

CONTACT INFORMATION

Name Christos Liosis
Telephone Number 6974278842
e-mail liosischristos@uniwa.gr

EDUCATION

Phd Candidate Department of Civil Engineering, University of Thessaly (2019)

Doctoral Thesis: Water Purification Modeling Through Chemical Reactions and Electromagnetic Particle Navigation.

MSc in Energy Technology, University of Heriot Watt-University of West Attica (2018)

Master Thesis: Numerical study of nanoparticles mixing in micropipes.

MSc in Science, Technology, Engineering and Mathematics in Education, School of Pedagogical and Technological Education (2017)

Master Thesis: Developing S.T.E.M. Experiments using Arduino, Matlab and their Didactic Analysis.

PBD in Science of Materials in Advanced Technologies, University of Ioannina – University of Patras – University of Crete (2015)

BSc in Physics, School of Sciences, Department of Physics, University of Ioannina (2014)

CONTINUING EDUCATION

09/2020-04/2021	Expert in Finite Element Analysis (National and Kapodistrian University of Athens)
12/2020	Marketing and Brand (National and Kapodistrian University of Athens)
11-12/2017	Latex (University of Piraeus)
10-11/2017	Programming with Python (Aristotle University of Thessaloniki)
01-04/2016	Arduino (Ενωση Ελλήνων Φυσικών)
11/2015	Εθνικό Πρόγραμμα Εκπαίδευσης Ελλήνων Καθηγητών Φυσικής (Cern)
01-10/2015	Business Analytics (National and Kapodistrian University of Athens)
02-08/2015	Web Design with Joomla (National and Kapodistrian University of Athens)
02-05/2015	Matlab (National and Kapodistrian University of Athens)
04-06/2015	Eshop Development (National and Kapodistrian University of Athens)
04-05/2015	Microsoft Access and Power Point 2010 (National and Kapodistrian University of Athens)

- 07-09/2015 [Programming with Matlab](#) (University of Vanderbilt)
- 04-05/2015 [Fundamentals of Nanoelectronics](#) (University of Purdue)
- 10-12/2014 [Wind, Waves and Tides: Alternative Energy Systems](#) (University of Toronto)
- 10-12/2014 [Programming Python](#) (University of Michigan)
- 09-12/2014 [Science and Modeling of Climate Change](#) (University of Chicago)
- 10-11/2014 [Wheels of Metal: Urban Mining for a Circular Economy](#) (University of Leiden)
- 09-11/2014 [Our Future Energy](#) (University of California San Diego)
- 09-10/2014 [Organic Solar Cells-Theory and Practice](#) (Technical University of Denmark)

RESEARCH EXPERIENCE

Member of Flow Analysis and Simulation Team since 2015. Research lab Team involves with Fluid Flow, Hydraulics and Convective Heat Transfer, which includes Magnetohydrodynamics, Turbomachinery, Bioengineering, Thermal Analysis, Turbulence, Multiphase Flow, Industrial and Environmental Applications and Fluid-Structure Interaction.

PARTICIPANT in RESEARCH PROGRAMS

- 03/2020- MIS: 5048923 [EΔBM103], Title of project:” Magnetic navigation of
05/2021 nanoparticles in real networks of human arteries”.

ARTICLES

Liosis, C., Karvelas, E., T.H. Karakasidis and I.E. Sarris, « Mixing of Fe₃O₄ nanoparticles under electromagnetic and shear conditions for wastewater treatment applications», Journal of Water Supply: Research and Technology – Aqua (2022) 71 (6): 671–681.

Liosis, C., Papadopoulou A., Karvelas, E., T.H. Karakasidis and I.E. Sarris« Heavy metals adsorption using magnetic nanoparticles for water purification: a critical review», Materials: Advanced Nanomaterials and Nanotechnology, vol.14, 24, 2021.

Karvelas, E., C. Liosis, A. Theodorakakos, I.E. Sarris, T. Karakasidis, «An optimized method for 3D magnetic navigation of nanoparticles inside human arteries», Fluids, vol. 6(3), 97, 2021.

Karvelas, E.G., C. Liosis, T.E. Karakasidis and I.E Sarris, “Mixing Nanoparticles and Contaminated Water Under Different Velocities for Optimum Heavy Metal Ions Adsorption”, Environmental Science Proceedings, vol. 2, 65, 2020.

C. Liosis, Karvelas E.G., T.E. Karakasidis and I.E Sarris, “Numerical Study of Nanoparticles Mixing in Micropipes”, Journal of Water Supply: Research and Technology-Aqua jws2020090, 2020.

Karvelas, E.G., C. Liosis, L. Benos, T.E. Karakasidis and I.E Sarris, “Micromixing Efficiency of Particles in Heavy Metal Removal Processes under Various Inlet Conditions”, *Water*, vol 11, 1135, 2019.

Karvelas, E.G., C. Liosis, T.E. Karakasidis and I.E Sarris, “Mixing of Nanoparticles in Micromixers Under Different Angles and Velocities of the Incoming Water”, *Proceedings*, vol. 2, 577, 2018.

CONFERENCE PRESENTATIONS

C. Liosis, G. Sofiadis, E. Karvelas, T. Karakasidis and I.E. Sarris, ‘Simulations of Tesla Valve micromixer for water purification with Fe₃O₄ nanoparticles’, 5th EWaS (Efficient Water Systems) International Conference on "Water Security and Safety Management: emerging threats or new challenges? Moving from Therapy and Restoration to Prognosis and Prevention", 12-15 July 2022, Naples, Italy, 2022.

Karvelas, E., C. Liosis, T. Karakasidis and I.E. Sarris, ‘Magnetic Navigation of Nanoparticles for Drug Delivery inside Carotid Artery Under the Cardiac Cycle’, XXXV Panhellenic Conference on Solid State Physics and Materials Science, NCSR "Demokritos", 26-29 September, Athens, Greece, 2021, (virtually).

Karvelas E.G., C. Liosis, A. Theodorakakos and T.E. Karakasidis, “Magnetic Navigation of Nanoparticles Inside a 3D Carotid Model”, International Conference on Drug Delivery Nanosystems for Biomedical Engineering Applications, Rome, Italy, 18-19 January 2021.

Karvelas E.G., C. Liosis, T.E. Karakasidis and I.E Sarris, “Mixing Nanoparticles and Contaminated Water Under Different Velocities for Optimum Heavy Metal Ions Adsorption”, 4th EWaS International Conference, Greece, 24-27 June 2020.

Karvelas E.G., C. Liosis, T.E. Karakasidis and I.E Sarris, “Ανάμιξη σωματιδίων με την χρήση μαγνητικών πεδίων σε μικροαγωγούς”, 12ο Πανελλήνιο Επιστημονικό Συνέδριο Χημικής Μηχανικής, National Technical University of Athens, Greece, 29-31 May 2019.

Karvelas E.G., C. Liosis, T.E. Karakasidis and I.E Sarris, “Mixing of nanoparticles in micromixers under different angles and velocities of the incoming water”, 3rd EWaS International Conference, Lefkada, Greece, 27-30 June 2018.

Christos Liosis, Athina Papadopoulou, Eleuthera Liosi, “Απλό εκκρεμές και μέτρηση της επιτάχυνσης της βαρύτητας με την χρήση βιντεοανάλυσης” 5ο Συνέδριο Νέου Παιδαγωγού, Eugenides Foundation of Athens, Greece, 28-29 April 2018.

Christos Liosis, “Χρήση ARDUINO κατά την πέδηση των οχημάτων” 5th International and Interscientific Conference eLife 2016, Plastiras Lake, Greece, 23-26 June 2016.

LANGUAGES

English

City and Guilds Mastery C2

MEMBERSHIPS

Member of Greek Physical Society (ΕΕΦ)

Member of European Physical Society (EPS)

Member of Hellenic Education Society of STEM

JOURNAL REVIEWER

Journal of Thermal Analysis and Calorimetry

Journal of SN Applied Sciences

Asian Journal of Geological Research

Hellenic Journal of STEM Education