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CHRISTOS TAMPAXIS

- Personal Information**
- Marital status: Single
 - Date of birth: October 11th, 1983
 - Place of birth: Athens, GREECE
 - Parents: Theodore, Styliani
- Current Position**
- Research Associate / PhD Candidate, *Porous Materials Group*, Institute of Nanoscience and Nanotechnology (INN), **National Center for Scientific Research “Demokritos”**, Athens-Greece (2012- today)
- Education**
- **M.Sc.** Chemistry & Science Based Business, **University of Leiden**, The Netherlands (2010)
Master Thesis: “Synthesis of Iron and Copper Coordination Compounds as Catalysts for Oxidation Reactions and DNA-cleaving agents”
Iron-Schiff base compounds tested as biomimetic homogeneous catalysts in the oxidation reaction of cyclohexane to cyclohexanol and cyclohexanone. Copper-Schiff base compounds after their single-crystal X-ray structures had been determined, were tested as potential DNA-cleaving agents (inducing double strand DNA-cleavages with respect to their geometry) using gel electrophoresis
 - **B.Sc. :** Chemistry, **University of Ioannina**, Greece (2007)
Thesis: “Non-heme biomimetic oxidation (homogeneous and heterogeneous) catalysts.”
Synthesis of Manganese compounds, use as catalysts in epoxidation of olefins, and research of their catalytic activity as homogeneous or heterogeneous (immobilized in silica gel) mixtures
- Working Experience**
- Visiting scientist, **IBT Co. Ltd.**, Israel (September - December 2016) (May - July 2017)
 - Visiting scientist **Megara Resins - Fanis Anastassios S.A.**, Greece (February - April 2017)
 - Visiting scientist, **Steel Belt Systems**, Italy (February - June 2016).
 - Research Associate – Porous Materials Group, **National Center for Scientific Research “Demokritos”**, Athens-Greece (2012- today).
 - Internship at **Janssen Pharmaceuticals** in Strategic Marketing Department under supervision of New Product Development Manager (April-October 2010)
 - Internship at **Gorlaeus Laboratories**, The Netherlands, under the direct supervision of Prof. dr. Jan Reedijk and Patrick Gamez. (February-October 2008)
 - Private teaching of Chemistry and Physics at second and third grade students (2001-2009), (2010-2012)

Publications

1. Kostoglou N, Koczwarra C, Stock S, **Tampaxis Ch**, Charalambopoulou G, Steriotis T, et al. Nanoporous polymer-derived activated carbon for hydrogen adsorption and electrochemical energy storage. *Chemical Engineering Journal*. 2022;427(July 2021).
2. Kostoglou N, Liao CW, Wang CY, Kondo JN, **Tampaxis Ch**, Steriotis T, Giannakopoulos, K et. al. Effect of Pt nanoparticle decoration on the H₂ storage performance of plasma-derived nanoporous graphene. *Carbon N Y*. 2021;171:294–305.
3. Kostoglou N, **Tampaxis Ch**, Charalambopoulou G, Constantinides G, Ryzhkov V, Doumanidis C, Matovic B, Mitterer C, Rebholz C. Boron nitride nanotubes versus carbon nanotubes: A thermal stability and oxidation behavior study. *Nanomaterials*. 2020;10(12):1–9.
4. Nguyen, H. G. T. et al. A reference high-pressure CH₄ adsorption isotherm for zeolite Y: results of an interlaboratory study. *Adsorption* 26, 1253–1266 (2020)
5. Smyrnioti M, **Tampaxis Ch**, Steriotis T, Ioannides T. Study of CO₂ adsorption on a commercial CuO/ZnO/Al₂O₃ catalyst. *Catalysis Today*. (2020) 357 (November 2018):495–502.
6. Stefanopoulos KL, **Tampaxis Ch**, Sapalidis AA, Katsaros FK, Youngs TGA, Bowron DT, Steriotis T. Total neutron scattering study of supercooled CO₂ confined in an ordered mesoporous carbon. *Carbon N Y*. (2020);167:296–306
7. **Tampaxis Ch**, Steriotis T, Katsaros FK, Sapalidis AA, Youngs TGA, Bowron DT, Stefanopoulos K.. Enhanced Densification of CO₂ Confined in the Pores of a Carbon Material: an in Situ Total Neutron Scattering Study. *Journal of Surface Investigation*. (2020);14(Suppl. 1):S221–4
8. Holec, D., Kostoglou, N., **Tampaxis, Ch.**, Babic, B., Mitterer, C., Rebholz, C. “*Theory-guided metal-decoration of nanoporous carbon for hydrogen storage applications*”, *Surface and Coatings Technology*, 351, (2018), pp. 42-49.
9. Bratsos, I., **Tampaxis, Ch.**, Spanopoulos, I., Demitri, N., Charalambopoulou, G., Vourloumis, D., Steriotis, T.A., Trikalitis, P.N. “*Heterometallic In(III)-Pd(II) Porous Metal-Organic Framework with Square-Octahedron Topology Displaying High CO₂ Uptake and Selectivity toward CH₄ and N₂*”, *Inorganic Chemistry*, 57 (12), (2018), pp. 7244-7251.
10. Tsoufis, T., **Tampaxis, Ch.**, Spanopoulos, I., Steriotis, T., Katsaros, F., Charalambopoulou, G., Trikalitis, P.N. “*High-quality graphene sheets decorated with ZIF-8 nanocrystals*”, *Microporous and Mesoporous Materials*, 262, (2018), pp. 68-76.
11. Kostoglou, N., Koczwarra, C., Prehal, C., Terziyska, V., Babic, B., Matovic, B., Constantinides, G., **Tampaxis, Ch.**, Charalambopoulou, G., Steriotis, T., Hinder, S., Baker, M., Polychronopoulou, K., Doumanidis, C., Paris, O., Mitterer, C., Rebholz, C. “*Nanoporous activated carbon cloth as a versatile material for hydrogen adsorption, selective gas separation and electrochemical energy storage*”, *Nano Energy*, 40, (2017), pp. 49-64.
12. V. Tzitzios, N. Kostoglou, M. Giannouri, G. Basina, **Ch. Tampaxis**, G. Charalambopoulou, Th. Steriotis, K. Polychronopoulou, Ch. Doumanidis, Ch. Mitterer, C. Rebholz, “*Solvothermal synthesis, nanostructural characterization and gas cryo-adsorption studies in a metal–organic framework (IRMOF-1) material*” *International Journal of Hydrogen Energy*, (2017), Article in Press
13. Kostoglou, N., Tarat, A., Walters, I., Ryzhkov, V., **Tampaxis, Ch.**, Charalambopoulou, G., Steriotis, Th., Mitterer, C., Rebholz, C., “*Few-layer graphene-like flakes derived by plasma treatment: A potential material for hydrogen adsorption and storage*”, *Microporous and Mesoporous Materials*, 225 (2016) 482-487.

14. Giasafaki, D., Charalambopoulou, G., **Tampaxis, Ch.**, Dimos, K., Gournis, D., Stubos, A., Steriotis, Th., “*Comparing hydrogen sorption in different Pd-doped pristine and surface-modified nanoporous carbons*”, Carbon 98 (2016) 1-14.
15. Spanopoulos, I., Bratsos, I., **Tampaxis, Ch.**, Vourloumis, D., Klontzas, E., Froudakis, G., Charalambopoulou, G., Steriotis, Th., Trikalitis, P., “*Exceptional Gravimetric and Volumetric CO₂ Uptake in a Palladated NbO-type MOF Utilizing Cooperative Acidic and Basic, Metal-CO₂ Interactions*”, Chemical Communications, 52 (69), (2016), 10559-10562.
16. Kourtellaris, A, Moushi, E, Spanopoulos, I, **Tampaxis, Ch**, Charalambopoulou, G, Steriotis, Th, Papaefstathiou, G, Trikalitis, P, Tasiopoulos, A, “*A microporous Cu₂⁺ MOF based on a pyridyl isophthalic acid Schiff base ligand with high CO₂ uptake*”, Inorganic Chemistry Frontiers3(12), (2016), pp. 1527-1535
17. D. Giasafaki, G. Charalambopoulou, **Ch. Tampaxis**, D. Mirabile Gattia, A. Montone, G. Barucca, Th. Steriotis, “*Hydrogen storage properties of Pd-doped thermally oxidized single wall carbon nanohorns*”, Journal of Alloys and Compounds, 645, Issue S1, 11 (2015), S485-S489.
18. Spanopoulos I., Bratsos, I., **Tampaxis, Ch.**, Kourtellaris, A., Tasiopoulos, A, Charalambopoulou, G.,Steriotis, T. Trikalitis, P.N, “*Enhanced gas-sorption properties of a high surface area, ultramicroporous magnesium formate*”, CrystEngComm, 17 (3),(2015) 532-53
19. Kostoglou, N, Tzitzios, V, Kontos A, Giannakopoulos K, **Tampaxis Ch**, Papavasiliou A, Charalambopoulou, G, Steriotis, T, Li, Y, Liao, K, Polychronopoulou, K, Mitterer, C, Rebholz, C, “*Synthesis of nanoporous graphene oxide adsorbents by freeze-drying or microwave radiation: Characterization and hydrogen storage properties*” International Journal of Hydrogen Energy 40 (2015) 6844-6852
20. Giasafaki, D., Charalambopoulou, G., **Tampaxis, Ch.**, Stubos, A., Steriotis, T., “*Pd-doped molecular sieves for hydrogen storage*”, International Journal of Hydrogen Energy 39 (2014) 9830-9836

Conferences

- Bratsos, **Ch. Tampaxis**, I. Spanopoulos, N. Demitri, D. Vourloumis, G. Charalambopoulou, P. Trikalitis, Th. Steriotis, “*An unprecedented heterobimetallic In(III)-Pd(II) porous metal-organic framework with soc topology for hydrogen storage*”, E-MRS 2015 Fall Meeting, Warsaw-Poland, 15-18 September 2015.
- Ampoumogli, D. Giasafaki, **Ch. Tampaxis**, G. Charalambopoulou, A. Stubos, Th. Steriotis, “*Hydrogen storage in solids with the use of nanoporous carbon supports and scaffolds*”, Euro-Mediterranean Hydrogen Technologies Conference - EmHyTeC2014, 9-12 December 2014, Taormina, Italy
- N. Kostoglou, V. Tzitzios, **Ch. Tampaxis**, G. Charalambopoulou, Th. Steriotis, K. Giannakopoulos, A. Kontos, Y. Li, K. Liao, K. Polychronopoulou, C. Rebholz, “*Synthesis, characterization and hydrogen storage capacity of nanoporous graphene-based adsorbents*”, AVS 61st International Symposium & Exhibition, Baltimore-USA, 9-14 November 2014
- D. Giasafaki, **Ch. Tampaxis**, G. Charalambopoulou, D. Mirabile Gattia, A. Montone, Th. Steriotis, “*Hydrogen storage properties of Pd-doped thermally oxidised Single Wall Carbon Nanohorns*”, 14th International Symposium on Metal-Hydrogen Systems (MH 2014), Salford, Manchester - UK, 20 - 25 July 2014
- D. Giasafaki, Ch. Tampaxis, A. Ampoumogli, G. Charalambopoulou, A. Bourlinos, A. Stubos, Th. Steriotis, “*Studying the effect of surface chemistry and metal-doping*

on the hydrogen storage capacity of carbon nanostructures”, Symposium C: Nanostructured Materials for solid state hydrogen storage, E-MRS 2013 Fall Meeting, Warsaw-Poland, 16-20 September 2013

Participation in research projects

- RESEARCH–CREATE–INNOVATE (Project nr: T1EΔK-00770, 2014-2020): “Application of Novel Porous Materials in Industrially Relevant GasSeparation/Purification Processes (PureGas)”.
- MC FP7-PEOPLE-2012-IAPP (Grant 324410), 06.2014-05.2016 New weather-stable low gloss powder coatings based on bifunctional acrylic solid resins and nano-additives (GLOW)
- FP7-INFRASTRUCTURES-2011-1 (Grant Agreement 284522, 2011-2015): “Integrating European Infrastructure to support Science and Development of Hydrogen- and Fuel Cell Technologies towards European Strategy for Sustainable, Competitive and Secure Energy (H2FC)”.