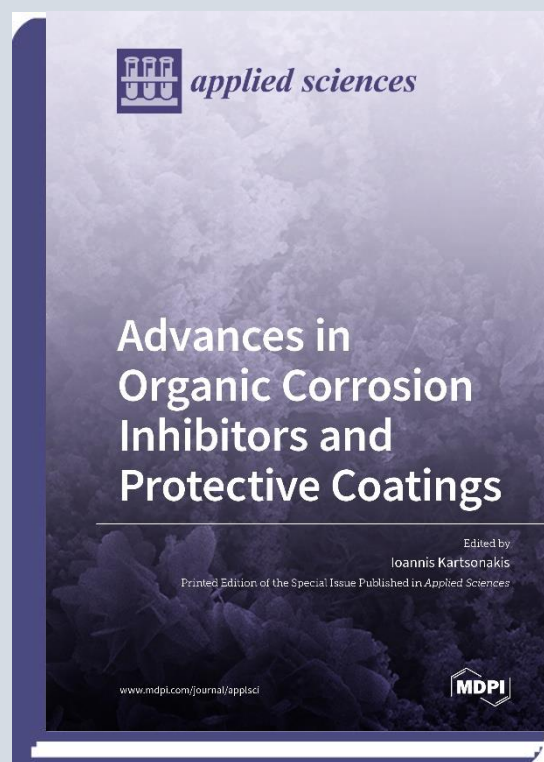
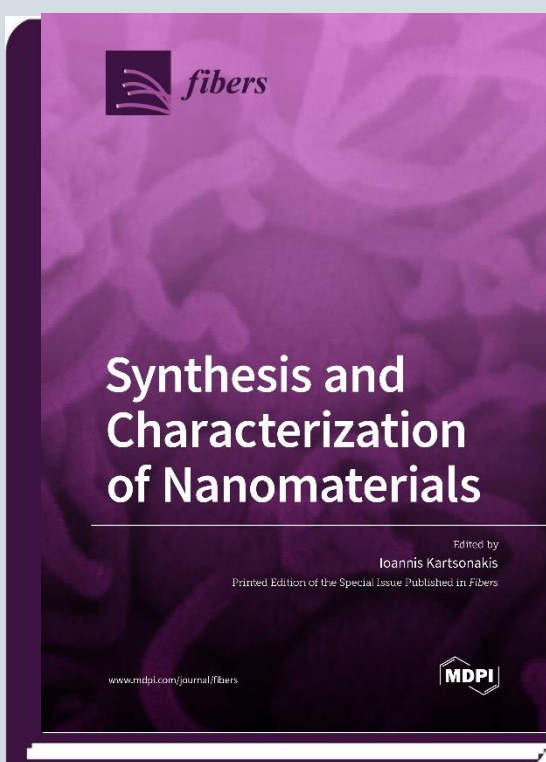
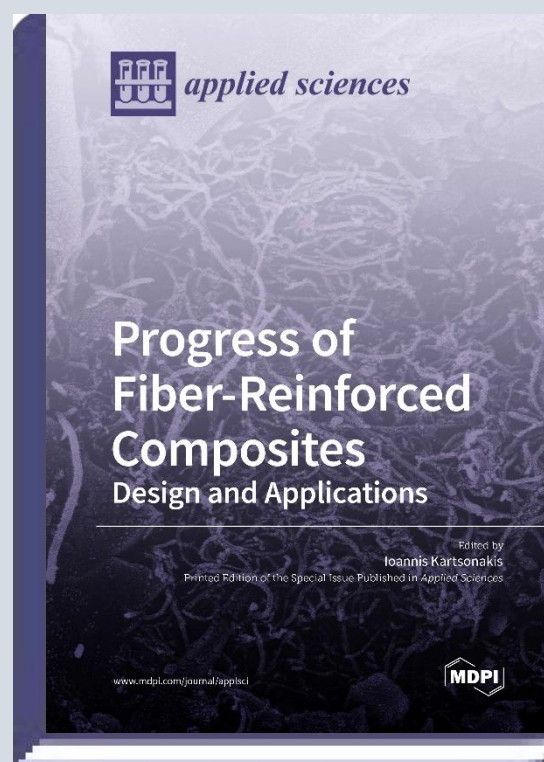


Curriculum Vitae

Ioannis Kartsonakis



Ioannis Kartsonakis

📍 Laboratory of Physical Chemistry, School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece - 54124

☎ 00306973011473

✉ ikartson@chem.auth.gr ; ioanniskartsonakis@gmail.com

ORCID Scopus[®] (*h-index: 24*)

Web of Science Group (*h-index: 23*)

Google (*h-index: 28*)

Sex Male | Date of birth 08/09/1974 | Place of birth Johannesburg S. Africa | Nationality Greek Status Married | Military service from 23/9/2002 to 23/4/2004: Reserve lieutenant.

SUMMARY

Ioannis Kartsonakis is an **Assistant Professor** in the School of Chemistry in the Aristotle University of Thessaloniki. He is a Chemist with a **PhD** in **Chemistry** and a **MSc** in **Polymer** science. His PhD subject was on **electrochemical deposition** of multifunctional conductive polymers for **corrosion protection** of metals [10.12681/eadd/25933](https://doi.org/10.12681/eadd/25933), using electrochemistry, sol-gel technique and radical polymerization.

Activities:

- **European Commission Expert;**
- Specialist **Scientist** in the Hellenic Army Academy, Department of Military Sciences;
- External **consultant** at Pöyry Switzerland Ltd in the field of metal alloys **corrosion protection**;
- **Independent Expert** appointed as **Evaluator** of the General Secretariat of Research and Technology of Greece;
- **Independent Expert** consultant as **Project Peer Reviewer**;
- **Associate Author** and **Scientific Supervisor in charge** for INE-GSEE and KANEP-GSEE;
- **Associate Editor** in Frontiers (ISSN: 2673-2718) [Chemical Engineering - Surface and Interface Engineering](#)
- Member of the Section **Editorial Board** of Applied Sciences (ISSN 2076-3417): ["Chemical and Molecular Sciences"](#)

His work is focused on:

- **Management** of R&D projects,
- Implementation of research and development tasks in the field of **electrochemistry** and **corrosion protection**,
- Studies on **physicochemical** properties of **nanomaterials**,
- Synthesis and characterization of hybrid inorganic/ organic **nanomaterials**, **coatings**, **fibers**, cement/ polymer **composites**

Ioannis Kartsonakis has organized **8 issues** as **Guest Editor**:

1. Research Topic in [Frontiers in Bioengineering and Biotechnology: "Biofouling, Biocorrosion and Biodeterioration: Recent Advancements"](#)
2. Topical Collection in [Applied Sciences: Organic Corrosion Inhibitors and Protective Coatings](#)
3. Special Issue in [Applied Sciences: Phase Change Materials: Design and Applications—Volume II](#)
4. Special Issue in [Applied Sciences: Progress of Fiber-Reinforced Composites: Design and Applications](#)
5. Special Issue in [Applied Sciences: Phase Change Materials: Design and Applications](#)
6. Special Issue in [Applied Sciences: Advances in Organic Corrosion Inhibitors and Protective Coatings](#)
7. Special Issue in [Fibers: Advances in Electrochemical Power Sources Based on Fibers](#)
8. Special Issue in [Fibers: Synthesis and Characterization of Nanomaterials](#)

Synthetic processes and methods:

- **Electro-polymerization**; anionic, radical and step-growth **polymerization**,
- **Sol-gel** formulations including organic and inorganic **precursors**, organic binders, plasticizers and surfactants,
- **Dip-coating**/ roll-coating (tape casting, wet coating process),
- Dry/melt spinning,
- **Co-precipitation** method,

Characterization techniques:





- **Electrochemical Impedance Spectroscopy**,
- **Scanning Electron Microscopy** / Energy dispersive x-ray analysis,
- **Potentiodynamic Polarization**,
- **Cyclic Voltammetry**,

- Dynamic Light Scattering,
- Thermogravimetric Analysis,
- Size Exclusive Chromatography,
- X-ray Diffraction,
- Infra-Red Spectroscopy,
- Ultraviolet Spectroscopy.

Ioannis Kartsonakis is co-inventor in **3 patent applications** and **editor in 4 books**. He has also published **2 chapters** in international books, **73 papers** in peer-reviewed international journals and **75 contributions** to **conference** proceedings and workshops. He has presented **29 talks** in international conferences (**5 invited talks**).

He has been working in **9 European** and **6 National research projects** where his role has been in the fields of: management of work packages; participating and making presentations in physical and online meetings of the consortiums; writing deliverables, milestones and publications; contributing to the scientific field in the authorship of new proposals; participating in the research and innovation activities such as working in the laboratory for the synthesis of new materials.

WORK EXPERIENCE

July 2023 - ongoing:	Assistant Professor, Laboratory of Physical Chemistry, School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece - 54124.	
December 2022 - ongoing:	Specialist Scientist Hellenic Army Academy, Department of Military Sciences, Leoforos Eyepidon (Varis – Koropiou) Avenue, Vari GR-16673.	
August 2022 – June 2023:	Chemist - Educational Hellenic Ministry of Education and Religious Affairs, 37 Andrea Papandreou St. Marousi GR-15180.	
March 2012 – February 2023:	Chemist - Senior Researcher (A) National Technical University of Athens, 9 Heron Polytechniou St. Zographos, Greece GR-157 73. <ul style="list-style-type: none"> • Management (Leader) of work packages, • Studies on physicochemical properties of nanomaterials • Synthesis and characterization of powder/ nanomaterials, fibers, cement/ polymer composites and multi-layered coatings (ceramics, polymeric, inorganic, hybrid), • Study of corrosion processes on materials, • Support in thesis of undergraduate students. <p><i>January 2019 - February 2023:</i> Project HORIZON 2020-EU.2.1.3, HORIZON 2020-EU.2.1.2. “DECOAT” (‘Recycling of coated and painted textile and plastic materials’, Grant agreement no.: 814505, overall budget: € 5, 974, 457.50). <i>My role is:</i> Management (Leader) of work package; participating and making presentations in physical and online meetings of the consortiums; writing deliverables, milestones and publications; synthesis and characterization of core-shell hybrid organic-inorganic nanocomposites; support in thesis of undergraduate students. https://cordis.europa.eu/project/id/814505</p> <p><i>May 2016 - April 2020:</i> Project HORIZON 2020-EU.2.1.3. “LORGENIS” (Long Lasting Reinforced Concrete for Energy Infrastructure under Severe Operating Conditions, Grant agreement no.: 685445, overall budget: € 7, 927, 345). <i>My role was:</i> Management (Leader) of work package; participating and making presentations in physical and online meetings of the consortiums; writing deliverables, milestones and publications; synthesis and characterization of core-shell hybrid organic-inorganic nanocomposites; synthesis and characterization of super absorbent polymers / cement composites; support in thesis of under-graduate students. https://cordis.europa.eu/project/id/685445</p> <p><i>July 2016 - July 2018:</i> Project “Examination, diagnosis and treatment of corrosion of the water-steam circulation system” of industry of Uni-Pharma S.A. Pharmaceutical Laboratories. <i>My role was:</i> Corrosion evaluation of pipelines.</p>	

April 2017 - March 2018: Project “Examination, diagnosis and troubleshooting of **cooling and heating circuits with water and water-steam circuit**” of the building of OPAP – Greek Organisation of Football Prognostics S.A. *My role was:* Corrosion evaluation of pipelines.

February 2016 - July 2019: FP7-KBBE Collaborative project “**EQUINOX**” (A novel process for manufacturing complex shaped Fe-Al intermetallic parts **resistant to extreme environments**, Grant agreement no.: 689510, overall budget: € 4. 678. 345). *My role was:* corrosion evaluation of metal alloys. <https://cordis.europa.eu/project/id/689510>

January 2014 - December 2017: FP7-KBBE Collaborative project “**BYEFOULING**” (Low-toxic cost-efficient environment-friendly **antifouling materials**, Grant agreement no.: 612717, overall budget: € 9, 959, 644). *My role was:* Management (Leader) of work package; participating and making presentations in physical and online meetings of the consortiums; writing deliverables, milestones and publications; synthesis and characterization of coatings and nanocomposites; corrosion evaluation of coatings; support in thesis of undergraduate students. <https://cordis.europa.eu/project/id/612717>

January 2014 - December 2017: Project FP7-NMP “**FIBRALSPEC**” (Functionalised Innovative **Carbon Fibres** Developed from Novel Precursors with Cost Efficiency and Tailored Properties, Grant agreement no.: 604248, overall budget: € 8, 126, 545.99). *My role was:* Synthesis and characterization of carbon and polymer fibers; support in thesis of undergraduate students. <https://cordis.europa.eu/project/id/604248>

November 2013 - November 2015: FP7 Collaborative project “**SAFEJOINT**” (Enhancing structural efficiency through novel **dissimilar material joining** techniques, Grant agreement no.: 310498, overall budget: € 4, 093, 335.80). *My role was:* Writing deliverables, milestones and publications; synthesis and characterization of nanocomposites, corrosion evaluation of materials. <https://cordis.europa.eu/project/id/310498>

April 2014 - October 2015: Ministry of Education, Lifelong Learning and Religious Affairs in the context of the Operational Program "Education and Lifelong Learning" – "Aristeia II" project “**SHELL**” (**SELF HEALING NANOMATERIALS FOR PROTECTION OF METAL ALLOYS**, Code no: 3456.). *My role was:* Writing deliverables, milestones and publications; synthesis and characterization of coatings and nanocomposites; corrosion evaluation of coatings; support in thesis of undergraduate students.

October 2014 - November 2014: Greek project “**MARIPAINTS**” (Novel Self-Healing Eco-friendly **Coatings with Antifouling and Anticorrosion** Properties for Maritime Applications, ESPA, Code: 11ΣΥΝ_5_1274, 2013-2015, overall budget: 172, 860.00 €). *My role was:* Writing deliverables, milestones and publications; synthesis and characterization of coatings and nanocomposites; corrosion evaluation of coatings.

September 2012 - March 2013: Project “Investigation and treatment of **corrosion mechanisms in metallic cooling water circuit** elements” of the building of the Hellenic Telecommunications Organization S.A. *My role was:* Corrosion evaluation of pipelines.

*March 2005
- October 2013:*

Chemist-Researcher

National Center of Scientific Research “Demokritos”,
Patr. Gregoriou E' & 27, Neapoleos St., Agia Paraskevi, Greece GR-153 41.

- Management (Leader) of work packages,
- Studies on **physicochemical** properties of nanomaterials
- Synthesis and characterization of coatings and nanocomposites,
- Study of **corrosion** processes on materials,
- Support in Thesis of undergraduate students.



October 2012 - October 2013: Greek-China collaborative project “**COLNOVREC**” (Linear-focus concentrating **solar collector** based on a novel receiver - Development and demonstration, ESPA, Code: 12CHN100, overall budget: 160, 860.00 €). *My role was:* Synthesis and characterization of coatings and nanocomposites.

February 2012 – September 2013: Project in the framework of FP7-ERC-IDEAS “**NANOTHERAPY**” (A Novel **Nano-container drug carrier** for targeted treatment of prostate cancer, Grant agreement no.: 232959, overall budget: € 2, 000, 000). *My role was:* Synthesis and characterization of hybrid organic-inorganic nanocontainers.

June 2008 - February 2012: Project FP7-NMP “**MUST**” (“Multi-Level Protection of Materials for Vehicles by “**SMART**” **Nanocontainers**”, EC Grant Agreement N° NMP3-LA-2008-214261, overall budget: € 10, 510, 970.60). *My role was:* Management (Leader) of work package; participating and making presentations in physical and online meetings of the consortiums; writing deliverables, milestones and publications; synthesis and characterization of coatings and nanocomposites; corrosion evaluation of coatings; support in thesis of undergraduate students.

March 2005 - May 2009: Integrated Project “**MULTIPROTECT**” (Advanced Environmentally Friendly **Multifunctional Corrosion Protection** by Nanotechnology, Contract N° NMP3-CT-2005-011783, overall budget: € 13, 667, 547). *My role was:* Management (Leader) of work package; participating and making presentations in physical and online meetings of the consortiums; writing deliverables, milestones and publications; synthesis and characterization of coatings and nanocomposites; corrosion evaluation of coatings; support in Thesis of undergraduate students.

October 2006 - **Teacher of Analytical Chemistry**

February 2009: on Institutes of Vocational Training “AKMI”, and Institute of Vocational Training “AIGALEO”

April - August 2004: **Chemist,**

Quality control of refreshments and drinks, IBS S.A. Menidi.

September 2003 - **Chemist,**

April 2004: Quality control of flour mechanical properties.

791 Supply and Transport Battalion. “Kapota” military camp.

July - September **Chemist,**

1999: Quality control. Practice training in the milk farm sector in the central laboratory materials.

DELTA DAIRY INDUSTRY S.A.

1998 -1999: **Teacher** of Chemistry – Physics.

MODEL STUDENT CENTER. Educational Sector.

May – August 1997: **Chemist,**

Quality control. Practice training based on distillation of petrol and benzene for chemical analysis.

HELLENIC ASPROPYRGOS REFINERY S.A.

WORK – ACADEMIC EXPERIENCE

2022 - ongoing: Co-teaching as Instructor in **BSc course** of the Hellenic Army Academy course:

1. Chemical Technology: Theory and laboratories

2014 - 2023: Co-teaching in **MSc course** in Interdisciplinary Postgraduate Program: “**Microsystems and Nanodevices**”, National Technical University of Athens, Greece:

2. Fabrication and Characterization of Nanostructures: Lecture and Laboratory. Nanoparticles, Thin films, Carbon nanotubes, Surfaces - Interfaces, Sol-Gel method, Radical polymerization.

2014 - 2023: Academic assistant, trainee in **MSc course** in Interdisciplinary Postgraduate Program: “**Microsystems and Nanodevices**”, National Technical University of Athens, Greece:

3. Experimental Techniques for Nanomaterials: Lecture and Laboratory. Sol-Gel method, Radical polymerization.

2014 - 2022: Academic assistant, trainee in **MSc course** in Interdisciplinary Postgraduate Program: “**Materials Science and Technology**”, National Technical University of Athens, Greece.

4. Composition, production processes and nanomaterials: Lecture and Laboratory. Sol-Gel method, Radical polymerization.

2010 - 2018: Academic assistant, trainee in **BSc courses** in School of Chemical Engineering, Department of Materials Science and Technology, National Technical University of Athens, Greece:

5. Nanostructures and Nanomaterials: Lecture and Laboratory. Sol-Gel method, Radical polymerization.

6. Radiochemistry: Lecture and Exercises. Nuclei, Radiation, Radioactive elements, Interaction of radiation with matter, Nuclear energy.

Education body: Institutes of Vocational Training

February 2023 – **Teacher of Cosmetology II.**

June 2023:

- Specialty: "Technician of Medicines, Cosmetics and Related Products".
Public Institute of Vocational Training "Amarousiou".
- February 2023 – June 2023:* **Teacher of Cosmetology II, Elements of Chemistry – Cosmetology.**
Specialties: "Pharmacy Assistant", "Esthetics and Make-up Art Specialist".
Public Institute of Vocational Training "Zografou".
- October 2022 - June 2023:* **Teacher of General Chemistry, Elements of Chemistry – Cosmetology.**
Specialties: "Nutrition and Dietetics Executive", "Esthetic Podiatry Technician for Onychoplasty".
Public Institute of Vocational Training "Chalandriou".
- October 2022 - February 2023:* **Teacher of General Chemistry; Physical and Chemical Procedures.**
Specialty: "Pharmacy assistant".
Public Institute of Vocational Training "Ampelokipon".
- October 2021 – June 2022:* **Teacher of Organic Chemistry; Physical and Chemical Procedures.**
Specialty: "Pharmacy assistant".
Public Institute of Vocational Training "Zografou".
- October 2021 – June 2022:* **Teacher of General Chemistry; Organic Chemistry; Physical and Chemical Procedures.**
Specialty: "Technician of Pharmaceutical, Cosmetics and Similar Products".
Public Institute of Vocational Training "Kifissia".
- February 2021- June 2022:* **Teacher of Chemical Technology.**
Specialty: "Pharmacy assistant".
Public Institute of Vocational Training "Amarousiou".
- February 2021- June 2021:* **Teacher of Organic Chemistry; Chemical Technology.**
Specialty: "Pharmacy assistant".
Public Institute of Vocational Training "Dafnis-Imittou".
- October 2008 - February 2009:* **Teacher of Analytical Chemistry.**
Specialty: "Medicines and Cosmetics Technician".
Institutes of Vocational Training "AKMI".
- October 2006 - June 2008:* **Teacher of Analytical Chemistry.**
Specialty: "Medicines and Cosmetics Technician".
Institute of Vocational Training "AIGALEO".

EDUCATION AND TRAINING

- 2010: PhD in Chemistry.** National and Kapodistrian University of Athens, School of Science, Department of Chemistry, Greece, in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece. "Electrochemical deposition of multifunctional conductive polymers for corrosion protection of metals" [10.12681/eadd/25933](https://doi.org/10.12681/eadd/25933) (Supervisor: Maria Andrianopoulou-Palaiologou, Assistant Professor of Physical Chemistry).
- 2002: Master Degree in Polymer Science.** National and Kapodistrian University of Athens, School of Science, Department of Chemistry, Greece, "Copolymers of methacrylic acid (M) with styrene (S) and butadiene (B) of type BM, SBM, SBSM, MBM and MSBSM. Synthesis, characterization and thermal properties". Anionic polymerization, standard polymers, vacuum technique, (Supervisor: Nikos Hadjichristidis, Distinguished Professor, Chemical Science).
- 2000: BSc in Chemistry** at the National and Kapodistrian University of Athens, School of Science, Department of Chemistry, Greece
- 2000: Certificate of Oenological Education.** National and Kapodistrian University of Athens, School of Science, Department of Chemistry, Greece.

LANGUAGE SKILLS

Mother tongue Greek

UNDERSTANDING

SPEAKING

WRITING

Other language(s)	Listening	Reading	Spoken interaction	Spoken production	
English:	C2	C2	C2	C2	C2
Certificate of Proficiency in English (The University of Michigan)					
Deutsch:	B1	B1	B1	B1	B1
Levels: A1/2: Basic user - B1/2: Independent user - C1/2: Proficient user Common European Framework of Reference for Languages					

Participation in the training/supervision of graduate and post graduate students

1. PhD Theses [4]

- 2016 - 2022: Irini Kanellopoulou - "Development, optimization and manufacturing of functional composite materials for structural applications", National Technical University of Athens, Greece, 2019 (Supervisor: Costas Charitidis, Professor).
- 2016 - 2021: Panagiotis Goulis - "Development and Processing of advanced polymers and carbon-based composite materials", National Technical University of Athens, Greece, 2019 (Supervisor: Costas Charitidis, Professor).
- 2014 - 2020: Evangelia Karaxi - "Development and characterization of nanocomposites for their application in protective metal coatings", National Technical University of Athens, Greece, 2019 (Supervisor: Costas Charitidis, Professor).
- 2008 - 2012: Andronikos Balaskas - "Formulation and characterization of polymeric coatings with nanocontainers on metals for corrosion protection in marine environment", Department of Chemistry, School of Sciences, National and Kapodistrian University of Athens, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2012 (Supervisors: Prof. Nikos Hadjichristidis/ Dr. George Kordas).

2. MSc Theses [7]

- 2019 - 2021: Christina Podara – "Synthesis of core / shell phase change materials and study of their properties for energy storage", Interdisciplinary Postgraduate Programme: "Materials Science and Technology", National Technical University of Athens, Greece, 2019 (Supervisor: Costas Charitidis, Professor).
- 2018 - 2019: Athanasia Chrysanthopoulou - "Cement Mortar Reinforced with Carbon Nanotubes and Carbon Fibers: Study of their Mechanical, Electrical/ Piezoelectric Properties", Interdisciplinary Postgraduate Programme: "Microsystems and Nanodevices", National Technical University of Athens, Greece, 2019 (Supervisor: Costas Charitidis, Professor).
- 2016 - 2017: Maria-Foteini Kalogerini - "Synthesis of polymeric biodegradable microspheres and release study of encapsulated hydrophilic substance", Interdisciplinary Postgraduate Programme: "Microsystems and Nanodevices", National Technical University of Athens, Greece, 2017 (Supervisor: Costas Charitidis, Professor).
- 2013 - 2014: Vasiliki Halepli - "Nanopods with Anti-corrosion Function: Development, Characterization and Evaluation of their Functionality", Interdisciplinary Postgraduate Programme: "Microsystems and Nanodevices", National Technical University of Athens, Greece, 2014 (Supervisor: Costas Charitidis, Professor).
- 2011 - 2013: Evangelia Karaxi - "Composition and characterization of hybrid inorganic-organic coatings with integrated nanotubes for corrosion protection of magnesium alloys", Interdisciplinary Postgraduate Programme: "Materials Science and Technology", National Technical University of Athens, Greece, 2013 (Supervisor: Costas Charitidis, Professor).
- 2011 - 2013: Eleni Milioni - "Composition and Characterization of Organic Micro Containers with Integrated Microorganisms for Self-healing of Building Materials", Interdisciplinary Postgraduate Programme: "Materials Science and Technology", National Technical University of Athens, Greece, 2013 (Supervisor: Costas Charitidis, Professor).
- 2006 - 2008: Andronikos Balaskas - "Comparative study and improvement of anticorrosive properties of polypyrrole conducting coatings on aluminium and aluminium alloys", Department of Chemistry, School of Sciences, National and Kapodistrian University of Athens, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2008 (Supervisors: Prof. E. Kaplanoglou/ Dr. George Kordas).

3. Diploma Theses [15]

- 2021 - 2022: Stefania Mavromati – "Study of anti-corrosion action of anti-rust pigments for the protection of metal structures", National Technical University of Athens, Greece, 2019 (Supervisor: Costas Charitidis, Professor).

- 2018 – Panagiota Stamatogianni - "Intermetallics and black mild steel: substitution of Critical Raw Materials, corrosion and mechanical properties", National Technical University of Athens, Greece, 2019 (Supervisor: Costas Charitidis, Professor).
2019:
- 2017 – Efthymios Damopoulos - "Reinforcement of cement mortars with carbon nanotubes and study of mechanical properties", National Technical University of Athens, Greece, 2018 (Supervisor: Costas Charitidis, Professor).
2018:
- 2012 – Anna-Maria Routsis - "Hybrid inorganic protective coatings with nanoparticles on building materials", National Technical University of Athens, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2013 (Supervisor: Costas Charitidis, Professor).
2013:
- 2012 – Penelope Pelekis - "Electrochemical deposition of water-based epoxy systems and study of anti-corrosion properties", National Technical University of Athens, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2013 (Supervisor: Costas Charitidis, Professor).
2013:
- 2012 – Evangelia - Nefeli Athanasopoulou - "Self-healing Polymeric Coatings of Metal Alloys", National Technical University of Athens, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2013 (Supervisor: Costas Charitidis, Professor).
2013:
- 2011 – Dimitrios Perivoliotis - "Composition and Characterization of Nanocomposite Ceramic Coatings of Organically Modified Silicate Compounds in Aluminum Alloy 2024 - T3", National Technical University of Athens, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2012 (Supervisor: Costas Charitidis, Professor).
2012:
- 2011 – Malamatenia Koklioti - "Raman spectroscopy in compounds of pharmaceutical interest", National Technical University of Athens, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2012 (Supervisor: Costas Charitidis, Professor).
2012:
- 2010 – Evangelia Karaxi - "Activation of the surface of spherical nanotubes in order to create suspensions with optimal rheological properties", National Technical University of Athens, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2011 (Supervisors: Prof. Athina Tsetsekou/ Dr. George Kordas).
2011:
- 2010 – Emmanuel Mygiakis - "Measurement of nanocontainers' porosity", University of Patras, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2011 (Supervisors: Prof. Sotirios Baskoutas/ Dr. George Kordas).
2011:
- 2009 – Zacharenia-Irini Kostaki - "Synthesis and Characterization of Copper Oxide Nanocontainers", University of Patras, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2010 (Supervisor: Dr. George Kordas).
2010:
- 2007 – Panagiota Kontogianni - "Synthesis and Characterization of Hollow Nanospheres of Titanium Compounds with Iron Blends", University of Patras, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2008 (Supervisors: Prof. Dimitris Foteinos/ Dr. George Kordas).
2008:
- 2007 – Georgios Pappas - "Production and Characterization of Biological Nanospheres Type SiO₂-CaO", University of Patras, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2008 (Supervisors: Prof. Sotirios Baskoutas/ Dr. George Kordas).
2008:
- 2006 – Christos Tapinos - "Preparation and Characterization of Nanocontainers Fe₂O₃", University of Patras, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2007 (Supervisors: Prof. Dimitris Foteinos/ Dr. George Kordas).
2007:
- 2005 – Evangelos Mekeridis - "Modification of Behavior of Amorphous Sol-Gel Coatings in Nanosphere-Enriched Metals or Nanoparticles", University of Patras, Greece (in collaboration with the National Center of Scientific Research "Demokritos", Agia Paraskevi, Greece), 2006 (Supervisors: Prof. Dimitris Foteinos/ Dr. George Kordas).
2006:

ADDITIONAL INFORMATION

Computer Skills Microsoft Office, Origin, Adobe Photoshop

Driving licence B

Member of Greek Chemists Association

Former President of the council of parents and guardians of the 1st Primary School Glyka Nera

Registered to the scheme "Friends of the European Federation of Corrosion (EFC)"

- Seminars** 1. Attendance of the Workshop – MUST Training Course: "Adhesives" (SIKA AG – Zurich Switzerland), 17-18 March, 2011

2. Training course on “Electrochemical Impedance Spectroscopy” – MUST Project, 9 - 30 October 2010, Instituto Superior Technico of Lisbon (Portugal)
3. Attendance of the Workshop – MUST Training Course: “Cleaning & Pre-treatment” (Chemetall, Frankfurt, Germany), “Risk Analysis of new products and technologies” (Steinbeis Advanced Risk Technologies GmbH R-Tech, Stuttgart, Germany), “Automotive Applications” (Daimler’s Mercedes- Benz), 9-12 March, 2009
4. Training course on “Electrochemical Impedance Spectroscopy” – - MULTIPROTECT Training Course, 1 - 14 June 2008, University of Aveiro (Portugal)
5. Attendance of the Vicenza Workshop - First MULTIPROTECT Training Course: “The use of the electrochemical techniques to study coatings protection and degradation”, 25 - 27 May 2006, Vicenza (Italy)
6. Attendance of IUPAC 2001 international conference: “International Symposium on Ionic Polymerization”, 22 – 26 October 2001, Crete, Greece.

Oral Presentations - speaker I.A. Kartsonakis [29]

Invited speaker in International Conferences [5]

1. Advances in Smart Coatings: Classification, Improvements and Applications, 1st Corrosion and Materials Degradation, Web Conference, 17-19 May 2021
2. Multifunctional Admixtures for Concrete Reinforcement Against Material Degradation, 4th Portuguese-Brazilian meeting on degradation of concrete structures, DEGRADA 2020, 18-19 March 2021, online format.
3. DECOAT Materials Development, “Ecomondo – The green technology expo”, 5-8 November 2019, Rimini EXPO CENTRE – Italy.
4. Smart admixtures with active functionality in concrete, “Durable Concrete for Infrastructure under Severe Conditions - Smart Admixtures, Self-responsiveness and Nano-additions”, 10-11 September 2019, Gent, Belgium.
5. Advancement in corrosion resistance characterisation of multifunctional materials and structures, Frontiers in Materials Characterisation towards Industrial Translation (FRIMACHAT) 2017, INTERNATIONAL WORKSHOP, 11-13th July 2017, University of Limerick, Limerick, Ireland.

International Conferences [21]

6. Assessment of corrosion inhibitive behavior of 2-mecraptobenzothiazole and sodium phosphate dibasic on industrial steel pipelines, “EUROCORR 2018 - Applied Science with constant Awareness” September, 9-13 2018, ICE Krakow, Poland.
7. Improvement of corrosion behaviour of dissimilar friction stir welded aluminium alloys reinforced with nanoadditives, “EUROCORR 2017 - European Corrosion Congress 2017, 20th International Corrosion Congress & Pro-cess Safety Congress 2017”, 3-7 September 2017, Prague, Czech Republic.
8. Corrosion and mechanical performance of a novel antifouling system containing nanoreservoirs, “EUROCORR 2017 - European Corrosion Congress 2017, 20th International Corrosion Congress & Process Safety Congress 2017”, 3-7 September 2017, Prague, Czech Republic.
9. Self-Healing Microcomposites for Corrosion Protection of Hot Dip Galvanized Steel, “EUROCORR 2015 - The European Corrosion Congress”, 6-10 September 2015, Graz, Austria.
10. Evaluation of corrosion properties of dissimilar friction stir welded AA5083-H111 and AA6082-T6 reinforced with nanoadditives. “ICEAF IV, 4th International Conference on Engineering against Fracture”, 24-26 June 2015, Skiathos, Greece.
11. Evaluation of core-shell Mg-Al-NO₃ layered double hydroxides for chlorides entrapment. “ICEAF IV, 4th International Conference on Engineering against Fracture”, 24-26 June 2015, Skiathos, Greece.
12. Self-healing cerium molybdate and copper oxide nanomaterials for protection of metal alloys for marine applications, EEInS2015-ASHRAE International Conference on Environment and Energy in Ships, 22-24 May 2015, Piraeus, Greece.
13. The influence of nanotraps and nanocontainers into multilayer coatings for corrosion protection of Mg alloy ZK30, “EUROCORR 2013 - The European Corrosion Congress”, 1-5 September 2013, Estoril, Portugal.
14. Encapsulation of CaCO₃-producing bacterial strains into containers for cement self-restoration. “ICEAF III, 3rd International Conference on Engineering against Fracture”, 26-28 June 2013, Kos, Greece.
15. Multilayer epoxy coatings including nanotraps and nanocontainers for corrosion protection of HDG steel. “ICEAF III, 3rd International Conference on Engineering against Fracture”, 26-28 June 2013, Kos, Greece.
16. The influence of nanotraps and nanocontainers into hybrid organic-inorganic coatings for corrosion protection of Mg ZK30. “ICEAF III, 3rd International Conference on Engineering against Fracture”, 26-28 June 2013, Kos, Greece.
17. Study of corrosion of copper in industrial cooling systems. “ICEAF III, 3rd International Conference on Engineering against Fracture”, 26-28 June 2013, Kos, Greece.
18. Corrosion investigation and evaluation of mechanical and structural properties of powder coatings for industrial-domestic applications. “ICEAF III, 3rd International Conference on Engineering against Fracture”, 26-28 June 2013, Kos, Greece, Pages 953-962.

19. Corrosion resistance of magnesium alloy ZK10 coated with hybrid organic-inorganic film including containers. "EUROCORR 2012 - The European Corrosion Congress", 9-13 September 2012, Istanbul, Turkey.
20. Hybrid organic-inorganic coatings including containers for corrosion protection of magnesium alloy ZK10. XI International Conference on Nanostructured Materials, NANO2012, 26-31 August 2012, Rhodes, Greece.
21. Studying the Incorporation of Ceramic Nanocontainers into Epoxy Coatings for the Antifouling and Corrosion Protection of Hot Dip Galvanized Steel, 12th Paint Symposium Research and Technology of Paints Varnishes & Inks New Developments 16-17 March NTUA Polytechniupoli Zographou, Greece.
22. Improvement of Anticorrosion Properties of Epoxy Coatings on Steel with Nanocontainers. EUROCORR 2011, "Developing Solutions for the Global Challenge", 4-8 September 2011, Stockholm, Sweden.
23. Improvement of Anticorrosion Properties of Epoxy Coatings on Steel with Nanocontainers. "ICEAF II, 2nd International Conference on Engineering against Fracture", 22-24 June 2011, Mykonos, Greece.
24. ORMOSIL coatings containing loaded nanocontainers for corrosion protection of magnesium alloy ZK10. "EUROCORR 2009 - The European Corrosion Congress", 6-10 September 2009, Nice, France.
25. Synthesis, Characterisation and Antibacterial Action of Hollow Ceria Nanospheres and Hollow Titania Spheres. "14th International Sol-Gel Conference", 2-7 September 2007, Montpellier, France.
26. "ICSAM-2007. The International Conference on Structural Analysis of Advanced Materials", 2-6 September 2007, Patra (Greece).

National Conferences [3]

27. Research and Innovation in the field of construction in cement-based building material, 18th Concrete Conference", 29-31 March 2018, Athens, Greece.
28. Functionalized Innovative Carbon Fibers Developed from Novel Precursors with Cost Efficiency and Tailored Properties. 11th Panhellenic Scientific Chemical Engineering Congress 25-27 May 2017, Thessaloniki, Greece.
29. Studying the effects of corrosion inhibitors on magnesium alloy ZK30 and hot dip galvanized steel. 9th Panhellenic Scientific Chemical Engineering Congress 23-25 May 2013, Athens, Greece.

Conference Organization

Member of the organizing committee of the international conference: "XI International Conference on the Physics of Non-Crystalline Solids", 29 October – 3 November 2006, Rhodes (Greece).

PUBLICATIONS

Patents [3]

1. "Multifunctional Coatings including Nanocontainers with Self-Healing, Antibacterial and Photocatalytic Properties", G.C. Kordas*, **I.A. Kartsonakis**, A.C. Balaskas, *Patent no 1007721*.
2. "Hybrid Coatings including Nanocontainers with Antifouling Properties", G.C. Kordas*, **I.A. Kartsonakis**, A.C. Balaskas, A. Karatzas, *Patent no 1007729*.
3. "Functional Multi-stimuli responsive polymeric nanocontainers-microcontainers as drug delivery systems", G.C. Kordas, **I.A. Kartsonakis**, et al., *Patent no 1007882*.

Editor in International Books [4]

1. MDPI, Basel, Switzerland. **Ioannis A. Kartsonakis (Editor)**. *Phase Change Materials: Design and Applications*. This is a reprint of articles from the Special Issue published online in the open access journal Applied Sciences (ISSN 2076-3417) (available at: <https://www.mdpi.com/books/book/6004>). ISBN 978-3-0365-5062-6 (Hbk) ISBN 978-3-0365-5061-9 (PDF)
2. MDPI, Basel, Switzerland. **Ioannis A. Kartsonakis (Editor)**. *Progress of Fiber-Reinforced Composites: Design and Applications*. This is a reprint of articles from the Special Issue published online in the open access journal Applied Sciences (ISSN 2076-3417) (available at: <https://www.mdpi.com/books/book/6028>).
3. MDPI, Basel, Switzerland. **Ioannis A. Kartsonakis (Editor)**. *Synthesis and Characterization of Nanomaterials*. This is a reprint of articles from the Special Issue published online in the open access journal Fibers (ISSN 2079-6439) (available at: <https://www.mdpi.com/books/book/4856>). ISBN 978-3-0365-2943-1 (Hbk) ISBN 978-3-0365-2942-4 (PDF).
4. MDPI, Basel, Switzerland. **Ioannis A. Kartsonakis (Editor)**. *Advances in Organic Corrosion Inhibitors and Protective Coatings*. This is a reprint of articles from the Special Issue published online in the open access journal Applied Sciences (ISSN 2076-3417) (available at: <https://www.mdpi.com/books/book/4222>). ISBN 978-3-0365-0640-1 (Hbk), ISBN 978-3-0365-0641-8 (PDF) (book).

Book chapters in International Books [2]

1. European Federation of Corrosion: Maney Publishing. Lorenzo Fedrizzi, Wolfram Furbeth & Fátima Montemor (Eds.). Self-healing properties of new surface treatments: 2011: "Influence of the doping agent on the corrosion protection properties of polypyrrole grown on Al-2024-T3", Andronikos C. Balaskas, **Ioannis A. Kartsonakis**, Ioannis L. Daniilidis, George C. Kordas, pp. 279-292. ISBN-13: 978-1-906540-36-4 (book).
2. Walter de Gruyter GmbH, Berlin/Boston. J. Paulo Davim, Constantinos A. Charitidis (Eds.). Advanced Composites; Nanocomposites: materials, manufacturing and engineering: 2013: "Synthesis and characterization of ceramic hollow nanocomposites and Nanotraps", **I.A. Kartsonakis**, C.A.Charitidis, G.C. Kordas, pp. 1-31. ISBN 9783110267426 (e-book).

International peer-reviewed Journals – articles [72]

1. "Toxicity assessment of core-shell and superabsorbent polymers in cell-based systems", **Ioannis A. Kartsonakis**, Periklis Vardakas, Panagiotis Goulis, Nikolaos Perkias, Ioannis D. Kyriazis, Zoi Skaperda, Fotios Tekos, Constantinos A. Charitidis, Demetrios Kouretas, *Environmental Research*, **2023**, 115772; <https://doi.org/10.1016/j.envres.2023.115772>
2. "Editorial: Biofouling, Biocorrosion and Biodeterioration: Recent Advancements", **Ioannis A. Kartsonakis***, Viswanathan S. Saji, Leto Aikaterini Tziveleka, Raman Singh, Daniel J. Blackwood and Tingyue Gu, *Front. Bioeng. Biotechnol., Sec. Industrial Biotechnology*, Volume 11, **2023**; [10.3389/fbioe.2023.1144671](https://doi.org/10.3389/fbioe.2023.1144671)
3. "Pristine, carboxylated, and hybrid multi-walled carbon nanotubes exert potent antioxidant activities in in vitro-cell free systems", Periklis Vardakas, **Ioannis A. Kartsonakis**, Ioannis D Kyriazis, Panagiotis Kainourgios, Aikaterini Flora A Trompeta, Constantinos A Charitidis, *Environmental Research*, **2023**, 220, 115156; <https://doi.org/10.1016/j.envres.2022.115156>
4. Special Issue on "Progress of Fiber-Reinforced Composites: Design and Applications", **Ioannis A. Kartsonakis**, *Appl. Sci.* **2022**, 12, 8030; <https://doi.org/10.3390/app12168030>
5. Special Issue on "Phase Change Materials: Design and Applications", **Ioannis A. Kartsonakis**, *Appl. Sci.* **2022**, 12, 7770; <https://doi.org/10.3390/app12157770>
6. Special Issue on "Synthesis and Characterization of Nanomaterials", **Ioannis A. Kartsonakis**, *Fibers*, **2021**, 10, 9; <https://doi.org/10.3390/fib10010009>
7. "Synthesis and characterization of SiO₂@CNTs microparticles; evaluation of microwave induced heat production", Panagiotis Kainourgios, **Ioannis A. Kartsonakis***, Costas A. Charitidis*, *Fibers*, **2021**, 9, 81; <https://doi.org/10.3390/fib9120081>
8. "Silver nanoparticles grown on crosslinked poly(methacrylic acid) microspheres: Synthesis, characterization, and antifungal activity evaluation", Panagiotis Kainourgios, Leto-Aikaterini Tziveleka, **Ioannis A. Kartsonakis**, Efstathia Ioannou, Vassilios Roussis, Costas A. Charitidis*, *Chemosensors* **2021**, 9, 152; <https://doi.org/10.3390/chemosensors9070152>
9. "Triggerable Super Absorbent Polymers for Coating Debonding Applications", **Ioannis A. Kartsonakis***, Panagiotis Goulis, Costas A. Charitidis*, *Polymers*, 13, 1432, **2021**; [10.3390/polym13091432](https://doi.org/10.3390/polym13091432)
10. "Towards Phase Change Materials for Thermal Energy Storage: Classification, Improvements and Applications in the Building Sector", Christina V. Podara, **Ioannis A. Kartsonakis***, Costas A. Charitidis, *Applied Sciences*, 11, 1490, **2021**; [doi: https://www.mdpi.com/2076-3417/11/4/1490](https://www.mdpi.com/2076-3417/11/4/1490)
11. "The effect of Superabsorbent Polymers on the microstructure and self-healing properties of cementitious-based composite materials", Irene A. Kanellopoulou, **Ioannis A. Kartsonakis**, Costas A. Charitidis, *Applied Sciences*, 11, 700, **2021**; [doi: 10.3390/app11020700](https://doi.org/10.3390/app11020700)
12. Special Issue on "Advances in Organic Corrosion Inhibitors and Protective Coatings", **Ioannis A. Kartsonakis***, *Applied Sciences*, 11, 123, **2021**; <https://www.mdpi.com/2076-3417/11/1/123>
13. "Synthesis and characterization of core-shell copolymer with different glass transition temperatures", Panagiotis Goulis, **Ioannis A. Kartsonakis***, Costas A. Charitidis, *Fibers*, **2020**, 8, 71; doi:[10.3390/fib8110071](https://doi.org/10.3390/fib8110071)
14. "Corrosion protection evaluation of mild steel: The role of hybrid materials loaded with inhibitors", **Ioannis A. Kartsonakis**, Costas A. Charitidis, *Applied Sciences*, 10, 6594, **2020**; doi:[10.3390/app10186594](https://doi.org/10.3390/app10186594)
15. "Comparative Study on the Corrosion Inhibitive Effect of 2-Mercaptobenzothiazole and Na₂HPO₄ on Industrial Conveying API 5L X42 Pipeline Steel", **Ioannis A. Kartsonakis**, Panagiota Stamatogianni, Evangelia K. Karaxi, Costas A. Charitidis, *Applied Sciences*, 10(1), 290, **2020**, doi:[10.3390/app10010290](https://doi.org/10.3390/app10010290)
16. "Synthesis and processing of melt spun materials from esterified lignin with lactic acid", Panagiotis Goulis, **Ioannis A. Kartsonakis**, George Konstantopoulos, Costas A. Charitidis, *Applied Sciences*, 9(24), 5361, **2019**, doi: [10.3390/app9245361](https://doi.org/10.3390/app9245361)
17. "Assessment of self-healing epoxy-based coatings containing microcapsules applied on hot dipped galvanized steel", Evangelia K Karaxi, **Ioannis A Kartsonakis**, Costas A Charitidis, *Frontiers in Materials*, section Environmental Materials, 6:222, **2019**, <https://doi.org/10.3389/fmats.2019.00222>
18. "Effect of submicron admixtures on mechanical and self-healing properties of cement-based composites", Irene Kanellopoulou, Evangelia K. Karaxi, Anna Karatza, **Ioannis A. Kartsonakis** and Costas Charitidis, *Fatigue & Fracture of Engineering Materials & Structures*, 1-16, **2019**, <https://doi.org/10.1111/ffe.12998>

19. "Combined effects of multi-walled carbon nanotubes and lignin on polymer fiber-reinforced epoxy composites", Panagiotis Goulis, **Ioannis A. Kartsonakis**, Konstantinos Mpalias and Costas Charitidis, *Materials Chemistry and Physics*, 218, 18-27, **2018**, <https://doi.org/10.1016/j.matchemphys.2018.07.025>
20. "Fabrication of carbon nanotubes reinforced mortar specimens: evaluation of mechanical integrity and pressure-sensitive properties", E.K. Karaxi, I.A. Kanellopoulou, A. Karatza, **I.A. Kartsonakis**, C.A. Charitidis, *MATEC Web of Conferences*, **2018**, 188,01019, <https://doi.org/10.1051/mateconf/201818801019>
21. "Hybrid superabsorbent polymer networks based on crosslinked poly(methacrylic acid) encapsulated with SiO₂ for novel applications", I.A. Kanellopoulou, E.K. Karaxi, A. Karatza, **I.A. Kartsonakis**, C.A. Charitidis, *MATEC Web of Conferences*, **2018**, 188,01025, <https://doi.org/10.1051/mateconf/201818801025>
22. "Effect of Lignin and CNTs on the properties of melt-spun polymeric fibers", P. Goulis, **I.A. Kartsonakis**, K. Mpalias, C.A. Charitidis, *MATEC Web of Conferences*, **2018**, 188,01026, <https://doi.org/10.1051/mateconf/201818801026>
23. "Functionalized Innovative Carbon Fibers Developed from Novel Precursors with Cost Efficiency and Tailored Properties", C.A. Charitidis, D.A. Dragatogiannis, P. Goulis, **I.A. Kartsonakis**, E. Koumoulos, S. Soulis, S. Anagnou, K. Mpalias, *Materials Today: Proceedings*, **2018**, 5 (14), 27662-27671, <https://doi.org/10.1016/j.matpr.2018.09.087>
24. "Electrochemical surface functionalization of carbon fibers for chemical affinity improvement with epoxy resins", P. Kainourgios, **I.A. Kartsonakis**, D.A. Dragatogiannis, E.P. Koumoulos, P. Goulis, C.A. Charitidis, *Applied Surface Science*, 416, 593-604, **2017**, <http://dx.doi.org/10.1016/j.apsusc.2017.04.214>
25. "Thermal treatment of melt spun fibers based on High Density PolyEthylene and Lignin", P. Goulis, G. Konstantopoulos, **I.A. Kartsonakis**, K. Mpalias, S. Anagnou, D. Dragatogiannis, C. Charitidis, *C-Journal of Carbon Research*, 3(4), 35, **2017**, <https://doi.org/10.3390/c3040035>
26. "Poly(lactic acid) Microparticles for Drug Carriers in Enhancement of Controlled Release Systems towards 3D Printing", Kalogerini M., **Kartsonakis I.A.**, Brasinika D., Koumoulos E.P., Charitidis C.A., *International Journal of Nanomedicine and Nanosurgery*, 3(2) (in press), **2017**, <http://dx.doi.org/10.16966/2470-3206.123>
27. "Advanced characterization of by-product carbon film obtained by thermal chemical vapor deposition during CNT manufacturing", A-F. A. Trompeta, E.P. Koumoulos, **I.A. Kartsonakis**, C.A. Charitidis, *Manufacturing Review*, 4, 7, **2017**, <https://doi.org/10.1051/mfreview/2017006>
28. "Advancement in corrosion resistance of AA 2024-T3 through sol-gel coatings including nanocontainers", **I.A. Kartsonakis**, E.P. Koumoulos, C.A. Charitidis, *Manufacturing Review*, 4, 2, **2017**, <https://doi.org/10.1051/mfreview/2017001>
29. "A comparative study of corrosion inhibitors on hot-dip galvanized steel", **I.A. Kartsonakis**, S.G. Stanciu, A.A. Matei, R. Hristu, A. Karantonis, C.A. Charitidis, *Corrosion Science*, 112, 289-307, **2016**, <https://doi.org/10.1016/j.corsci.2016.07.030>
30. "Corrosion behaviour of dissimilar friction stir welded aluminium alloys reinforced with nanoadditives", **I.A. Kartsonakis**, D.A. Dragatogiannis, E.P. Koumoulos, A. Karantonis, C.A. Charitidis, *Materials & Design*, 102, 56-67, **2016**, <https://doi.org/10.1016/j.matdes.2016.04.027>
31. "Dissimilar friction stir welded between AA5083 and AA6082 Al alloys reinforced with TiC nanoparticles", D.A. Dragatogiannis, E.P. Koumoulos, **I. Kartsonakis**, D.I. Pantelis, P.N. Karakizis, C.A. Charitidis, *Materials and Manufacturing Processes*, 1-14, **2016**, DOI: 10.1080/10426914.2015.1019095
32. "Evaluation of polymer composites based on core/shell polystyrene/Mg-Al-NO₃ layered double hydroxides for chloride entrapment", **I.A. Kartsonakis**, E.K. Karaxi, C.A. Charitidis, *Plastics, Rubber and Composites: Macromolecular Engineering*, 45 (2), 50-57, **2016**, <https://doi.org/10.1080/14658011.2015.1133116>
33. "Nanomechanical performance of protective coatings reinforced with core/shell composite materials", E.P. Koumoulos, D.A. Dragatogiannis, **I.A. Kartsonakis**, E.K. Karaxi, Th. Kehagias, C.A. Charitidis, *International Journal of Structural Integrity*, 7 (5), 671-689, **2016**, <https://doi.org/10.1108/IJSI-10-2015-0051>
34. "Investigation of MWCNTs addition into poly-dimethylsiloxane based coatings", E.P. Koumoulos, Th. Parousis, A-F. A. Trompeta, **I.A. Kartsonakis**, C.A. Charitidis, *Plastics, Rubber and Composites: Macromolecular Engineering*, 45 (3), 106-117, **2016**, <https://doi.org/10.1080/14658011.2016.1144376>
35. "Corrosion investigation and evaluation of mechanical and structural properties of powder coatings", E.P. Koumoulos, **I.A. Kartsonakis**, G. Vlachakis, M. Vlachakis, C.A. Charitidis, *International Journal of Structural Integrity*, 7, 2-24, **2016**, <https://doi.org/10.1108/IJSI-11-2013-0040>
36. "Deformation mechanism during nanoindentation creep and corrosion resistance of Zn", D.A. Dragatogiannis, E.P. Koumoulos, **I.A. Kartsonakis**, C.A. Charitidis, *International Journal of Structural Integrity*, 7, 47-69, **2016**, <https://doi.org/10.1108/IJSI-07-2014-0034>
37. "Nanomechanical properties and thermal decomposition of Cu-Al₂O₃ composites for FGM applications", E.P. Koumoulos, **I.A. Kartsonakis**, A. Bakolas, C.A. Charitidis, *Manufacturing Review* 3, 20, **2016**, <https://doi.org/10.1051/mfreview/2016022>
38. "Chloride ion entrapment by calcined layered double hydroxides", E.K. Karaxi, **I.A. Kartsonakis**, C.A. Charitidis, *International Journal of Structural Integrity*, 7, 788-806, **2016**, <https://doi.org/10.1108/IJSI-04-2016-0012>
39. "Influence of lignin modification on the mechanical properties of lignin/PEO blends", S. Anagnou, E. Milioni, C. Mpalias, **I.A. Kartsonakis**, E.P. Koumoulos, C.A. Charitidis, *International Journal of Structural Integrity*, 7, 762-772, **2016**, <https://doi.org/10.1108/IJSI-11-2015-0057>

40. "Evaluation of the protective ability of typical corrosion inhibitors for magnesium alloys towards the Mg ZK30 variant", **I.A. Kartsonakis**, S.G. Stanciu, A. Matei, E.K. Karaxi, R. Hristu, Antonis Karantonis, C.A. Charitidis*, Corrosion Science, 100, 194-208, 2015, <https://doi.org/10.1016/j.corsci.2016.07.030>
41. "Study of corrosion of copper in industrial cooling systems", **I.A. Kartsonakis**, E.P. Koumoulos, A. Karantonis, C.A. Charitidis, S. Dessypris, A. Monos, International Journal of Structural Integrity, 6, 617-635, 2015, <https://doi.org/10.1108/IJSI-10-2013-0039>
42. "Strategies towards novel carbon fiber precursors: the research results on the synthesis of PAN copolymers via AGET ATRP and on lignin as a precursor", S. Soulis, S. Anagnou, E. Milioni, C. Mpalias, **I.A. Kartsonakis**, I. Kanellopoulou, V. Markakis, E.P. Koumoulos, E. Kontou, C.A. Charitidis, NanoWorld Journal, 1 (3), 86-92, 2015, DOI: [10.17756/nwj.2015-011](https://doi.org/10.17756/nwj.2015-011)
43. "Synthesis, structural and nanomechanical properties of cobalt based thin films", Koumoulos E.P., Tsiourkitoudi V.P., **Kartsonakis I.A.**, Markakis V.E., Papadopoulos N., Hristoforu E., Charitidis C.A., International Journal of Structural Integrity, 6, 225-242, 2015, <https://doi.org/10.1108/IJSI-10-2013-0031>
44. "Carbon nanotube/polymer nanocomposites: a study on mechanical integrity through nanoindentation", E.P. Koumoulos, P. Jagdale, **I.A. Kartsonakis**, M. Giorelli, A. Tagliaferro, C.A. Charitidis, Journal of Polymer Composites, 36 (8), 1432-1446, 2015, <https://doi.org/10.1002/pc.23049>
45. "Multifunctional epoxy coatings combining a mixture of traps and inhibitor loaded nanocontainers for corrosion protection of AA2024-T3", **I.A. Kartsonakis***, E. Athanasopoulou, D. Snihrova, B. Martins, M.A. Koklioti, M.F. Montemor, G. Kordas, C.A. Charitidis*, Corrosion Science, 85, 147-159, 2014, <https://doi.org/10.1016/j.corsci.2014.04.009>
46. "Hybrid organic-inorganic coatings including nanocontainers for corrosion protection of magnesium alloy ZK30", **I.A. Kartsonakis***, E.P. Koumoulos, C.A. Charitidis, G. Kordas, Journal of Nanoparticle Research, 15, 1871, 2013, DOI: [10.1007/s11051-013-1871-3](https://doi.org/10.1007/s11051-013-1871-3)
47. "Photocatalytic action of cerium molybdate and iron-titanium oxide hollow nanospheres to escherichia coli", **I.A. Kartsonakis***, P. Kontogianni, G.S. Pappas, G. Kordas, Journal of Nanoparticle Research, 15, 1759, 2013, DOI: [10.1007/s11051-013-1759-2](https://doi.org/10.1007/s11051-013-1759-2)
48. "ORMOSIL-epoxy coatings with ceramic containers for corrosion protection of magnesium alloys ZK10", **I.A. Kartsonakis***, A.C. Balaskas, E.P. Koumoulos, C.A. Charitidis, G. Kordas, Progress in Organic Coatings, 76, 459-470, 2013, <https://doi.org/10.1016/j.porgcoat.2012.10.028>
49. "A Raman study of 8-Hydroxyquinoline release from loaded TiO₂ nanocontainer", G.C. Kordas, A.C. Balaskas, **I.A. Kartsonakis***, E.K. Efthimiadou, International Journal of Structural Integrity, 4, 121-126, 2013, <https://doi.org/10.1108/17579861311303672>
50. "Influence of TiO₂ Nanocontainers on Hybrid Organic-Inorganic Coatings for Corrosion Protection of Magnesium Alloy", **I.A. Kartsonakis***, A.C. Balaskas, G.C. Kordas, International Journal of Structural Integrity, 4, 127-142, 2013, <https://doi.org/10.1108/17579861311303681>
51. "Evaluation of corrosion resistance of magnesium alloy ZK10 coated with hybrid organic-inorganic film including containers", **I.A. Kartsonakis***, A.C. Balaskas, E.P. Koumoulos, C.A. Charitidis, G. Kordas, Corrosion Science, 65, 481-493, 2012, <https://doi.org/10.1016/j.corsci.2012.08.052>
52. "Electro-deposited Sol-gel Coatings Containing Ceramic Nanocontainers Loaded with Inhibitors for the Corrosion Protection of AA2024-T3", E.D. Mekeridis, **I.A. Kartsonakis***, G. Kordas, Advances in Ceramic Science and Engineering Vol. 1 Iss. 1, November 2012, [257143495](https://doi.org/10.257143495)
53. "Water diffusion in polymer coatings containing water-trapping particles. Part 2. Experimental verification of the mathematical model", M. Krzak*, Z. Tabor, G. Mordarski, P. Nowak, A. Karatzas, **I.A. Kartsonakis**, G.C. Kordas, P. Warszyński, Progress in Organic Coatings, 75, 207-214, 2012, <https://doi.org/10.1016/j.porgcoat.2012.05.008>
54. "Residual stress and deformation mechanism of friction stir welded aluminum alloys by nanoindentation", C.A. Charitidis*, D.A. Dragatogiannis, E.P. Koumoulos, **I.A. Kartsonakis**, Journal of Material Sciences & Engineering, 540, 226-234, 2012, <https://doi.org/10.1016/j.msea.2012.01.129>
55. "Improvement of anti-corrosive properties of epoxy-coated AA 2024-T3 with TiO₂ nanocontainers loaded with 8-hydroxyquinoline", A.C. Balaskas, **I.A. Kartsonakis***, L.-A. Tziveleka, G.C. Kordas, Progress in Organic Coatings, 74, 418-426, 2012, <https://doi.org/10.1016/j.porgcoat.2012.01.005>
56. "Hybrid organic-inorganic multilayer coatings including nanocontainers for corrosion protection of metal alloys", **I.A. Kartsonakis***, E.P. Koumoulos, A.C. Balaskas, G.S. Pappas, C.A. Charitidis, G.C. Kordas, Corrosion Science, 57, 56-66, 2012, <https://doi.org/10.1016/j.corsci.2011.12.034>
57. "Incorporation of ceramic nanocontainers into epoxy coatings for the corrosion protection of hot dip galvanized steel", **I.A. Kartsonakis***, A.C. Balaskas, E.P. Koumoulos, C.A. Charitidis, G.C. Kordas, Corrosion Science, 57, 30-41, 2012, <https://doi.org/10.1016/j.corsci.2011.12.037>
58. "Evaluation of self-healing ability in protective coatings modified with combination of nanocontainers filled with corrosion inhibitors", M.F. Montemor, D.V. Snihrova, M.G. Taryba, S.V. Lamaka, **I.A. Kartsonakis**, A.C. Balaskas, G.C. Kordas, J. Tedim, A. Kuznetsova, M.L. Zheludkevich, M.G.S. Ferreira, Electrochimica Acta, 60, 31-40, 2012, <https://doi.org/10.1016/j.electacta.2011.10.078>
59. "Reversible Spherical Organic Water Microtraps", A. Karatzas, P. Bilalis, **I.A. Kartsonakis**, G.C. Kordas*, Journal of Non-Crystalline Solids, 358, 443-445, 2012, <https://doi.org/10.1016/j.jnoncrsol.2011.10.010>

60. "Multilayer organic-inorganic coating incorporating TiO₂ nanocontainers loaded with inhibitors for corrosion protection of AA2024-T3", E.D. Mekeridis, **I.A. Kartsonakis**, G.C. Kordas*, Progress in Organic Coatings, 73, 142-148, **2012**, <https://doi.org/10.1016/j.porgcoat.2011.10.005>
61. "Improving the Corrosion Protection Properties of Organically Modified Silicate – Epoxy Coatings by Incorporation of Organic and Inorganic Inhibitors", A.C. Balaskas, **I.A. Kartsonakis***, D. Snihirova, M. F. Montemor, G. Kordas, Progress in Organic Coatings, 72, 653-662, **2011**, <https://doi.org/10.1016/j.porgcoat.2011.07.008>
62. "Influence of Cerium Molybdate Containers on the Corrosion Performance of Epoxy coated Aluminium Alloys 2024-T3", **I.A. Kartsonakis***, A.C. Balaskas, G.C. Kordas, Corrosion Science, 53, 3771-3779, **2011**, <https://doi.org/10.1016/j.corsci.2011.07.026>
63. "Influence of the doping agent on the corrosion protection properties of polypyrrole grown on aluminium alloy 2024-T3", A.C. Balaskas, **I.A. Kartsonakis**, G.C. Kordas*, A.M. Cabral, P.J. Morais, Progress in Organic Coatings, 71 [2], 181-187, **2011**, <https://doi.org/10.1016/j.porgcoat.2011.02.011>
64. "Release studies of corrosion inhibitors from Cerium Titanium Oxide Nanocontainers", Evaggelos Mekeridis, **Ioannis Kartsonakis***, George Pappas, George Kordas, Journal of Nanoparticle Research, 13, 541-554, **2011**, DOI: [10.1007/s11051-010-0044-x](https://doi.org/10.1007/s11051-010-0044-x)
65. "Synthesis of conductive polymeric composite coatings for corrosion protection applications", A.Tsirimpis, **I.A. Kartsonakis**, I. Daniilidis, G. Kordas*, Progress in Organic Coatings, 67 [4], 389-397, **2010**, <https://doi.org/10.1016/j.porgcoat.2009.12.010>
66. "Synthesis and Characterization of Cerium Molybdate Nanocontainers and their Inhibitor Complexes", **I.A. Kartsonakis***, G. Kordas, Journal of the American Ceramic Society, 93 [1], 65, **2010**, <https://doi.org/10.1111/j.1551-2916.2009.03310.x>
67. "Encapsulation and Release of Corrosion Inhibitors into Titania Nanocontainers", **Ioannis A. Kartsonakis***, Ioannis L. Daniilidis, George S. Pappas, George C. Kordas, Journal of Nanoscience and Nanotechnology, 10, 5912-5920, **2010**, DOI: [10.1166/jnn.2010.2571](https://doi.org/10.1166/jnn.2010.2571)
68. "Synthesis and Characterization of Magnetic Nano Containers", C. Tapeinos, **I.A. Kartsonakis**, P. Liatsi, I. Daniilidis, G. Kordas*, Journal of the American Ceramic Society, 91 [4], 1052, **2008**, <https://doi.org/10.1111/j.1551-2916.2007.02240.x>
69. "Synthesis and characterisation of new SiO₂-CaO hollow nanospheres by sol-gel method: bioactivity of the new system", G. Pappas, P. Liatsi, **I. Kartsonakis**, I. Daniilidis, G.Kordas*, Journal of Non-Crystalline Solids, 354,755, **2008**, <https://doi.org/10.1016/j.jnoncrysol.2007.09.007>
70. "Encapsulation of the corrosion inhibitor 8-hydroxyquinoline into Ceria Nanocontainers", **I.A. Kartsonakis***, I. Daniilidis, G. Kordas, Journal of Sol-Gel Science and Technology, 48, 24, **2008**, DOI: [10.1007/s10971-008-1810-4](https://doi.org/10.1007/s10971-008-1810-4)
71. "Synthesis, Characterization and Antibacterial action of Hollow Titania Spheres", **I.A. Kartsonakis***, P. Liatsi, I. Daniilidis, D. Bouzarelu, G. Kordas, Journal of Physics and Chemistry of Solids, 69, 214, **2008**, <https://doi.org/10.1016/j.jpccs.2007.08.071>
72. "Synthesis, Characterization and Antibacterial action of Hollow Ceria Nanospheres with/without Conductive Polymer Coating", **I.A. Kartsonakis***, P. Liatsi, I. Daniilidis, G. Kordas, Journal of the American Ceramic Society, 91 [2], 372, **2008**, <https://doi.org/10.1111/j.1551-2916.2007.02088.x>

Publications in Conferences' Proceedings [75]

International Conferences [61]

1. E.K. Karaxi, I.Kanellopoulou, **I.A Kartsonakis**, C.A. Charitidis*. Smart admixtures with active functionality in concrete, "Durable Concrete for Infrastructure under Severe Conditions - Smart Admixtures, Self-responsiveness and Nano-additions", 10-11 September 2019, Gent, Belgium, p. 2-5.
2. N. Al-Ayish , U. Mueller, E.K. Karaxi, **I.A. Kartsonakis**, C.A. Charitidis, L. De Meyst "Safety and sustainability of new admixtures for durable concrete", 10-11 September 2019, Gent, Belgium, p. 143-146
3. **I.A. Kartsonakis**, E.K. Karaxi, P. Stamatogianni, P. Kavouras, C.A. Charitidis, "Assessment of corrosion inhibitive behavior of 2-mecraptobenzothiazole and sodium phosphate dibasic on industrial steel pipelines", "EUROCORR 2018 - Applied Science with constant Awareness" September, 9-13 2018, ICE Krakow, Poland.
4. E.K. Karaxi, **I.A. Kartsonakis**, I. Kanellopoulou, C.A. Charitidis, "Self-sensing capability assessment and corrosion evaluation of multi-walled carbon nanotubes reinforced mortars", "EUROCORR 2018 - Applied Science with constant Awareness" September, 9-13 2018, ICE Krakow, Poland.
5. E.K. Karaxi, I.A. Kanellopoulou, A. Karatza, **I.A. Kartsonakis**, C.A. Charitidis, "Fabrication of carbon nanotubes reinforced mortar specimens: evaluation of mechanical integrity and pressure-sensitive properties", ICEAF V, 5th International Conference on Engineering against Fracture, 20-22 June 2018, Chios, Greece.
6. I.A. Kanellopoulou, E.K. Karaxi, A. Karatza, **I.A. Kartsonakis**, C.A. Charitidis, "Hybrid superabsorbent polymer networks based on crosslinked poly(methacrylic acid) encapsulated with SiO₂ for novel applications", ICEAF V, 5th International Conference on Engineering against Fracture, 20-22 June 2018, Chios, Greece.
7. P. Goulis, **I.A. Kartsonakis**, K. Mpalias, C.A. Charitidis, "Effect of Lignin and CNTs on the properties of melt-spun polymeric fibers", ICEAF V, 5th International Conference on Engineering against Fracture, 20-22 June 2018, Chios, Greece.
8. Daniel Höche, Zahid Mohammad Mir, Ingeborg H. Svenum, Inga Gudem Ringdalen, Ole Swang, Philippe Mainçon, Jesper Friis, Alexandre C. Bastos, Miguel Prieto Rabade, Filip Nilenius, Nelson Dias Ferreira Da Silva, John Psihogios, Athanasios

Morozinis, Dimitrios A. Dragatogiannis, **Ioannis A. Kartsonakis**, Costas Charitidis, Mikhail L. Zheludkevich, "Multiscale modelling of corrosion in reinforced concrete structures - The LORCENIS approach", 2018 eSENCE-Multiscale Modelling Meeting 11-13 June 2018, Uppsala, Sweden.

9. I. Kanellopoulou, **I.A. Kartsonakis**, E.K. Karaxi, C.A. Charitidis "Synthesis, characterization and swelling behavior of a novel hybrid superabsorbent polymer composed of SiO₂-CaO@PMAA submicron – spheres", EUROMAT 2017 – European Congress and Exhibition on Advanced Materials and Processes, 17-22 September 2017, Thessaloniki, Greece.
10. **I.A. Kartsonakis**, D. Dragatogiannis, E. Koumoulos, C.A. Charitidis, "Improvement of corrosion behaviour of dissimilar friction stir welded aluminium alloys reinforced with nanoadditives", "EUROCORR 2017 - European Corrosion Congress 2017, 20th International Corrosion Congress & Process Safety Congress 2017", 3-7 September 2017, Prague, Czech Republic.
11. A-F.A.Trompeta, **I.A. Kartsonakis**, E.P. Koumoulos, D. Mata, M.J. Ferreira, F. Maia, J. Tedim, C.A. Charitidis, "Corrosion and mechanical performance of a novel antifouling system containing nanoreservoirs", "EUROCORR 2017 - European Corrosion Congress 2017, 20th International Corrosion Congress & Process Safety Congress 2017", 3-7 September 2017, Prague, Czech Republic.
12. **I.A. Kartsonakis**, E.K. Karaxi, I. Kanellopoulou, C.A. Charitidis, "Corrosion behaviour, mechanical integrity and self-sensing properties of bulk reinforced concrete", "EUROCORR 2017 - European Corrosion Congress 2017, 20th International Corrosion Congress & Process Safety Congress 2017", 3-7 September 2017, Prague, Czech Republic.
13. **I.A. Kartsonakis**, C.A. Charitidis, "Advancement in corrosion resistance characterisation of multifunctional materials and structures", Frontiers in Materials Characterisation towards Industrial Translation (FRIMACHAT) 2017, INTERNATIONAL WORKSHOP, 11-13th July 2017, University of Limerick, Limerick, Ireland.
14. A.F. Trompeta, **I. Kartsonakis**, V. Markakis, E. Koumoulos, C. Charitidis, "Improved surface properties of antifouling coatings by incorporation of carbon nanotubes", Joint workshop "Bridging the gap between academia and industry – A collaborative enterprise" 24/06/2016, Toulon, France.
15. A.F. Trompeta, V. Markakis, E.P. Koumoulos, **I.A. Kartsonakis**, C.A. Charitidis, "Carbon nanotubes and antifouling coatings: sustainable synthesis, safe-by design and release assessment", European Technical Coatings Congress, Vincentz Network GmbH & Co. KG Plathnerstr. 4c 30175 Hannover Germany.
16. C.A. Charitidis, **I.A. Kartsonakis**, E.K. Karaxi, E. Koumoulos, I. Kanellopoulou, A. Karantonis "Self-Healing Microcomposites for Corrosion Protection of Hot Dip Galvanized Steel", "EUROCORR 2015 - The European Corrosion Congress", 6-10 September 2015, Graz, Austria.
17. **I.A. Kartsonakis**, D. Dragatogiannis, E. Koumoulos, A. Karantonis, C.A. Charitidis, "Evaluation of corrosion properties of dissimilar friction stir welded AA5083-H111 and AA6082-T6 reinforced with nanoadditives", ICEAF IV, 4th International Conference on Engineering against Fracture, 24-26 June 2015, Skiathos, Greece.
18. **I.A. Kartsonakis**, E.K. Karaxi, V. Chaleplis, C.A. Charitidis, "Evaluation of core-shell Mg-Al-NO₃ layered double hydroxides for chlorides entrapment", ICEAF IV, 4th International Conference on Engineering against Fracture, 24-26 June 2015, Skiathos, Greece.
19. S. Anagnou, E. Milioni, C. Mpalias, **I.A. Kartsonakis**, E.P. Koumoulos, C.A. Charitidis, "Lignin as new precursors for the development of carbon fibers: co-blends and extrusion", ICEAF IV, 4th International Conference on Engineering against Fracture, 24-26 June 2015, Skiathos, Greece.
20. E.K. Karaxi, V. Chaleplis, **I.A. Kartsonakis**, C.A. Charitidis, "Chloride nanotraps based on Mg-Al-CO₃ layered double hydroxides", ICEAF IV, 4th International Conference on Engineering against Fracture, 24-26 June 2015, Skiathos, Greece.
21. E.P. Koumoulos, M. Koklioti, S. Anagnou, E. Milioni, K. Mpalias, **I.A. Kartsonakis**, C.A. Charitidis, "Functionalised Innovative Carbon Fibres and Nanofibers: Novel Precursors with Cost Efficiency and Tailored Properties", EuroNanoForum 2015, 10-12 June 2015, Riga, Latvia.
22. A-F.A. Trompeta, E. Milioni, **I.A. Kartsonakis**, E.P. Koumoulos, C.A. Charitidis, "Novel Eco-friendly Nanocomposite Coatings with Antifouling and Mechanical Properties for Maritime Applications", EuroNanoForum 2015, 10-12 June 2015, Riga, Latvia.
23. E.K. Karaxi, **I.A. Kartsonakis**, E.P. Koumoulos, C.A. Charitidis, "Self-healing cerium molybdate and copper oxide nanomaterials for protection of metal alloys for marine applications", EEinS2015-ASHRAE-International Conference on Environment and Energy in Ships, 22-24 May 2015, Piraeus, Greece.
24. Stavros Anagnou, Eleni Milioni, Costas Mpalias, **Ioannis Kartsonakis**, Elias Koumoulos, Costas Charitidis, "Lignin as a new sustainable precursor for carbon fibre", SUN-SNO-GUIDENANO Sustainable Nanotechnology Conference, 9-11 March 2015, Venice, Italy.
25. **I. Kartsonakis**, D. Caraksis, D. Dragatogiannis, C. Charitidis, G. Kordas, "The influence of nanotraps and nanocontainers into multilayer coatings for corrosion protection of Mg alloy ZK30", EUROCORR 2013 - The European Corrosion Congress, 1-5 September 2013, Estoril, Portugal.
26. **I. Kartsonakis**, E. Athanasopoulou, D. Snihirova, F. Montemor, C. Charitidis, G. Kordas, "Multilayer epoxy coatings including nanotraps and nanocontainers for corrosion protection of AA2024-T3", EUROCORR 2013 - The European Corrosion Congress, 1-5 September 2013, Estoril, Portugal.
27. E.K. Efthimiadou, E. Milioni, **I.A. Kartsonakis**, G. S. Pappas, A. Skarmoutsou, C.A. Charitidis, G. Kordas "Encapsulation of CaCO₃-producing bacterial strains into containers for cement self-restoration", ICEAF III, 3rd International Conference on Engineering against Fracture, 26-28 June 2013, Kos, Greece

28. **I.A. Kartsonakis**, D. Perivoliotis, A.M. Routsis, C.A. Charitidis, G. Kordas "Multilayer epoxy coatings including nanotraps and nanocontainers for corrosion protection of HDG Steel" ICEAF III, 3rd International Conference on Engineering against Fracture", 26-28 June 2013, Kos, Greece
29. **I.A. Kartsonakis**, D. Caraksis, D.A. Dragatogiannis, C.A. Charitidis, G. Kordas "The influence of nanotraps and nanocontainers into hybrid organic-inorganic coatings for corrosion protection of Mg ZK30" ICEAF III, 3rd International Conference on Engineering against Fracture", 26-28 June 2013, Kos, Greece
30. **I.A. Kartsonakis**, E.P. Koumoulos, A. Karantonis, G. Kordas, S. Dessypris, A. Monos, C.A. Charitidis "Study of corrosion of copper in industrial cooling systems" ICEAF III, 3rd International Conference on Engineering against Fracture", 26-28 June 2013, Kos, Greece, Pages 638-647
31. C.A. Charitidis, E.P. Koumoulos, V.P. Tsikourkitoudi, **I.A. Kartsonakis**, N. Papadopoulos, E. Hristoforu "Synthesis, structural and nanomechanical properties of B, C, N-doped cobalt based thin films" ICEAF III, 3rd International Conference on Engineering against Fracture", 26-28 June 2013, Kos, Greece, Pages 899-908
32. C.A. Charitidis, E.P. Koumoulos, **I.A. Kartsonakis**, G. Kordas, G. Vlachakis, M. Vlachakis "Corrosion investigation and evaluation of mechanical and structural properties of powder coatings for industrial-domestic applications" ICEAF III, 3rd International Conference on Engineering against Fracture", 26-28 June 2013, Kos, Greece
33. Evagelia Ksinopoulou, Asterios Bakolas, **Ioannis Kartsonakis**, Constantinos Charitidis, Antonia Moropoulou "Particle modified consolidants in the consolidation of porous stones" 12th International Congress on the Deterioration and Conservation of Stone Columbia University, New York, 2012
34. E.P. Koumoulos, C.A. Charitidis, A. Tsetsekou, **I.A. Kartsonakis**, A. Bakolas, N.M. Daniolos, K. Pietrzak "Nanomechanical integrity, structural analysis and thermal stability of Cu-Al₂O₃ nanocomposites for FGM application", 9th International Conference on Nanosciences & Nanotechnologies – NN12, 3-6 July 2012, Thessaloniki, Greece
35. A. Skarmoutsou, A. Chatzipavlidis, V. Malamas, **I. Kartsonakis**, G. Kordas, C.A. Charitidis "Synthesis and characterization of in situ functionalized iron oxide nanoparticles", 9th International Conference on Nanosciences & Nanotechnologies – NN12, 3-6 July 2012, Thessaloniki, Greece
36. A. Sohrabi, A. Dolati, M. Ghorbani, V.P. Tsikourkitoudi, E.P. Koumoulos, **I.A. Kartsonakis**, P. Stroeve, C.A. Charitidis "Nanomechanical characterization of electrodeposited nickel containing silicon carbide nanodispersions", 9th International Conference on Nanosciences & Nanotechnologies – NN12, 3-6 July 2012, Thessaloniki, Greece
37. V. P. Tsikourkitoudi, E.P. Koumoulos, **I.A. Kartsonakis**, C.A. Charitidis "Structural investigation and mechanical integrity of metal and metal oxide thin films for sensing applications: A comparative study through nanoindentation", 9th International Conference on Nanosciences & Nanotechnologies – NN12, 3-6 July 2012, Thessaloniki, Greece
38. **I.A. Kartsonakis***, A.C. Balaskas, A.E. Karatzas, G.C. Kordas "Improvement of Anticorrosion Properties of Epoxy Coatings on Steel with Nanocontainers", EUROCORR 2011 "Developing Solutions for the Global Challenge", 4 to 8 September 2011 in Stockholm, Sweden
39. A.C. Balaskas, **I.A. Kartsonakis**, A. Karatzas, G. Kordas "Effect of Loaded Inorganic Nanocontainers Into Epoxy Coatings for Protection of AA 2024-T3 Against Corrosion", EUROCORR 2011 "Developing Solutions for the Global Challenge", 4 to 8 September 2011 in Stockholm, Sweden
40. A.C. Balaskas, P. Bilalis, A. Karatzas, **I.A. Kartsonakis**, G. Kordas "Epoxy Coatings with pH sensitive Organic Nanocontainers Loaded with Inhibitors for Protection of AA 2024-T3 Against Corrosion", EUROCORR 2011 "Developing Solutions for the Global Challenge", 4 to 8 September 2011 in Stockholm, Sweden
41. **Ioannis A. Kartsonakis***, Andronikos C. Balaskas, George C. Kordas "Improvement of Anticorrosion Properties of Epoxy Coatings on Steel with Nanocontainers", 3rd International Conference on Self-Healing Materials (3rd ICSHM 2011), 27th-29th June 2011, Bath, United Kingdom, Book of Abstracts, Page 97
42. **I.A. Kartsonakis**, A.C. Balaskas, G. C. Kordas "Improvement of Anticorrosion Properties of Epoxy Coatings on Steel with Nanocontainers", "ICEAF II, 2nd International Conference on Engineering against Fracture", 22-24 June 2011, Mykonos, Greece
43. A.C. Balaskas, **I.A. Kartsonakis**, G/C. Kordas "Influence of Loaded Nanocontainers on Epoxy Coatings for Protection of AA 2024-T3 against Corrosion", "ICEAF II, 2nd International Conference on Engineering against Fracture", 22-24 June 2011, Mykonos, Greece
44. G.C. Kordas, A.C. Balaskas, **I.A. Kartsonakis**, E.C. Efthimiadou, G.V. Mitrikas "A Raman study of 8-hydroxyquinoline release from loaded TiO₂ nanocontainers", "ICEAF II, 2nd International Conference on Engineering against Fracture", 22-24 June 2011, Mykonos, Greece
45. **I.A. Kartsonakis**, A. Balaskas, A. Karatzas and G. Kordas "Improvement of Anticorrosion Properties of Hybrid Organic-Inorganic Coatings on Magnesium Alloys with Nanocontainers", "XIV International Sol-Gel Conference", Aug. 28 – Sept. 2, 2011, Hangzhou
46. Haralambos Hatzikirou, George Lolas, Dimitrios A. Dragatogiannis, Costas A. Charitidis, **Ioannis A. Kartsonakis** and George Kordas, "A review on multiscale modeling in complex biological systems: the tumor growth paradigm", Proc. 7th GRACM Int. Con. on 'Computational Mechanics', Athens, Greece, 30 June - 2 July 2011, National Center for Research 'Demokritos', Book of Abstracts, Page 46.

47. **I.A. Kartsonakis**, I.L. Danilidis, G.K. Kordas "ORMOSIL coatings containing loaded nano-containers for corrosion protection of magnesium alloy ZK10", "EUROCORR 2009 - The European Corrosion Congress", 6 - 10 September 2009, Nice, France, p. 117 in the Book of Abstracts
48. A. Balaskas, **I. Kartsonakis**, I. Danilidis, G. Kordas, "Improving the corrosion protection properties of organically modified silicate coatings by incorporation of organic and inorganic inhibitors", "EUROCORR 2009 - The European Corrosion Congress", 6 - 10 September 2009, Nice, France, p. 118 in the Book of Abstracts
49. **I.A. Kartsonakis**, I. Danilidis, A. Balaskas, G. Kordas "Corrosion protection of aluminum alloys by coatings of ORMOSIL and of conductive copolymers including nanocontainers loaded with inhibitors", "EUROCORR 2009 - The European Corrosion Congress", 6 - 10 September 2009, Nice, France, p. 145 in the Book of Abstracts
50. I.L. Danilidis, **I.A. Kartsonakis**, G.K. Kordas "Conductive polymer coatings for corrosion protection of aluminium alloy AA2024-T3", "EUROCORR 2009 - The European Corrosion Congress", 6 - 10 September 2009, Nice, France, p. 144 in the Book of Abstracts
51. E. Mekeridis, I. Danilidis, **I. Kartsonakis**, G. Kordas "Electrosynthesized sol-gel coatings for the corrosion protection of Al-2024 - influence of the drying process", "EUROCORR 2009 - The European Corrosion Congress", 6 - 10 September 2009, Nice, France, p. 147 in the Book of Abstracts
52. **I.A. Kartsonakis**, A.Balaskas, E. Mekeridis, G.C. Kordas "Incorporation of Nanocontainers into Coatings for Corrosion Protection of Magnesium ZK10, ZK30 Alloys", "2nd ICAN-2009. International Conference from Nanoparticles & Nanomaterials to Nanodevices & Nanosystems" 28 June – 3 July 2009, Rhodes (Greece), p.166 in the Book of Abstracts.
53. **I.A. Kartsonakis**, I.L. Danilidis, G.C. Kordas "Corrosion Protection of Aluminum Alloys by Coatings of Conductive Copolymers including Nanocontainers loaded with Inhibitors", "1st ICAN-2008. International Conference from Nanoparticles & Nanomaterials to Nanodevices & Nanosystems" 16-18 June 2008, Halkidiki (Greece), p.166 in the Book of Abstracts.
54. **I.A. Kartsonakis**, I.L. Danilidis, G.C. Kordas "Synthesis and Characterization of Cerium-Molybdate Nanocontainers. Loading and Release of Corrosion Inhibitors", "1st ICAN-2008. International Conference from Nanoparticles & Nanomaterials to Nanodevices & Nanosystems" 16-18 June 2008, Halkidiki (Greece), p.167 in the Book of Abstracts.
55. P.C. Kontogianni, **I.A. Kartsonakis**, I.L. Danilidis, G.C. Kordas "Synthesis, Characterization and Antibacterial Action of Titania Nanocontainers with Iron and Ammonium Embodiments", "1st ICAN-2008. International Conference from Nanoparticles & Nanomaterials to Nanodevices & Nanosystems" 16-18 June 2008, Halkidiki (Greece), p.168 in the Book of Abstracts.
56. A.I. Kikidis, I.L. Danilidis, **I.A. Kartsonakis**, G.C. Kordas "Corrosion Protection of Aluminium 2024-T3 by Depositing Polyaniline with Grafted Nanoparticles", "1st ICAN-2008. International Conference from Nanoparticles & Nanomaterials to Nanodevices & Nanosystems" 16-18 June 2008, Halkidiki (Greece), p.72 in the Book of Abstracts.
57. **I.A. Kartsonakis**, P. Liatsi, I. Daniilidis and G. Kordas "Synthesis, Characterisation and Antibacterial Action of Hollow Ceria Nanospheres and Hollow Titania Spheres", "14th International Sol-Gel Conference" 2-7 September 2007, Montpellier (France) p.112 in the Book of Abstracts.
58. G.S. Pappas, P.Liatsi, **I.A.Kartsonakis**, I. Danilidis, G.Kordas "Synthesis and characterization of new SiO₂-CaO hollow nanospheres by sol-gel method: bioactivity of the new system", "14th International Sol-Gel Conference" 2-7 September 2007, Montpellier (France) p.436 in the Book of Abstracts.
59. E. Mekeridis, P. Liatsi, I. Danilidis, **I. Kartsonakis** and G. Kordas "Electrosynthesised sol-gel coatings for the corrosion protection of Al-2024. Influence of the deposition electrolyte", "14th International Sol-Gel Conference" 2-7 September 2007, Montpellier (France) p.454 in the Book of Abstracts.
60. E. Mekeridis, P. Liatsi, I. Danilidis, **I. Kartsonakis**, A.Tsirimpis and G. Kordas "Corrosion protection of Al-2024 by electrochemical growth of silane based sol-gel in the presence of cerium containing electrolytes", "14th International Sol-Gel Conference" 2-7 September 2007, Montpellier (France) p.457 in the Book of Abstracts.
61. Christos Tapeinos, **Ioannis Kartsonakis**, Penelope Liatsi, Ioannis Daniilidis, George Kordas "Synthesis and Characterization of Hollow Magnetic Nanospheres", "14th International Sol-Gel Conference" 2-7 September 2007, Montpellier (France) p.489 in the Book of Abstracts.

Publications in Conferences' Proceedings in National Conferences [14]

1. A. Kerchoulas, **I. Kartsonakis**, A. Karantonis *, "Synthesis and study of the properties of manganese and molybdenum oxide electrodes for applications in electrochemical supercapacitors", 13th Panhellenic Scientific Conference on Chemical Engineering, 2-4 June, Patra, Greece.
2. A.I. Chrysanthopoulou, E.K. Karaxi, E. Kanellopoulou, **I.A. Kartsonakis**, C.A. Charitidis, "Preparation of mortar specimens reinforced with carbon nanotubes and carbon fibers: evaluation of mechanical integrity, electric/piezoelectric properties of the composites", 12th Panhellenic Scientific Conference in Chemical Engineering, 29-30 May 2019, Athens, Greece.
3. I. Kanellopoulou, E.K. Karaxi, **I.A. Kartsonakis**, E. Kontou, C.A. Charitidis, "Effect of SAPs on the mechanical integrity and self-healing/sealing properties of bulk reinforced cement", 18th Concrete Conference", 29-31 March 2018, Athens, Greece.
4. E.K. Karaxi, **I.A. Kartsonakis**, I. Kanellopoulou, A. Karatza, E. Kontou, C.A. Charitidis, "Corrosion behaviour, self-sensing properties and mechanical integrity of cement reinforced with MWCNTs", 18th Concrete Conference", 29-31 March 2018, Athens, Greece.

5. A-F.A. Trompeta, **I.A. Kartsonakis**, C.A. Charitidis, "Life Cycle Assessment and End-Of-Life Treatment of Coatings Including Nanomaterials", 13th Paints Symposium – Research and Technology of Paints, Varnishes & Inks, Building a lasting Future, Athens 15-16 March 2018, Greece, p.203 in the Book of Abstracts.
6. A-F.A. Trompeta, **I.A. Kartsonakis**, E.P. Koumoulos, C.A. Charitidis, "Novel Antifouling Systems Containing Carbon Nanotubes", 13th Paints Symposium – Research and Technology of Paints, Varnishes & Inks, Building a lasting Future, Athens 15-16 March 2018, Greece, p.239 in the Book of Abstracts.
7. D.A. Dragatogiannis, **I. Kartsonakis**, S. Soulis, S. Anagnou, K. Mpalias, P. Goulis, E. Koumoulos, C.A. Charitidis, "Functionalized Innovative Carbon Fibers Developed from Novel Precursors with Cost Efficiency and Tailored Properties", 11th Panhellenic Scientific Conference in Chemical Engineering, 25-27 May 2017, Thessaloniki, Greece.
8. **I.A. Kartsonakis**, D. Dragatogiannis, E. Koumoulos, A. Karantonis, "Corrosion behaviour of dissimilar metal/metal joints including reinforcing additives", XXXI Panhellenic Conference on Solid State Physics and Materials Science», 20-23 September 2015, Thessaloniki, Greece.
9. C.A. Charitidis E.G. Milioni, S.C. Anagnou, **I.A. Kartsonakis**, C.A. Charitidis, "Synthesis of new carbon fiber precursors using AGET ATRP in microemulsion", 10th Panhellenic Scientific Conference in Chemical Engineering, 4-6 June 2015, Patra, Greece.
10. E.K. Karaxi, **I.A. Kartsonakis**, C.A. Charitidis, "The effect of tailoring the synthetic strategy on the final copper oxide structure", 10th Panhellenic Scientific Conference in Chemical Engineering, 4-6 June 2015, Patra, Greece.
11. **I.A. Kartsonakis**, E.C. Karaxi, A.-M. Routsis, D. Tsoutsou, A. Dimoulas, C.A. Charitidis, G.C. Kordas "Studying the effects of corrosion inhibitors on magnesium alloy ZK30 and hot dip galvanized steel", 9th Panhellenic Scientific Conference in Chemical Engineering, 23-25 May 2013.
12. **I.A. Kartsonakis**, I.L. Danilidis, G.C. Kordas, *Synthesis and Characterization of Cerium-Molybdate Nanocontainers. Studies on their Anticorrosive and Antibacterial Action*, «XXIV Panhellenic Conference on Solid State Physics and Materials Science», 21-24 September 2008, Heraklion, Crete (Greece), p.125 in the Book of Abstracts.
13. **I.A. Kartsonakis**, I.L. Danilidis, G.C. Kordas, *Corrosion Protection of Aluminum Alloys by Coatings of Conductive Copolymers including Nanocontainers loaded with Inhibitors*, «XXIV Panhellenic Conference on Solid State Physics and Materials Science», 21-24 September 2008, Heraklion, Crete (Greece), p.126 in the Book of Abstracts.
14. P.C. Kontogianni, **I.A. Kartsonakis**, I.L. Danilidis, G.C. Kordas, *Synthesis and Characterization and Antibacterial Action of Titanium-Iron Oxide Nanocontainers*, «XXIV Panhellenic Conference on Solid State Physics and Materials Science», 21-24 September 2008, Heraklion, Crete (Greece), p.133 in the Book of Abstracts.

Reviewer at the books/ journals [61]:

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|---|--|
| 1. ACS Applied Materials and Interfaces, | 31. Journal of Alloys and Compounds, |
| 2. Analytical Chemistry, | 32. Journal of Applied Electrochemistry, |
| 3. Anti-Corrosion Methods and Materials, | 33. Journal of Bridge Engineering, |
| 4. Applied Materials Today, | 34. Journal of Cleaner Production, |
| 5. Applied Surface Science, | 35. Journal of Electroanalytical Chemistry, |
| 6. Arabian Journal of Chemistry, | 36. Journal of Environmental Chemical Engineering, |
| 7. Brazilian Journal of Chemical Engineering, | 37. Journal of Industrial and Engineering Chemistry, |
| 8. Buildings, | 38. Journal of Nanoparticles Research, |
| 9. Carbon Neutrality, | 39. Journal of Solid-State Electrochemistry, |
| 10. Chemical Engineering Journal, | 40. Journal of Solid-State Science and Technology, |
| 11. Chemical Engineering Science, | 41. Journal of the American Ceramic Society, |
| 12. Chemistry of Materials, | 42. Journal of The Electrochemical Society (JES), |
| 13. Coatings, | 43. Journal of the Taiwan Institute of Chemical Engineers, |
| 14. Colloids and Surfaces A: Physicochemical & Engineering Aspects, | 44. Macromolecular Materials and Engineering, |
| 15. Composites Part B, | 45. Materials & Design, |
| 16. Corrosion and Materials Degradation, | 46. Materials Characterization, |
| 17. Corrosion Reviews, | 47. Materials Chemistry and Physics, |
| 18. Corrosion Science, | 48. Materials Letters, |
| 19. Crystals, | 49. Materials Research Bulletin, |
| 20. Electrochimica Acta, | 50. Materials Research, |
| 21. Elsevier – Handbook of Science & Engineering of Corrosion | 51. Materials, |
| 22. Energies, | 52. Metals, |
| 23. Environmental Technology & Innovation, | 53. Nanomaterials, |
| 24. Frontiers in Materials, | 54. Nanoscale Research Letters, |
| 25. Frontiers in Chemistry, | 55. Physics and Chemistry of Solids, |
| 26. Heliyon, | 56. Polymers, |
| 27. Industrial and Engineering Chemistry Research, | 57. Polymer Testing, |
| | 58. Progress in Organic Coatings, |

28. International Journal of Industrial Chemistry,
29. International Journal of Structural Integrity,
30. International Scholarly Research Notices: Nanotechnology,
59. Reviews on Advanced Materials Science,
60. Surface and Coatings Technology,
61. Sustainability.

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