**Olga THODA (Ms)**

E-mail: [olga\_thoda@windowslive.com](mailto:olga_thoda@windowslive.com) ,Tel: +30 6946532582, Date of birth: 03/12/1988, Nationality: Greek

**EDUCATION:**

**Sept. 2014-June 2019**  **Coventry University, UK**

**Ph.D. in Chemical Engineering** Faculty of Engineering, Environment and Computing.

* Investigated chemical synthesis parameters which can optimize solution combustion synthesis of Ni-based nano-catalysts which are applied in various industrial processes.

Doctoral Thesis Title: "Investigation of physico-chemical properties of Ni-based nano- and micro-structured catalysts produced by combustion synthesis and their catalytic activity in liquid phase hydrogenation" Supervisors: Prof. A. Chroneos (UK), Dr G. Xanthopoulou (Gr).

**Sept. 2006-Feb. 2014 National Technical University of Athens (NTUA)**

**M.Eng. in Chemical Engineering** School of Chemical Engineering (Overall grade: **71%**).

* Completed course modules, coursework, laboratory practicals and undertook a chemical engineering internship at NCSR "Demokritos", Athens, Greece (09/2006-07/2012).

Final Year M.Eng Thesis: “Development and characterization of Cobalt-based inorganic pigments by combustion synthesis”. (07/2012-02/2014). In collaboration with the Advanced Ceramics and Composites Laboratory, INN, NCSR "Demokritos", Athens, Greece.

Supervisors: G. Xanthopoulou (Dr.), L. Zouboulakis (Prof.).

**June 2006:** Graduated from the senior high school of Ambelonas Larissas. Average grade: **19.3/20 (96%)**.

**SKILLS:**

*Language skills:* Greek (Native), English (C2), French (B2), Russian (B1).

*Computer skills:* Regular user of Crystallographica, Origin, Grapher and Microsoft Office Suite.Some experience with Fortran, AutoCAD. Experience in online scientific research and data categorization.

*Laboratory skills and experience:*

* Metallographic preparation and examination of metallic and ceramic materials (cutting, mounting, grinding, polishing)
* Optical Microscopy
* Hardness and micro-hardness testing
* X-ray Diffraction (XRD)
* Fourier transform infrared spectroscopy (Ft-IR)
* Gas chromatography (GC)
* Viscosity measurements (dynamic and kinetic)
* Mechanical properties of materials
* (INSTRON UTM)
* Scanning electron microscope (SEM)
* Polymers and biopolymers (PLA)
* Polymer-ceramic composites
* Self-propagating High-Temperature Synthesis (SHS)
* Solution Combustion Synthesis (SCS)
* Chemical processing: titration etc.
* Heat treatment of materials
* Measurements of catalytic properties of materials
* Surface area and pore analysis (BET)

**Research papers:**

* G. Xanthopoulou, O. Thoda, E. D. Metaxa, G. Vekinis, A. Chroneos, Influence of atomic structure on the activity of nano-structured nickel-based SCS catalysts during hydrogenation of maleic acid , Journal of Catalysis, [Volume 348](http://www.sciencedirect.com/science/journal/00219517/348/supp/C), April 2017, pp 9–21.
* O. Thoda, G. Xanthopoulou, G. Vekinis, A. Chroneos, Parametric optimisation of Solution Combustion Synthesis catalysts and their application for the aqueous hydrogenation of maleic acid, Catalysis letters, February 2018, Volume 148, Issue 2, pp 764–778.
* G. Xanthopoulou , O. Thoda, S. Roslyakov, A. Shteinman, D. Kovalev, E. Levashov, G. Vekinis, A. Sytschev, A. Chroneos, Solution combustion synthesis of nano-catalysts with a hierarchical structure, Journal of Catalysis, Volume 364, August 2018, pp 112-124.
* O. Thoda,G. Xanthopoulou, G. Vekinis, A. Chroneos, Review of Recent Studies on Solution Combustion Synthesis of Nanostructured Catalysts, Advanced Engineering Materials, 2018, Volume 20, Issue 8, pp 1800047.
* O. Thoda, G. Xanthopoulou, V. Prokof’ev, S. Roslyakov, G. Vekinis, A. Chroneos, Influence of Preheating Temperature on Solution Combustion Synthesis of Ni–NiO Nanocomposites: Mathematical Model and Experiment, International Journal of Self-Propagating High-Temperature Synthesis, 2018, Volume 27, Issue 4, pp 207–215.
* O. Thoda, G. Xanthopoulou, G. Vekinis, A. Chroneos, The Effect of the Precursor Solution's Pretreatment on the Properties and Microstructure of the SCS Final Nanomaterials, Applied Sciences, 2019, Volume 9, Issue 6, pp 1200.
* O. Thoda, G. Xanthopoulou, G. Vekinis, A. Chroneos, Influence of various parameters on the SCS Ni/NiO nanostructures and their mechanism of formation, Accepted for publication in Eurasian Chemico-Technological journal, 2019.

**Conference presentations:**

* O. Thoda, G. Xanthopoulou, G. Vekinis, L. Zoumpoulakis, N. Boukos Solution Combustion Synthesis of cobalt pigments, 11th SHS International Symposium on SHS, 5-9 September 2011, Anavissos, Greece, pp.362-363.
* O. Thoda, G. Xanthopoulou, G. Vekinis, L. Zouboulakis “Regularity of colour formation in cobalt pigments produced by Solution Combustion Synthesis”, SHS2013, 21-24 October 2013, South Padre Island, Texas, USA, pp.162-163.
* O. Thoda, G. Xanthopoulou, G. Vekinis, L. Zouboulakis, “Production of cobalt based pigments with Solution Combustion Synthesis”, 6thPanhellenic Ceramics Conference, Athens, 3-4 April 2014.
* O. Thoda, G. Xanthopoulou, A. Chroneos, G. Vekinis, Physico-chemical properties of combustion synthesis catalysts and their catalytic activity in liquid-phase hydrogenation, International symposium SHS2015, 12-15 October 2015, Antalia, Turkey, pp.145-146.
* O. Thoda, G. Xanthopoulou, A. Chroneos, G. Vekinis, Thessaloniki, Greece Influence of water treatment on the nickel and nickel oxide nanoparticles properties produced by SCS, 13th International Conference on Nanosciences& Nanotechnologies (NN16), 5-8 July 2016, pp.125.
* O. Thoda, G. Xanthopoulou, A. Chroneos, G. Vekinis, Solution Combustion Synthesis of Ni and Ni-Al based nanomaterials, 6th Pan-Hellenic Conference on Metallic Materials, 7-9 December 2016, Ioannina, Greece.
* O. Thoda, G. Xanthopoulou, V.Prokof’ev,G. Vekinis, A. Chroneos Numerical modelling of flame temperature of gel solution combustion synthesis of nanocrystalline nickel-based catalyst and comparison with experimental data, SHS2017, Tbilisi, Georgia, 25-28 September 2017, pp.267-270.
* O. Thoda, G. Xanthopoulou, G. Vekinis, A. Chroneos, Development of solution combustion synthesis technology for nickel-based hydrogenation catalysts, SHS2017, Tbilisi, Georgia, 25-28 September 2017, pp.271-275. (key-note lecture).
* Marinou, O. Thoda, G. Xanthopoulou, G. Vekinis, Ni-based catalytic coatings synthesized by in-flight SCS during flame spraying, SHS2017, Tbilisi, Georgia, 25-28 September 2017, pp. 292-295, (oral talk).
* O. Thoda, G. Xanthopoulou, G. Vekinis, A. Chroneos, Glycine-organic matrix combustion synthesis (Glycine-OMCS): an alternative method for synthesising nanostructured nickel catalysts for liquid phase hydrogenation, Euromat2017, Thessaloniki, Greece, 17-22 September 2017, A7-I-P-TUE-P1-12.