CURRICULUM VITAE

Dr. Ourania Oikonomidou

Post-doctoral Fellow

Multiphase Dynamics Group School of Chemistry Aristotle University of Thessaloniki

E-mail: rania.oik@gmail.com

Tel: +30 2310 997798

Webpage: http://karapant.webpages.auth.gr/



EDUCATION

PhD Research March 2014 – Feb 2020

School of Chemistry, Aristotle University of Thessaloniki, Greece. (Degree: 10/10)

PhD Thesis: "Bubble dynamics during degassing of liquids", funded by European Space Agency.

Postgraduate Studies Oct. 2010 – March

2012

Automation Systems (constructions and production), National Technical University of Athens, Greece. (Degree: **8.55/10**) Master Thesis: Simulating mechanical recycling of polyolefins. Reprocessing in a twin screw extruder.

Graduate Studies Oct. 2003 – Nov. 2009

Chemical Engineering, Aristotle University of Thessaloniki, Greece. (Degree: 7.14/10)

Diploma Thesis: Synthetic chemistry of Cadmium (Cd⁺²) and O-,N- ligands.

WORK EXPERIENCE

Horizon 2020 Research Project (2019 – present)

"Innovative technologies and concepts for fine particle flotation: unlocking future fine-grained deposits and Critical Raw Materials resources for the EU"

Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020-EPAnEK (2018 – 2020)

"Innovative high efficiency boiler using "smart" heat transfer surfaces"

Marie-Curie Initial Training Network (March-April 2018)

Complex Wetting Phenomena (CoWet)

ESA-MAP Research Project (Nov-Dec 2017)

"Soft-Matter Dynamics"

ELGRA 2015 (September 2015)

Organizing Committee of the "22nd E.L.G.R.A. Symposium and General Assembly" Corfu, Greece, September 29 – October 01, 2015.

NPI European Space Agency Research Project, NPI 4000108790/13/NL/PA (2014 – 2018)

"Bubble dynamics during degassing of liquids"

EUFOAM 2014 (July 2014)

Organizing committee of 10th European Conference on Foams and Applications EUFOAM 2014, 7-10 July 2014, Thessaloniki, Greece.

NPI European Space Agency Research Project (Nov-Dec 2013)

Highly efficient flow boiling in macro-structured / macro-porous channels

Hellenic Petroleum, Thessaloniki (Chemistry Laboratory) (Sept 2011- March 2012)

Characterization of thermal, rheological and mechanical properties of polypropylene and its nanocomposites. (Research collaboration in terms of Master Thesis)

49th Thessaloniki International Film Festival, Thessaloniki (Nov 2008)

Accounting Assistant

Hellenic Petroleum, Thessaloniki (Department of Petrochemical Products Management) (2006-2007)

Undergraduate Summer Internship Job. Data processing and data management.

TEACHING EXPERIENCE

Undergraduate Lab Courses on Chemical Technology, School of Chemistry, Aristotle University of Thessaloniki, Greece. 2015-2021

Undergraduate Lab Courses on Physical Processes, School of Chemistry, Aristotle University of Thessaloniki, Greece. 2016-2021

PUBLICATIONS IN INTERNATIONAL SCIENTIFIC JOURNALS

- M. Kostoglou, T.D. Karapantsios, <u>O. Oikonomidou</u>. "A critical review on turbulent collision frequency/efficiency models in flotation: Unravelling the path from general coagulation to flotation", Advances in Colloid and Interface Science, 279, 102158, 2020.
- O. Oikonomidou, J.J.W.A van Loon, C.J. Schwarz, M. Kostoglou, T.D. Karapantsios, "A Note on Liquid Velocities Arising during Decompression Degassing in Hypergravity", Microgravity Science and Technology, 31(5), 505-551, 2019.
- O. Oikonomidou, S.P. Evgenidis, C. Schwarz, J.J.W.A. van Loon, T.D. Karapantsios. "Degassing of a decompressed flowing liquid under hypergravity conditions", International Journal of Multiphase Flow, 115, 126-136, 2019.
- O. Oikonomidou, S.P. Evgenidis, M. Kostoglou, T.D. Karapantsios. "Degassing of a pressurized liquid saturated with dissolved gas when injected to a low pressure liquid pool", Experimental Thermal and Fluid Science 96, 347–357, 2018.
- O. Oikonomidou, M.I. Triantou, P.A. Tarantili, C. Anatolaki, N. Karnavos. "The effect of extrusion reprocessing on structure and properties of isotactic polypropylene", Macromolecular Symposia, 321-322 (1), 216-220, 2012.

ORAL PRESENTATIONS IN INTERNATIONAL SCIENTIFIC CONFERENCES

- <u>O. Oikonomidou</u>, S.P. Evgenidis, C.J. Schwarz, J.J.W.A. van Loon, M. Kostoglou, T.D. Karapantsios. "Bubbles forming under hypergravity accelerations due to the degassing of a liquid jet", 26th ELGRA Symposium and General Assembly, Granada, Spain, September 24-27, 2019.
- <u>O. Oikonomidou</u>, S.P. Evgenidis, C.J. Schwarz, J.J.W.A. van Loon, M. Kostoglou, T.D. Karapantsios. "Degassing of a liquid jet under various gravitational accelerations", 8th Conference: Bubble and Drop, Sofia, Bulgaria, June 24-28, 2019.
- J. S. Lioumbas, M.C. Vlachou, <u>O. Oikonomidou</u>, T.D. Karapantsios "LDC as a tool to explore the role of buoyancy in bubbles related applications" Hypergravity Workshop, ESA-ESTEC, Noordwijk, The Netherlands, January 25 26, 2018.
- O. Oikonomidou, S.P. Evgenidis, M. Kostoglou, T.D. Karapantsios "Degassing of a pressurized liquid saturated with dissolved gas when injected to a low pressure liquid pool" FLOWING MATTER 2017 jointly organized with COST MP1305 Annual Workshop, Porto, Portugal, January 23 27, 2017.
- O. Oikonomidou, S.P. Evgenidis, M. Kostoglou, T.D. Karapantsios, "Liquid degassing in hypergravity", 1st Conference in Chemistry for Graduate, Postgraduate students and PhD Candidates, November 10 12, 2017.
- O. Oikonomidou, S.P. Evgenidis, M. Kostoglou, T.D. Karapantsios, "Saturation pressure effect on the size of bubbles formed due to liquid decompression", Smart and Green Interfaces 2016 Conference jointly organized with COST MP1106 Annual Workshop, Athens, Greece, May 04-06, 2016.

POSTER PRESENTATIONS IN INTERNATIONAL SCIENTIFIC CONFERENCES

- <u>O. Oikonomidou</u>, S.P. Evgenidis, M. Kostoglou, T.D. Karapantsios. "Bubble Size Evolution During Decompression Flow Degassing Under Terrestrial and Hypergravity Conditions", 22nd ELGRA Symposium and General Assembly, Corfu, Greece, 29th September 1st October, 2015.
- O. Oikonomidou, S.P. Evgenidis, M. Kostoglou, T.D. Karapantsios T.D. "Assessment of parameters affecting 'flow' decompression degassing performance", Smart and Green Interfaces Conference, Belgrade, Serbia, 30th March-1st April, 2015.
- <u>O. Oikonomidou</u>, M.I. Triantou, P.A. Tarantili, C. Anatolaki, N. Karnavos. "The effect of extrusion reprocessing on structure and properties of isotactic polypropylene", 11th European Symposium on Polymer Blends, Donostia San Sebastian, 25th-28th March, 2012.

SKILLS

Foreign Languages

English: Proficiency of Michigan (C2)

French: A2

Computer Skills

Microsoft Office, SolidWorks

Others

Regular member of European Low Gravity Research Association (ELGRA), since February 2021

Member of the Technical Chamber of Greece, since March 2011

Driving license