorption capacity in Wollastonite using atomistic simulation", *Journal of CO₂ Utilization*, **50**, 101564 (2021) <https://doi.org/10.1016/j.jcou.2021.101564>
- A60. Jeong, J., H. Ramézani, V.G. Papadakis, Y. Colin, and L. Izoret, "On CO₂ sequestration in concrete aggregate via carbonation: simulation and experimental verification", *European Journal of Environmental and Civil Engineering*, (2021) <https://doi.org/10.1080/19648189.2021.1928555>
- A61. Aravani, V.P., K. Tsigkou, M. Kornaros, V.G. Papadakis, "Laboratory analyses for assessing the potential for biogas production of various agricultural residues of Greece", *Agronomy Research*, **19**(3), 1339–1350 (2021) <https://doi.org/10.15159/AR.21.103>
- A62. Demis, S. and V.G. Papadakis, "Particularities of the hot desert climate of the Arabian Peninsula on the durability of reinforced concrete structures – A case study", *Construction and Building Materials*, **306**, 124813 (2021) <https://doi.org/10.1016/j.conbuildmat.2021.124813>
- A63. Pafili, A., N.D. Charisiou, S.L. Douvartzides, G.I. Siakavelas, W. Wang, G. Liu, V.G. Papadakis, and M.A. Goula, "Recent progress in the steam reforming of bio-oil for hydrogen production: A review on operating parameters, catalytic systems, and technological innovations", *Catalysts*, **11**, 1526 (2021) <https://doi.org/10.3390/catal11121526>

- A64. Papadopoulos, D.N., C.N. Antonopoulos and V.G. Papadakis, "Environmental Assessment of a **BIPV SYSTEM**", *Advances in Energy Research*, **8**,1, 1-19 (2022) [DOI: 10.12989/eri.2022.8.1.001](https://doi.org/10.12989/eri.2022.8.1.001)
- A65. Aravani, V.P., H. Sun, Z. Yang, G. Liu, W. Wang, G. Anagnostopoulos, G. Syriopoulos, N.D. Charisiou, M.A. Goula, M. Kornaros, V.G. Papadakis, "Agricultural and livestock sector's residues in Greece & China: Comparative qualitative and quantitative characterization for assessing their potential for biogas production", *Renewable and Sustainable Energy Reviews*, **154**, 111821 (2022) <https://doi.org/10.1016/j.rser.2021.111821>
- A66. Douvartzides, S.L., N.D. Charisiou, W. Wang, V.G. Papadakis, K. Polychronopoulou, and M.A. Goula, "Catalytic fast pyrolysis of agricultural residues and dedicated energy crops for the production of high energy density transportation biofuels. Part I: Chemical pathways and bio-oil upgrading", *Renewable Energy*, **185**, 483-505 (2022) <https://doi.org/10.1016/j.renene.2021.12.083>
- A67. Jeong, J., Abel Shiferaw Alemu, Solmoi Park, Hyo Kyoung Lee, Gebremicael Liyew, H. Ramézani, V.G. Papadakis, and Hyeong-Ki Kim, "Phase profiling of carbonation-cured cement paste: QXRD analysis and numerical validation", *Case Studies in Construction Materials*, **16**, e00890 (2022) <https://doi.org/10.1016/j.cscm.2022.e00890>
- A68. Aravani, V.P., K. Tsigkou, V.G. Papadakis, M. Kornaros, "Biochemical methane potential for most promising agricultural residues in Northern and Southern Greece", *Chemosphere*, **296** 133985 (2022) <https://doi.org/10.1016/j.chemosphere.2022.133985>
- A69. Yang, Z., H. Sun, L. Zhou, S.G. Arhin, V.G. Papadakis, M.A. Goula, G. Liu, Y. Zhang and W. Wang, "Bioaugmentation with well-constructed consortia can effectively alleviate ammonia inhibition of practical manure anaerobic digestion", *Water Research*, **215** 118244 (2022) <https://doi.org/10.1016/j.watres.2022.118244>
- A70. Yang, Z., H. Sun, M. Kurbonova, L. Zhou, S.G. Arhin, V.G. Papadakis, M.A. Goula, G. Liu, Y. Zhang and W. Wang, "Simultaneous supplementation of magnetite and polyurethane foam carrier can reach a Pareto-optimal point to alleviate ammonia inhibition during anaerobic digestion", *Renewable Energy*, **189**, 104-116 (2022) <https://doi.org/10.1016/j.renene.2022.02.092>
- A71. Douvartzides, S.L., N.D. Charisiou, W. Wang, V.G. Papadakis, K. Polychronopoulou, and M.A. Goula, "Catalytic fast pyrolysis of agricultural residues and dedicated energy crops for the production of high energy density transportation biofuels. Part II: Catalytic Research", *Renewable Energy*, **189**, 315-338 (2022) <https://doi.org/10.1016/j.renene.2022.02.106>
- A72. Sun, H., L. Zhou, V.G. Papadakis, M.A. Goula, G. Liu, Y. Zhang, Z. Yang, and W. Wang, "Calcium ion can alleviate ammonia inhibition on anaerobic digestion via balanced strengthening dehydrogenases and reinforcing protein-binding structure", *Bioresource Technology*, **354**, 127165 (2022) <https://doi.org/10.1016/j.biortech.2022.127165>
- A73. Arvaniti, E.N., A. Dima, C.D. Stylios, and V.G. Papadakis, "A new step-by-step model for implementing open innovation", *Sustainability*, **14**, 6017 (2022) <https://doi.org/10.3390/su14106017>
- A74. Liu, Chao; Ji, Jiacheng; Wu, Wanling; Arhin, Samuel; Papadakis, Vagelis G.; Goula, Maria A.; Zhang, Sanpeng; Zhang, Yi; Wang, Wen, "Heterogeneous catalyst-microbiome hybrids for efficient CO₂-driven C₆ carboxylic acid synthesis via metabolic pathway manipulation", *ACS Catalysis*, **12**, XXX, 5834–5845 (2022) <https://doi.org/10.1021/acscatal.2c00768>
- A75. Yang, Z., S. Wu, H. Sun, S.G. Archin, V.G. Papadakis, M.A. Goula, G. Liu, Y. Zhang, L. Zhou, and W. Wang, "Efficient degradation of organic compounds in landfill leachate via developing bio-electro-Fenton process", *Journal of Environmental Management*, **319**, 115719 (2022) <https://doi.org/10.1016/j.jenvman.2022.115719>
- A76. Arvaniti, E.N., A. Dima, C.D. Stylios, and V.G. Papadakis, "Introducing research loop to achieve open innovation for research centers in quintuple helix", *Sustainability*, **14**, 14968 (2022) <https://doi.org/10.3390/su142214968>
- A77. Aravani, V.P., K. Tsigkou, V.G. Papadakis, W. Wang, M. Kornaros, "Anaerobic co-digestion of agricultural residues produced in Southern and Northern Greece", *Fermentation*, **9**, 131 (2023) <https://doi.org/10.3390/fermentation9020131>
- A78. Aravani, V.P., K. Tsigkou, V.G. Papadakis, W. Wang, M. Kornaros, "Anaerobic co-digestion of agricultural residues produced in Southern Greece during spring/summer season", *Biochemical Engineering Journal*, **192**, 108826 (2023) <https://doi.org/10.1016/j.bej.2023.108826>

- A79. Stratoura, M.C, G.-E.D. Lazari, E.G. Badogiannis, V.G. Papadakis, "Perlite and rice husk ash re-use as fine aggregates in light weight aggregate structural concrete - Durability assessment", *Sustainability*, **15**, 4217 (2023) <https://doi.org/10.3390/su15054217>
- A80. Zhu Q., X. Li, Z. Nie, Y. Wang, T. Dang, V.G. Papadakis, M.A. Goula, W. Wang, Z. Yang, "In-situ microbial protein production by using nitrogen extracted from multifunctional bio-electrochemical system", *Journal of Environmental Management*, **347**, 119050 (2023) <https://doi.org/10.1016/j.jenvman.2023.119050>
- A81. Aravani, V.P., V.G. Papadakis, "Technoeconomic assessment for the viable exploitation of Western Greece' biomass residues by an innovative pyrolysis-anaerobic digestion processing plant", *Environmental Research*, **243**, 117835 (2024) <https://doi.org/10.1016/j.envres.2023.117835>
- A82. Wang, W, W. Lu, V.G. Papadakis, M.A. Goula, X. Li, Q. Zhu, Z. Yang, "Microbial protein production under mixotrophic mode: ammonium assimilation pathway and C/N ratio optimization", *Journal of Environmental Chemical Engineering*, **12**, 111727 (2024) <https://doi.org/10.1016/j.jece.2023.111727>
- A83. Papachristopoulos, E., E. Tsiaras, V.G. Papadakis, F.A. Coutelieres, "Design of a biogas power plant that uses olive tree pruning and olive kernels in Achaia, Western Greece", *Sustainability*, **24**, 16, 187 (2024) <https://doi.org/10.3390/su16010187>
- A84. Karakasis, I., V.G. Papadakis, C. Papanicolaou, T. Triantafillou, "Textile reinforced mortar (TRM) as a barrier for concrete structures subjected to carbonation and chloride attack: experimental investigation and analytical modeling", *Materials and Structures*, **57**, 37 (2024) <https://doi.org/10.1617/s11527-024-02303-3>
- A85. Wang, W., Q. Wang, Y. Peng, V.G. Papadakis, M.A. Goula, X. Li, T. Xie, Z. Yang, "Efficient degradation of methyl orange in wastewater via bio-electro-Fenton system: Optimization, pathway investigation and process evaluation", *Journal of Chemical Technology & Biotechnology*, **99**, 1240–1249 (2024) <http://doi.org/10.1002/jctb.7628>
- A86. Cheng, L., Y. Liu, D. Li, W. Xu, J. Jia, R. Zhang, Y. Wei, M.A. Goula, V.G. Papadakis, "Coupling pyrolysis and catalytic reforming of waste plastics for syngas production over confined Ni within silicalite-1 catalysts", *International Journal of Hydrogen Energy*, **69**, 381-390 (2024) <https://doi.org/10.1016/j.ijhydene.2024.04.313>
- A87. Papachristopoulos, E., G.N. Prodromidis, D.E. Mytakis, V.G. Papadakis, F.A. Coutelieres, "Modelling of the anaerobic digestion of biomass produced by agricultural residues in Greece", *Reactions*, **5**, 338–349 (2024) <https://doi.org/10.3390/reactions5020017>
- A88. Aravani, V.P., S. Wang, W. Wang, V.G. Papadakis, "LCA analysis on the management of typical lignocellulosic agricultural wastes: case studies and comparison in Greece and China", *Biomass and Bioenergy*, **190**, 107386 (2024) <https://doi.org/10.1016/j.biombioe.2024.107386>
- A89. Aravani, V.P., S. Wang, W. Wang, V.G. Papadakis, "Market analysis and trends for products deriving from the biochemical and thermal treatment of multi-dispersed agricultural residues", *Frontiers of Chemical Science and Engineering*, **19**(2), 11 (2025) <https://doi.org/10.1007/s11705-024-2515-0>
- A90. Ainatzoglou, M., E. Tsiaras, V.G. Papadakis, F.A. Coutelieres, "Biochar production from olive tree prunings by using open flame pyrolysis", *International Journal of Energy Sector Management*, 1750-6220 (2025) <http://dx.doi.org/10.1108/IJESM-10-2024-0057>
- A91. Arvaniti, E.N., A. Dima, C.D. Stylios, V.G. Papadakis, "Investigating regional stakeholders' perspective for open social innovation", *Journal of Innovation and Entrepreneurship*, submitted (2024).
- A92. Zhang, Y., B. Liu, W. Wu, H. Liu, V.G. Papadakis, W. Wang, "Optimizing odd medium-chain carboxylate production of propanol-based chain elongation in a mixed culture", *Journal of Environmental Sciences*, submitted (2024).
- A93. Aravani, V.P., S. Wang, W. Wang, V.G. Papadakis, "Energy production through anaerobic digestion of typical biodegradable residues: LCA comparison to composting and incineration in a small and larger country", *The International Journal of Life Cycle Assessment*, submitted (2025).

- A94. Song, C., Y. Li, X. Wang, C. Li, M. Kornaros; Vagelis G. Papadakis, C. Chen, G. Liu, "Directional production of volatile fatty acids from food waste using machine learning", *Chemical Engineering Journal*, submitted (2025).
- A95. Tsiaras, E., K.-M. Poulakou, V.G. Papadakis, F.A. Coutelieres, "Assessment of the carbon footprint of PDO/PGI wine production and transport: A case study from Laconia region, Greece", *Journal of Food Process Engineering*, submitted (2025).
- A96. Tsiaras, E., C.N. Antonopoulos, F.G. Fernández, T.G. Casas, A. Ribas, F.A. Coutelieres, V.G. Papadakis, "Breaking barriers: enabling young farmers and new entrants as agents of rural regeneration and resilience", *Journal of Rural Studies*, submitted (2025).

B. Patents

- B1. Vayenas, C.G., X.E. Verykios, I.V. Yentekakis, V.G. Papadakis, and C.A. Pliangos, "New Three-Way Catalysts with Pt, Rh and Pd, each Supported on a Separate Support", *European Patent No 94600002.3/28.01.94*.
- B2. Papadakis, V.G. and M.P. Efstathiou, "A procedure for a simultaneous reliable prediction of the mechanical strength, the durability against environmental actions, and the service lifetime of structures from concrete, with technical and financial optimization capability", *OBI No 20050200111/04.02.2005*.

C. Books – Chapter in books – Software

- C1. Papadakis, V.G., *Supplementary Cementing Materials in Concrete- Activity, Durability, and Planning*, Danish Technological Institute, Taastrup, 1999.
- C2. Papadakis, V.G., *Estimation of Concrete Service Life – The Theoretical Background*, Patras Science Park S.A., Patras, 2005.
- C3. Papadakis, V.G. and M.P. Efstathiou, *EUCON: A Software Package for Estimation of Concrete Service Life*, Patras Science Park S.A., Patras, 2005, see www.eucon.gr
- C4. Papadakis, V.G., "Estimation of Service Lifetime of Concrete Construction", in *Concrete Guide 2004-2005*, SELKA – 4M – Tekdotiki Publishing, Athens, 2005 (in Greek).
- C5. Papadakis, V.G., "Design of Processes & Plants", University of Patras' Press, Patras, 2002 (in Greek).
- C6. Kyriazis, K.C., and V.G. Papadakis, "Techno-economical Study", Tziolas Publishing, Thessaloniki, 2009 (in Greek).
- C7. Papachristopoulos, E.A. and V.G. Papadakis, "Using innovation as a way to create value, jobs, and promote environmental goals: A plan to introduce a new market concerning traditional olive oil production", *Special Issues on Regional Entrepreneurship & Innovation Planning: Perspectives from Western Greece and Apulia*, Edited by V. Missos, P. Prodromidis, I. Reziti, Patras & Athens, 2021.
- C8. Tsiaras, E., D.N. Papadopoulos, C.N. Antonopoulos, V.G. Papadakis and F.A. Coutelieres, "Chapter 8: Sustainable off-grid power supply system for small settlements", in *Hybrid Technologies for Power Generation*, Academic Press, 219-247 (2022) <https://doi.org/10.1016/B978-0-12-823793-9.00007-3>
- C9. Papadakis, V.G., *Durability and Sustainability of Constructions*, Tziolas Publishing, Thessaloniki, 2024 (in Greek).

D. Presentations in International Conferences with Reviewers

- D1. Papadakis, V.G., M.N. Fardis, and C.G. Vayenas, "Fundamental Concrete Carbonation Model and Application to Durability of Reinforced Concrete", 5th Inter. Conf. on Durability of Building Materials and Components, Brighton, U. K., November 1990; Edited by J.M. Baker, P.J. Nixon, A.J. Majumdar, and H. Davies, pp. 27-38, E. & F.N. SPON, London 1991.
- D2. Papadakis, V.G., M.N. Fardis, and C.G. Vayenas, "Physical and Chemical Properties Affecting the Durability of OPC and Pozzolan Cement Concrete", Symposium on Materials Science and Mathematical Modeling in Concrete, ACI Convention, Boston 1991.
- D3. Yentekakis, I.V., C.A. Pliangos, V.G. Papadakis, X.E. Verykios, and C.G. Vayenas, "Support and NEMCA Induced Promotional Effects on the Activity of Automotive Exhaust Catalysts", 3rd Inter. Congress on Catalysis and Automotive Pollution Control (CAPoC3), Brussels, April 1994.
- D4. Papadakis, V.G., C.A. Pliangos, I.V. Yentekakis, X.E. Verykios, and C.G. Vayenas, "Development of High Performance, Pd-mainly, Three-Way Catalysts", 2nd JAPAN-EC Joint Workshop on the Frontiers of Catalytic Science and Technology, JECAT'95, Lyon-Villeurbanne, 26-28 April 1995.
- D5. Angelidis, T.N., V.G. Papadakis, and K.A. Kydros, "Causes of Deactivation and an Effort to Regenerate a Spent Automotive Catalytic Converter", 2nd European Congress on Catalysis, EUROPACAT-II, Maastricht, 3-8 September 1995.
- D6. Papadakis, V.G., M.N. Fardis, and C.G. Vayenas, "Effect of Fly Ash and Natural Pozzolans on the Pore Structure Characteristics and on Durability of Concrete", 2nd Inter. Conf. for Chemicals and Additives used in Constructions, ConChem '95, Les Pyramides, Brussels, 28-30 November 1995. Edited by Verlag für Chemische Industrie, H. Ziolkowsky GmbH, pp. 273-282, Augsburg-D, 1995.
- D7. Papadakis, V.G., A.P. Roumeliotis, M.N. Fardis, and C.G. Vayenas, "Mathematical Modeling of Chloride Effect on Concrete Durability and Protection Measures", International Congress: Concrete in the Service of Mankind, Dundee, Scotland, 24-28 June 1996. In *Concrete Repair, Rehabilitation and Protection*, Edited by R.K. Dhir and M.R. Jones, pp. 165-174, E. & F.N. SPON, London 1996.
- D8. Papadakis, V.G., C.A. Pliangos, I.V. Yentekakis, X.E. Verykios, and C.G. Vayenas, "Improvement of Automotive Exhaust Catalysts by Support and Electrochemical Modification Induced Promotional Effects", 2nd World Congress of Nonlinear Analysts, Athens, July 1996.
- D9. Alexandrou, F.A., V.G. Papadakis, X.E. Verykios, and C.G. Vayenas, "The Promotional Effect of Na for the NO Reduction by CO on Supported Pt, Pd, and Rh Catalyst", 4th Inter. Congress on Catalysis and Automotive Pollution Control (CAPoC4), Brussels, April 1997.
- D10. Angelidis, T.N., M.M. Koutlemani, S.A. Sklavounos, Ch.B. Lioutas, A. Voulgaropoulos, V.G. Papadakis, and H. Emons, "Causes of Deactivation and an Effort to Regenerate a Commercial Spent Three-Way Catalyst", 4th Inter. Congress on Catalysis and Automotive Pollution Control (CAPoC4), Brussels, April 1997.
- D11. Verykios, X.E., C.G. Vayenas, V.G. Papadakis, F. Alexandrou, C. Stournaras, A. Tsetsekou, A. Economacou, and C. Agrafiotis, "Greek Development and Production of a Novel, Integrated, Low-Cost Automotive Catalytic Converter", 1st European Conference on Clean Cars, Athens, April 1997.
- D12. Alexandrou, F.A., V.G. Papadakis, C.G. Vayenas, and X.E. Verykios, "The Promotional Effect of Na on Supported Pt, Pd, and Rh Three-Way Catalysts", 3rd European Congress on Catalysis, EUROPACAT-III, Krakow, September 1997.
- D13. Papadakis, V.G. and E.J. Pedersen, "Effects of High-Calcium Fly Ash, Low-Calcium Fly Ash and Silica Fume on Mortar Properties", 6th CANMET/ACI Intern. Conf. on Fly Ash, Silica Fume, Slag and Natural Pozzolans in Concrete, Bangkok, 31 May – 5 June 1998.
- D14. Papadakis, V.G., "Fundamental Estimation of Concrete Service Life Regarding Carbonation- or Chloride-Induced Depassivation of Reinforcing Bars", 6th Intern. Expert-Centrum Conference on Life Prediction and Aging Management of Concrete Structures, Bratislava, Slovakia, July 1999.
- D15. Papadakis, V.G., "Development of High-Durability Concrete by Using Portland Cement-Based Binders", International Congress: Creating with Concrete, Dundee, Scotland, September 1999. In *Concrete Durability and Repair Technology*, Edited by R.K. Dhir and M.J. McCarthy, pp. 103-113, Thomas Telford Publ., London 1999.

- D16. Papadakis, V.G., "Efficiency Factors (k-values) of Supplementary Cementing Materials Regarding Carbonation and Chloride Penetration", 5th CANMET/ACI Intern. Conf. on Durability of Concrete, Barcelona, June 2000.
- D17. Tsimas, S., V.G. Papadakis, and S. Antiochos, "Study and Upgrade of Supplementary Materials for Cement and Concrete", International Symposium: Cement and Concrete Technology in the 2000s, Istanbul, 6-10 September 2000.
- D18. Kasselouri-Rigopoulou V., N. Kouloumbi, V.G. Papadakis, and S. Sioutis, "Permeability Study of Various Aggressive Media in Repaired Concretes", International Symposium: Cement and Concrete Technology in the 2000s, Istanbul, 6-10 September 2000.
- D19. Badogiannis, E., S. Tsimilis, V. Papadakis, and E. Chaniotakis, "The Effect of Metakaolin on Concrete Properties", International Congress: Challenges of Concrete Construction, Dundee, Scotland, September 2002. In *Innovations and Developments in Concrete Materials and Construction*, Edited by R.K. Dhir, P.C. Hewlett, and L.J. Cetenyi, pp. 81-89, Dundee, 2002.
- D20. Papadakis, V.G. and S. Tsimas, "Extended Use of Supplementary Cementing Materials in Construction for Economic and Environmental Benefits", 6th International Conference on Concrete Technology for Developing Countries, Amman, Jordan, 21-24 October 2002.
- D21. Antiochos, S., V.G. Papadakis, K. Maganari, and S. Tsimas, "The Development of a Blended Supplementary Cementing Material Containing High and Low Calcium Fly Ashes", 11th International Congress on the Chemistry of Cement, Cape Town, South Africa, June 2003.
- D22. Tsimilis, S., E. Badogiannis, G. Kakali, E. Chaniotakis, and V.G. Papadakis, "Investigation on the Production and Use of Metakaolin, Originated from Poor Greek Kaolins, as Cement Extender", 11th International Congress on the Chemistry of Cement, Cape Town, South Africa, June 2003.
- D23. Papadakis, V.G. and M.P. Efstathiou, "Computer Modelling of Concrete Service Life", 6th International Congress: Global Construction – Ultimate Concrete Opportunities, Dundee, Scotland, 5-7 July 2005. In *Cement Combinations for Durable Concrete*, Edited by R.K. Dhir, T.A. Harrison, and M.D. Newlands, pp. 777-786, Thomas Telford Publ., London 2005.
- D24. Papadakis, V.G. and M.P. Efstathiou, "Computer-Based Estimation of Concrete Service Life", 7th CANMET/ACI Intern. Conf. on Durability of Concrete, Montreal, Canada, May 28-June 3, 2006.
- D25. Papadakis, V.G. and M.P. Efstathiou, "Field Validation of a Computer-Based Prediction for Concrete Service Life", 2nd International *fib* Congress, Naples, Italy, June 5-8, 2006.
- D26. Antonopoulos, C.N., V.G. Papadakis Ch.D. Stylios, M.P. Efstathiou, and P.P. Groumpos, "Benchmarking Analysis for Creativity Understanding and Fostering in Conventional and New Technology Firms", XXIV IASP Conference on Science and Technology Parks, "Creative Jobs and Creative Companies – Key Factors for Growth and Competitiveness", Barcelona – Spain, 2-4 July 2007.
- D27. Antonopoulos, C.N., V.G. Papadakis, and P.P. Groumpos, "STPs as location for FDI; learning from past investment incidents: semiconductors in Western Greece", XXV IASP Conference on Science and Technology Parks, Johannesburg, 14-17 September 2008.
- D28. Konstantakou, P.P. and V.G. Papadakis, "An Integrated Management and Exploitation of Agricultural Residues – Application to Olive Tree Lop", 18th European Biomass Conference and Exhibition – From Research to Industry and Markets, Lyon, 3-7 May 2010.
- D29. Konstantakou, P.P., S.A. Haroutounian, and V.G. Papadakis, "Multilateral Exploitation of Olive Tree Lop – Techno-economical Analysis for Leave Extracts, Compost and Energy Pellet Production", Linnaeus Eco-Tech'10, Kalmar, Sweden, 22-24 November 2010.
- D30. Paraskeva, C.A., E.C. Arvaniti, and V.G. Papadakis, "Fundamentals and Techno-economical Analysis of Exploitation of Olive Mill WasteWater to High-Added Value By-products", Linnaeus Eco-Tech'10, Kalmar, Sweden, 22-24 November 2010.
- D31. Sousa-Coutinho, J. and V.G. Papadakis, "Rice Husk Ash - Importance of Fineness for its Use as a Pozzolan and Chloride-Resistant Material", 12th Inter. Conf. on Durability of Building Materials and Components, Porto, Portugal, 12-15 April 2011.
- D32. Papadakis, V.G. and S. Demis, "Estimation and Validation of Concrete Strength and Service Life Using Software Packages based on Predictive Models", 12th Inter. Conf. on Durability of Building Materials and Components, Porto, Portugal, 12-15 April 2011.

- D33. Demis, S. and V.G. Papadakis, "Durability of Glass Fibre Reinforced Polymer (FRP) Materials in Concrete – Effect of Carbonation on Bond Strength", 12th Inter. Conf. on Durability of Building Materials and Components, Porto, Portugal, 12-15 April 2011.
- D34. Demis, S. and V.G. Papadakis, "A Balanced Approach between Sustainable and Durable Design of Reinforced-Concrete Structures - The Way towards Green Durability", *fib* Symposium on Concrete Engineering for Excellence and Efficiency, Prague, Czech Republic, 8-10 June 2011.
- D35. Antonopoulos, C.N. and V.G. Papadakis, "Science Park Operations on the Verge between Renewal and Stagnation. Is there a Green Way out?", XXVIII IASP Conference on Science and Technology Parks, Copenhagen, 19-22 June 2011.
- D36. Demis, S. and V.G. Papadakis, "A Comparative Assessment of the Effect of Cement Type on Concrete Durability", 13th International Congress on the Chemistry of Cement, Madrid, Spain, 3-8 July 2011.
- D37. Arvaniti, E.C., D.P. Zagklis, V.G. Papadakis, and C.A. Paraskeva, "New Techniques in Olive Mill WasteWater (OMW) Treatment", *IFOAM AgriBioMediterraneo Conference "Organic Agriculture and Agro-Eco tourism in the Mediterranean"*, Zakynthos, Greece, 16-18 September 2011.
- D38. Demis, S. and V.G. Papadakis, "A Balanced Approach between Sustainable and Durable Design of Reinforced Concrete Structures", 6th *SDEWES - Conference on Sustainable Development of Energy, Water and Environment Systems*, Dubrovnik, Croatia, 25-29 September 2011.
- D39. Papadakis, V.G., "The WaterTech Cluster of Western Greece and its recent achievements through SWAM & STinno FP7-RoK projects", 9th International Hydrogeological Congress, Kalavryta, 5-8 October 2011.
- D40. Zagklis, D.P., E.C. Arvaniti, V.G. Papadakis, and C.A. Paraskeva, "Implementation of membrane filtration in the treatment of Olive Mill Wastewaters and a techno economical study", *BioNexGen Workshop "Development of the Next Generation membrane Bioreactor system - Membrane based Wastewater Treatment and Reuse"*, Sfax Tunisia , 8-9 March 2012.
- D41. Demis, S., M.P. Efstathiou, and V.G. Papadakis, "Development of a Software Package based on Proven Predictive Models for the Estimation of Concrete Service Life", 1st International Congress on Durability of Concrete, Trondheim, Norway, 17-21 June 2012.
- D42. Papadakis, V.G., "Service Life Prediction of a Reinforced Concrete Bridge under Chloride Induced Deterioration – Failure Scenarios and Protective Measures", 1st International Congress on Durability of Concrete, Trondheim, Norway, 17-21 June 2012.
- D43. Charisiou, N.D., P.P. Konstantakou, M.A. Goula, and V.G. Papadakis, "Estimation of Nitrogen and Carbon Loss during Composting Process of Olive Tree Lops and Contribution to Greenhouse Effect", *20th European Biomass Conference & Exhibition - Setting the course for a biobased economy*, Milan, Italy, 18-22 June 2012.
- D44. Charisiou, N.D., O. Bereketidou, V.G. Papadakis, and M.A. Goula, "Environmental Impacts of Biogas Utilization Pathways", *20th European Biomass Conference & Exhibition - Setting the course for a biobased economy*, Milan, Italy, 18-22 June 2012.
- D45. Tapali, J.G., S. Demis and V.G. Papadakis, "Use of new industrial by-products and mixtures for reducing the environmental cost of constructions", *EUROCOALASH 2012 Conference*, Thessaloniki, Greece, September 25-27, 2012.
- D46. Tapali, J. and V.G. Papadakis, "An optimum design of reinforced concrete structures for prolongation of service life time at the lowest environmental cost", *3rd International Symposium on Life-Cycle Civil Engineering (IALCCE 2012)*, Vienna, Austria, 3-6 October, 2012.
- D47. Paraskeva, C.A., D.P. Zagklis, E.C. Arvaniti, and V.G. Papadakis, "Olive Mill Wastewater treatment methods: Sustainability and benchmarking", *Prosodol Symposium on "Olive Mills Wastes and Environmental Protection"*, Chania, Greece, 16-18 October 2012.
- D48. Charisiou, N.D., V.G. Papadakis and, M.A. Goula, "Life cycle assessment of biogas catalytic and electro-catalytic processes utilization", 3rd International Workshop of COST Action CM0903 "*UBIOCHEM-III: Sustainable production of fuels/energy, materials & chemicals from biomass*" Thessaloniki, Greece, 1-3 November 2012.

- D49. M.A. Goula, and V.G. Papadakis, "Sustainability assessment of agricultural waste biomass exploitation", *4th International Symposium on Energy from Biomass and Waste*, Venice, Italy, 12-15 November 2012.
- D50. Charisiou, N.D., V.G. Papadakis, and M.A. Goula, "Biodegradable agricultural waste biomass utilization", *Bio4SuD International Conference "Biofuels for Sustainable Development of Southern Europe"*, Thessaloniki, Greece, 19-20 November 2012.
- D51. Soutzoukis, D. and V.G. Papadakis, "Experimental investigation of production of high quality compost from agricultural residues", *21st European Biomass Conference & Exhibition - Setting the course for a biobased economy*, Copenhagen, Denmark, 3-6 June 2013.
- D52. Binas, V., V.G. Papadakis, and G. Kiriakidis, "Eco-innovative photocatalytic materials activated under visible light illumination for applications in concrete", *Concrete Innovation Conference CIC 2014*, Oslo, Norway, 11-13 June 2014.
- D53. Charisiou, N.D., M.A. Goula and V.G. Papadakis, "Composting process of olive tree prunings: Assessment of nitrogen and carbon losses", *2nd International Conference on Sustainable Solid Waste Management*, Athens, Greece, 12-14 June, 2014.
- D54. Tapali, J., S. Demis and V.G. Papadakis, "Plant design & economics for rice husk ash exploitation as pozzolanic material", *SYMBIOSIS Conference*, Athens, Greece, 19-21 June, 2014.
- D55. Soutzoukis, D. and V.G. Papadakis, "Experimental investigation of production of high quality compost from agricultural residues", *5th International Conference on Engineering for Waste and Biomass Valorisation*, Rio de Janeiro, Brazil, 25-28 August 2014.
- D56. Ferreira, M. and V.G. Papadakis, "Considerations on the modelling of chloride transport – The influence of carbonation and frost attack", *13th Inter. Conf. on Durability of Building Materials and Components*, Sao Paulo, Brazil, 2-5 September 2014.
- D57. Demis, S., C.S. Rodrigues, L.A. Santos, and V.G. Papadakis, "An Investigation of the Effectiveness and Durability Characteristics of Biomass Ashes as Pozzolanic Materials", *13th Inter. Conf. on Durability of Building Materials and Components*, Sao Paulo, Brazil, 2-5 September 2014.
- D58. Tapali, J. and V.G. Papadakis, "Exploitation of rice husk ash as a pozzolanic material for the construction industry", *4th International Conference on Industrial and Hazardous Waste Management (Crete 2014)*, Chania, Greece, 2-5 September 2014.
- D59. Kontos, S.S, P.G. Koutsoukos, V.G. Papadakis, K.C. Angelopoulos and C.A Paraskeva, "Application of physicochemical techniques for the efficient treatment of olive mill wastewaters", *7th International Conference on Water Resources in the Mediterranean Basin: WATMED 7*, Marrakesh, Morocco, 10-12 October 2014.
- D60. Charisiou, N.D., V.G. Papadakis and M.A. Goula, "Syngas production from biogas reforming over La-promoted Ni/Al₂O₃ catalyst", *3rd International Conference on Sustainable Solid Waste Management*, Tinos, Greece, 2-4 July 2015.
- D61. Charisiou, N.D., C.A. Paraskeva, M.A. Goula and V.G. Papadakis, "Sustainability Analyses for the Exploitation of Olive Tree Cultivation Residues", *International Conference on Industrial Waste & Wastewater Treatment & Valorisation*, Athens, Greece, 21-23 May 2015.
- D62. Charisiou, N.D., A. Baklavaridis, V.G. Papadakis and M.A. Goula, "Synthesis gas production via the biogas reforming reaction over Ni/MgO-Al₂O₃ and Ni/CaO-Al₂O₃ catalysts", *International Conference on Industrial Waste & Wastewater Treatment & Valorisation*, Athens, Greece, 21-23 May 2015.
- D63. Charisiou, N.D., V.G. Papadakis and M.A. Goula, "Syngas production from biogas reforming over La-promoted Ni/Al₂O₃ catalyst", *3rd International Conference on Sustainable Solid Waste Management*, Tinos, Greece, 2-4 July 2015.
- D64. Demis, S. and V.G. Papadakis, "Durability design of reinforced concrete structures – Service life estimation", *6th International Conference on Concrete Repair: Concrete Solutions 2016*, Thessaloniki, Greece, 20-22 June 2016.
- D65. Arvaniti, E.N., C.D. Stylios and V.G. Papadakis, "Open social innovation – Challenges and opportunities for Greece", *International Conference for Entrepreneurship, Innovation and Regional Development*, Thessaloniki, Greece, 31/8-1/9 2017.

- D66. Arvaniti, E.N., C.D. Stylios and V.G. Papadakis, "The challenge of introducing Open Social Innovation for urban sustainable growth", International Geographical Union, Commission on Geography of Governance, International Annual Conference, "Local Governance in the New Urban Agenda", Lecce, Italy, 19-21 October 2017.
- D67. Siakavelas, G.I., N.D. Charisiou, V.G. Papadakis, K. Polychronopoulou and M.A. Goula, "Innovative valorization of biogas for the production of renewable ethylene via oxidative coupling of CH₄ and CO₂ hydrogenation", *International Conference on Advanced Energy Materials*, Surrey, England, 10-12 September 2018.
- D68. Demis, S. and V.G. Papadakis, "Design for durability of reinforced concrete structures under the hot desert climate of the Arabian Peninsula", RILEM Spring Convention and Sustainable Materials, Systems and Structures Conference, Rovinj, Croatia, 18-22 March 2019.
- D69. Stratoura, M., E. Badogiannis, K.K. Sideris and V.G. Papadakis, "Development of durable and structural lightweight concrete", RILEM Spring Convention and Sustainable Materials, Systems and Structures Conference, Rovinj, Croatia, 18-22 March 2019.
- D70. Katrivesis, F.K., V. Sygouni, C.A. Paraskeva, V.G. Papadakis, "Use of membranes for the water treatment – Performance and perspectives", 5th distance education e-learning, International Summer School and Workshop on "Wastewater and Biosolids Management" (WWSS19), Patras, Greece, 22-27 July 2019.
- D71. Goula M.A., N.D. Charisiou, S.L. Douvartzides, G.I. Siakavelas, V.G. Papadakis, W. Wang, G. Liu, "Integrated management and exploitation of multi-dispersed agricultural residues – application to energy production", 7th International Conference of Biorefinery, Johannesburg, South Africa, 18-21 August 2019.
- D72. Siakavelas, G.I., N.D. Charisiou, V.G. Papadakis, K. Polychronopoulou, M.A. Goula, "Highly selective nickel catalysts for CO₂ methanation reaction based on ceria promoted with Sm₂O₃, Pr₂O₃ and MgO", *Conference Advanced Energy Materials*, Guildford, England, 11-13 September, 2019.
- D73. Charisiou, N.D., G.I. Siakavelas, V. Sebastian, S. Hinder, M. Baker, V.G. Papadakis, W. Wang, K. Polychronopoulou, M.A. Goula, "Structural investigation of the carbon deposits on Ni/Al₂O₃ catalyst modified by CaO-MgO for the biogas dry reforming reaction", 1st International Electronic Conference of Catalysis Sciences – Section: Catalysis for biomass conversion, 10-30 November 2019.
- D74. Papachristopoulos, E.A., V.G. Papadakis, "Using innovation as a way to create value, jobs, and promote environmental goals: A plan to introduce a new market concerning traditional olive oil production", Conference on Regional Entrepreneurship and Innovation, Patras, Greece, 3 September 2020.
- D75. Charisiou N.D., G.I. Siakavelas, V. Sebastian, S.J. Hinder, M.A. Baker, V.G. Papadakis, W. Wang, K. Polychronopoulou, M.A. Goula, "Structural investigation of the carbon deposits on Ni/Al₂O₃ catalyst modified by CaO-MgO for the biogas dry reforming reaction", 1st International Electronic Conference on Catalysis Sciences, 10-30 November 2020.
- D76. Charisiou N.D., G.I. Siakavelas, S. Douvartzides, W. Wang, G. Liu, V.G. Papadakis, K. Polychronopoulou, M.A. Goula, "Syngas production via the biogas steam reforming reaction over a commercial Ni/MgAl₂O₄ catalyst", 24th International Congress of Chemical and Process Engineering, 15-18 March 2021.
- D77. Katsoulis, C., V.G. Papadakis, F.A. Coutelieris, "Optimization of olive oil production plants: The case of Tryfilia, Greece", ICFPIM 2021: 15. International Conference on Food Processing Industries and Management, Athens, Greece, 8-9 April 2021.
- D78. Aravani, V.P., M. Kornaros, V.G. Papadakis, "Agricultural residues in Greece: quantitative and qualitative characterization for assessing the most promising materials for biogas production", 29th European Biomass Conference and Exhibition EUBCE 2021, Marseille, 26-29 April 2021.
- D79. Charisiou, N.D., G.I. Siakavelas, S. Douvartzides, W. Wang, V.G. Papadakis, K. Polychronopoulou, M.A. Goula, "Biogas dry reforming reaction over Ni/Al₂O₃, Ni/CaO-MgO-Al₂O₃ and Ni/La₂O₃-Al₂O₃: Investigation of carbon deposition and catalyst deactivation", 29th European Biomass Conference and Exhibition EUBCE 2021, Marseille, 26-29 April 2021.

- D80. Douvartzides, S., N.D. Charisiou, W. Wang, V.G. Papadakis, M.A. Goula, "Processing of biomass derived bio-oils for large-scale Fischer - Tropsch synthesis of transportation biofuels", 29th European Biomass Conference and Exhibition EUBCE 2021, Marseille, 26-29 April 2021.
- D81. Aravani, V.P., K. Tsigkou, M. Kornaros, V.G. Papadakis, "Laboratory analyses for assessing the potential for biogas production of various agricultural residues of Greece", International Conference on Biosystems Engineering BSE 2021, Tartu, Estonia, 5-7 May 2021.
- D82. Aravani, V.P., K. Tsigkou, M. Kornaros, V.G. Papadakis, "Biochemical methane potential of various promising agricultural residues in Southern and Northern Greece", 8th International Conference on Sustainable Solid Waste Management, Thessaloniki, Greece, 23-26 June 2021.
- D83. Konstantopoulos, G., C.A. Apostolopoulos, V.G. Papadakis, "The influence of concrete cracks on the chloride penetration and corrosion damage of RC elements in the short term", 6th International Virtual Conference of Engineering Against Failure (ICEAF VI), 23-25 June 2021.
- D84. Katrivesis, F.K., V. Sygouni, V.G. Papadakis, C.A. Paraskeva, "Utilization of water treatment residual sludge for the improvement of barren soil", 6th distance education e-learning, International Summer School on "Wastewater and Biosolids Management" (WWSS21), Patras, Greece, 26-31 July 2021.
- D85. Papadakis, V.G., "Contribution of supplementary cementing materials on CO₂ sequestration in concrete structures", *EUROCOALASH 2021 Conference*, Thessaloniki, Greece, November 2-4, 2021.
- D86. Stratoura, M., E.G. Badogiannis, V.G. Papadakis, "Role of supplementary cementing materials on the development of durable and structural lightweight concrete", *EUROCOALASH 2021 Conference*, Thessaloniki, Greece, November 2-4, 2021.
- D87. Aravani, V.P., K. Tsigkou, M. Kornaros, V.G. Papadakis, "Anaerobic co-digestion of agricultural residues produced in Southern Greece during spring/summer season", 9th International Conference on Sustainable Solid Waste Management, Corfu, Greece, 15-18 June 2022.
- D88. Aravani, V.P., K. Tsigkou, M. Kornaros, V.G. Papadakis, "Anaerobic co-digestion of agricultural residues produced in Southern and Northern Greece", 9th International Conference on Engineering for Waste and Biomass Valorisation, WasteEng2022, Copenhagen, 27-30 June 2022.
- D89. Aravani, V.P., D. Zagklis, W. Wang, C. Zafiri, M. Kornaros, V.G. Papadakis, "Life cycle assessment of sheep and goat manure management scenarios in Greece: composting versus anaerobic digestion", 19th International Conference on Renewable Resources & Biorefineries, Riga, Latvia, 31/5-2/6 2023.
- D90. Aravani, V.P., D. Zagklis, C. Zafiri, W. Wang, M. Kornaros, V.G. Papadakis, "Life cycle assessment of olive tree pruning management scenarios in Greece: gasification versus open field burning", 31st European Biomass Conference and Exhibition EUBCE 2023, Bologna, Italy, 5-8 June 2023.
- D91. Aravani, V.P., V.G. Papadakis, "Technoeconomic assessment for the viable exploitation of Western Greece' biomass residues by an innovative pyrolysis-anaerobic digestion processing plant", 10th International Conference on Sustainable Solid Waste Management, Chania, Greece, 21-24 June 2023.
- D92. Ainatzoglou, M., Aravani, V.P., V.G. Papadakis, "On site conversion of olive tree prunings to biochar and environmental benefits", 10th International Conference on Sustainable Solid Waste Management, Chania, Greece, 21-24 June 2023.
- D93. Aravani, V.P., V.G. Papadakis, "Exploitation of agricultural residues in the context of circular economy – technoeconomic and environmental assessment", 8th International Conference on Biorefinery and Biomanufacturing (ICB 2023), Athens, Greece, 23-27 July 2023.
- D94. Papadakis, V.G., "Agricultural residues can contribute significantly to meeting energy needs - Technical, environmental and economic perspectives", *keynote speaker*, 9th International Conference on Biorefinery and Biomanufacturing (ICB 2025), Sao Paulo, Brazil, 13-17 January 2025.

E. Presentations in Panhellenic Conferences with Reviewers (in Greek)

66 presentations

F. Invited speaker (selections among 92)

1. "Mathematical Modeling and Experimental Investigation of Concrete Carbonation", XXth Scientific Conference of the Youth Researchers, Higher Institute of Chemical Technology, Sofia, Bulgaria, 9-5-1989.
2. "Development of High Durability and Performance Concrete by using Pozzolans and Optimum Material Synthesis" and "The State of the Cement and Concrete in Greece: Production & Research", Danish Technological Institute (DTI), Division of Building Technology, Taastrup, Denmark, 28-2-1997.
3. "Experimental Investigation and Theoretical Modeling of Pozzolanic Activity in Concrete", DTI, Division of Building Technology, Taastrup, Denmark, 26-5-1998.
4. "Utilization of Lignite Fly Ash in Construction", RWE Energie Aktiengesellschaft, Essen, Germany, 16-12-1998.
5. "Supplementary Cementing Materials in Concrete", Danish Technological Institute, Division of Building Technology, Taastrup, Denmark, 10-2-1999.
6. "The PANEEA project: A cost-effective system development for complete exploitation of olive mill wastewater", Institute of Water Research, University of Granada, Granada, Spain, 10-12-2004.
7. «Technology Transfer & Innovation Management», FP6 CODESNET meeting, Shannon Development, University of Limerick, Ireland 8-3-2007.
8. «Μικρομεσαίες Επιχειρήσεις – Ανάπτυξη μέσω Έρευνας & Καινοτομίας», Ημερίδα «Έρευνα προς Όφελος των Μικρομεσαίων Επιχειρήσεων στο 7ο Πρόγραμμα Πλαίσιο Έρευνας και Τεχνολογικής Ανάπτυξης στην ΕΕ», EOMMEX, Αθήνα 21-6-2007.
9. «SMEs sector in Western Greece, Epirus, Puglia and Sicily», HUREDEPIS project meeting, Science & Technology Park of Sicily, Catania, Italy 16-11-2007.
10. «WaterTech Cluster of Western Greece – Regional Innovation Pole of Western Greece», 1st STinno project meeting, Marrakesh, Morocco, 12-1-2010.
11. «WaterTech Cluster of Western Greece – Regional Innovation Pole of Western Greece», 1st SWAM project meeting, Murcia, Spain, 11-3-2010.
12. «Tools and methods system for the provision of social economy services», 3rd Transnational Meeting of the project *URBAN N.O.S.E. - Network of Social Enterprises*, URBACT II, Koropi, Athens, 15-4-2010.
13. «The research-driven WaterTech cluster of Western Greece», 2nd SWAM project meeting, Patras, 7-7-2010.
14. «Animating and sensitising the territory upon Social Economy», 4th Transnational Meeting of the project *URBAN N.O.S.E. - Network of Social Enterprises*, URBACT II, Grenoble, France, 10-9-2010.
15. «Encouraging entrepreneurs & education on water technology – Western Greece», 3rd SWAM project meeting, Kiryat-Shmona, Galilee, Israel, 18-1-2011.
16. «Water technologies & water clusters challenges - Case-studies in Western Greece», 3rd SWAM project meeting, Kiryat-Shmona, Galilee, Israel, 18-1-2011.
17. «Competitiveness and research analysis of WaterTech research-driven clusters», 4th SWAM project meeting, Patras, 30-5-2011.
18. «International overview of cluster policies», 3rd STinno project meeting, Lahti, Finland 16-7-2011.

19. «Architecture of Totalitarian Regimes of the XX Century in Urban Management – Cases of the Region of Western Greece», ATRIUM Transnational Meeting, Iasi, Romania, 15-11-2011.
20. «Policies for the support of regional research-driven clusters – Impacts & Conclusions», 4th STinno project meeting, Terni, Italy 13-12-2011.
21. «High-added value materials production from Olive Mill Wastewater – A technical and economical optimization», Horizon 2020 Capacity Building/Mediterranean Environment Programme, “*Best environmental practices in olive mill waste management and new technologies*”, Regional training: 19-21 March 2012, Athens.
22. «Presentation of project PYRICE II - Techno-Economical Design and Pilot Production of Advanced and High-Added Value Materials from Rice Husk Ash», Eco-Innovation Sustainable Concrete Workshop, European Commission, 3 May 2012, Brussels.
23. «PYRICE II project: Overall review, results and achievements», PYRICE II – Final Review, Agrino Plant, 6-6-2012, Sindos, Thessaloniki.
24. Special Guest Speaker in Scientific Coffee, «Ideas and perspectives for research cooperation in the future», Technical Research Center of Finland - VTT, 9 November 2012, Otaniemi/ Espoo, Finland.
25. Special Guest Speaker in Lecture, «A balanced approach between sustainable and durable design of reinforced-concrete structures - The way towards green durability», Aalto University, 9 November 2012, Otaniemi/ Espoo, Finland.
26. «Balanced approach between sustainable and durable design of buildings», INNOVA NET - winter school, University of Patras, 31 March 2014, Patras.
27. «A cost-effective system development for complete exploitation of olive mill wastewater» & «Techno-Economical Design and Pilot Production of Advanced and High-Added Value Materials from Rice Husk Ash», The Belt & Road Visiting Scholar Program, Beijing University of Chemical Technology, 5 June 2018, Beijing, China.
28. **Special Guest Speaker in Lecture, «A balanced approach between sustainable and durable design of reinforced concrete structures - The way towards Green Durability», University of New South Wales (UNSW), School of Civil & Environmental Engineering, 11 July 2019, Sydney, Australia.**
29. «Integrated management and exploitation of multi-dispersed agricultural residues – application to energy production», Regional Growth Conference 2021, Summer Workshop, Organization Newspaper PELOPONNESE, Patras, 5/6/2021.
30. «Resilience to Climate Change, Natural Hazards and Pandemic Risks – Biosafety», Speech at Panel 2, 2nd International Scientific Conference TMM_CH “Transdisciplinary Multispectral Modelling and Cooperation for the preservation of Cultural Heritage – Rebranding the World in Crisis through Culture”, Athens, 13/12/2021.
31. «Project SYNAGRON– Experimental investigation of the anaerobic digestion process using various Greek biodegradable agricultural residues», Online lectures to students of Beijing University of Chemical Technology, 9 December 2022.
32. **«Industrial ecology for green energy production and sustainable construction», Academic Lecture, 16 October 2024, Beijing, China.**

G. Selected Reports, Theses, and Books (among 71)

1. Papadakis, V.G. and C.A. Paraskeva, "Theoretical and Experimental Investigation of Macroscopical Behavior of Deep Bed Filters", *Diploma Thesis*, Chemical Engineering Dept., University of Patras, p. 156, Patras 1986.
2. Papadakis, V.G., "Investigation of Physicochemical Processes of Hardened Cement Paste Carbonation and of the Effects on the Reinforced Concrete Durability", *Ph.D. Thesis*, Chemical Engineering Dept., University of Patras, p. 240, Patras 1990.

3. Papadakis, V.G., "Aspects of Fly Ashes and their Utilization in the Constructions", *Report* to Public Power Corporation and to Association of Civil Engineers of Greece, p. 38, Patras 1992.
4. Antonopoulos, I., C. Papageorgiou, V.G. Papadakis, P. Nikolaidis, V. Speliadis, and S. Psara, "Investigation of Physicochemical Parameters of Seawater and its Biological Pollution Potential on Underwater Constuction in the Area of Rion-Antirion for the Bridge Project", *Final Report* to Ministry of Public Works/ GSPWD1, University of Patras, p. 240, Patras 1992.
5. Papadakis, V.G., "Environmental Effects on the Buildings", in the *Handbook* of ACEG: "Restoration of Monuments and Buildings of Special Significance", p. 40, Athens 1993.
6. Verykios, X.E., C.G. Vayenas, I.V. Yentekakis, V.G. Papadakis and C.A. Pliangos, "Development of Improved Automotive Catalytic Converters", *Final Report* to GSRT, ICE/HT, Patras 1994.
7. Papadakis, V.G. and D.N. Spartinos, "Special Chapters of Chemical Technology", *Instructive book*, Chemical Engineering Dept., University of Patras, p. 180, Patras 1994.
8. Papadakis, V.G., F. Alexandrou, C.G. Vayenas, and X.E. Verykios, "Optimization, Quality Control and Production of Automotive Exhaust Catalytic Converters", *Report* to GSRT, ICE/HT, Patras 1996.
9. Papadakis, V.G., "Development of New Techniques/ Apparatuses for the Assessment of Performance and Durability of Building Materials", *Report on Research Feasibility Work*, SMT4-CT97-5024, European Commission DG XII, December 1997.
10. Papadakis, V.G., "Prediction of the Øresund Link Service Life Regarding Chloride-Induced Depassivation of Reinforcing Bars"; *Technical Note* to Øresund-konsortiet, Danish Technological Institute, Taastrup, November 1998.
11. Papadakis, V.G., "Estimation of Concrete Service Lifetime- A Practical Guide"; *Technical Note*, Danish Technological Institute, Taastrup, December 1998.
12. Papadakis, V.G., M.E. Glavind, and M.T. Jepsen, "Use of Petcoke Fly Ash in Concrete"; *Report* to SK Power Company, Danish Technological Institute, Taastrup, December 1998 (in Danish).
13. Papadakis, V.G., "Supplementary Cementing Materials in Concrete- Activity, Durability, and Planning"; *Final Report* to European Commission, Project No. ERBFMBICT961387, Danish Technological Institute, Taastrup, January 1999.
14. Papadakis, V.G. and E.J. Pedersen, "Service Lifetime Prediction of Concrete used for Foundation. Case Study: Construction Christiansbro- Erhverv 2"; *Technical Note* to NCC Rasmussen & Schiøtz, Danish Technological Institute, Taastrup, February 1999.
15. Papadakis, V.G. and B. Matthiesen, "Computer Program for Chloride Intrusion in Concrete"; *Technical Note*, Danish Technological Institute, Taastrup, February 1999.
16. Papadakis, V.G., "Use of Supplementary Cementing Materials for Sustainable Building-Sector Growth"; *Final Report* to European Commission, Project No. HPMF-CT-1999-00370, National Technical University of Athens, Athens, June 2001.
17. Papadakis, V.G., C.A. Paraskeva, D. Kanellopoulou, E. Tsarouchi, P. Koutsoukos, M. Villa, S. Pajardi, C., Nakos, G. Bafiti, "Olive Mill Wastewater: Characterization and Treatment", *Report to EC for the project PANEEA QLK5-CT-2002-71666*, July 2003.
18. Papadakis, V.G., T. Benetatos, G. Karelak, C. Paraskeva, S. Patti, D. Stefano, and A. Villa, "Study for the Evaluation of Existing and Planning Regional Capabilities and Practices on the Designing of SME Policies", HUREDEPIS project, Archimed, Interreg Programme, October 2007.
19. Arvaniti, E.N., M.P. Efstathiou, and V.G. Papadakis, «Regional cluster analysis – interim report», SWAM Project, FP7 EU Programme, Patras, August 2010.
20. Arvaniti, E.N., M.P. Efstathiou, and V.G. Papadakis, «Regional cluster mapping – interim report», SWAM Project, FP7 EU Programme, Patras, September 2010.
21. Efstathiou, M.P., E.N. Arvaniti, and V.G. Papadakis, «Identification & evaluation of regional research-driven clusters», STinno Project, FP7 EU Programme, Patras, November 2010.
22. Arvaniti, E.N., M.P. Efstathiou, and V.G. Papadakis, «Mapping regional research agendas», STinno Project, FP7 EU Programme, Patras, November 2010.

23. Arvaniti, E.N., M.P. Efstathiou, and V.G. Papadakis, «EU policies for regional research-driven clusters», STInno Project, FP7 EU Programme, Patras, November 2010.
24. Efstathiou, M.P., E.N. Arvaniti, and V.G. Papadakis, «Report on market research, analysis and approach for the production of advanced and high-added value materials from rice husk ash», PYRICE II Project, CIP ECO-INNOVATION Programme, Patras, December 2010.
25. Arvaniti, E.N., M.P. Efstathiou, and V.G. Papadakis, «International overview for cluster policies», STInno Project, FP7 EU Programme, Patras, June 2011.
26. Arvaniti, E.N., M.P. Efstathiou, and V.G. Papadakis, «Regional competitiveness analysis – final report», SWAM Project, FP7 EU Programme, Patras, September 2011.
27. Efstathiou, M.P. and V.G. Papadakis, «Technoeconomical study of production of advanced and high-added value materials from rice husk ash», PYRICE II Project, CIP ECO-INNOVATION Programme, Patras, September 2011.
28. Papadakis, V.G., M.P. Efstathiou, and L. Litos «Technoeconomical design and pilot production of advanced and high-added value materials from rice husk ash», *Final Report to EACI - EU*, PYRICE II Project, CIP ECO-INNOVATION Programme, Patras, September 2012.
29. Efstathiou, M.P., E.N. Arvaniti, and V.G. Papadakis, «Architecture of Totalitarian Regimes of the XX Century in Urban Management – Cases of the Region of Western Greece: Identification, Digitalization, Durability Problems», ATRIUM Project, SEE Programme, Patras, December 2012.
30. Papadakis, V.G. «Doha Metro- Gold Line: Concrete Service Life Estimation», *Report to Joint Venture ALYSJ*, Doha, Qatar, April 2015.

Science Citation Index (10/2025):

Citations (Exclude self citations): Google Scholar: **11,000** (approx.), Scopus: **7000** (approx.)

h-index: Google Scholar: **42**, Scopus: **39**