

CV

Name: Katerinopoulou Katerina
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Academic Titles

- 1999 B.Sc. Chemistry Departmentt, University of Patras
- 2003 MSc, Chemistry Department, University of Patras: “Advanced Technology Materials Chemistry”
- 2008 MSc, Department of Materials Science, University of Patras.
[http:// nemertes.lis.upatras.gr/dspace/handle/123456789/1631](http://nemertes.lis.upatras.gr/dspace/handle/123456789/1631)
- 2017 PhD, Department of Business Administration of Food and Agricultural Enterprises, University of Patras «Title: Development of Innovative Biodegradable Hybrids Using Renewable Raw Materials».
<https://nemertes.lis.upatras.gr/jspui/handle/10889/10855>

Special knowledge - TECHNIQUES FOR MATERIAL CHARACTERIZATION:

Study of crystallinity of materials and determination of average size of crystallites by X-ray diffraction spectroscopy (XRD)

Nitrogen adsorption-desorption isotherms for the determination of the specific surface area (BET method) and material pore size distribution (BJH method)

Qualitative analysis of samples and identification of various chemical groups by FTIR spectroscopy and UV-VIS spectroscopy

Elemental surface analysis with X-ray photoelectron spectroscopy (XPS)

Morphology analysis with Scanning Electron Microscopy (SEM)

Thermobarimetric analysis (TGA)

Research Interests

Hybrid organic-inorganic nanocomposites. Synthesis / structure characterization, investigation of mechanical and barrier properties.

Geographic origin of agricultural products via isotopic ratio of stable isotopes estimation.

Publications

1. Katerina Katerinopoulou, Achilleas Kontogeorgos, Constantinos E. Salmas, Angelos Patakas and Athanasios Ladavos ‘**Geographical Origin Authentication of Agri-Food Products: A Review**’ MDPI, Foods (2020) 9, 489, doi:10.3390/foods9040489
2. K. Katerinopoulou, A. Giannakas, K. Grigoriadi, N. Barkoula, A. Ladavos ‘**Preparation, characterization and Biodegradability Assessment of Maize Starch-(PVOH)/Clay Nanocomposite Films**’, Journal of Starch, (2018) doi.org/10.1002/star.201800076

3. K. Katerinopoulou, A. Giannakas, K. Grigoriadi, N. Barkoula, A. Ladavos **‘Preparation and characterization of acetylated corn starch-(PVOH)/clay nanocomposites films’**, Journal of Carbohydrate Polymers, 102, 216-222, (2014)
4. G.Z. Papageorgiou, E. Karandrea, D. Giliopoulos, D.G. Papageorgiou, A. Ladavos, K. Katerinopoulou, D.S. Achilias, K.S. Triantafyllidis, D.N. Bikiaris. **‘Effect of clay structure and type of organomodifier on the thermal properties of poly(ethylene terephthalate) based nanocomposites’**, Journal of Thermochimica Acta, 567, 84-96, (2014)
5. G. Papakonstantinou, M.K. Daletou, A. Kotsifa, K. Katerinopoulou, T. Ioannides and S.G. Neophytides, **“Non Noble Metal Electrocatalysts for High Temperature PEM Fuel Cells”** The Electrochemical Society, Article in ECS Transactions 25(1):181-189, (2009) doi:10.1149/1.3210570
6. A.G. Kalampounias, K. Katerinopoulou, S. N. Yannopoulos and N. Bouropoulos **“Textural and structural studies of sol-gel derived CaO and MgO silica glasses”**, Journal of Non-Crystalline Solids, Volume 354, Issues 2-9, pp. 749-754, (2008)

Conferences

7. K. Katerinopoulou, N. Barkoula, A. Giannakas, A. Lantavos. **‘Composition and characterization of biodegradable nanocomposite films of starch - clay.’** 4th Panhellenic Conference on Green Chemistry and Sustainable Development, 30 Oct-1 November 2014, Ioannina
8. Nektaria-Marianthi Barkoula, Aris Giannakas, Kalouda Grigoriadi, Maria Vlacha, Katerina Katerinopoulou, Athanasios Ladavos, **“Effect of layered silicate addition on the thermomechanical response of polymers for food packaging applications.”** 6th Panhellenic Conference on Thermal Analysis & Calorimetry, Thermo 2014, 26-28 September 2014
9. Lantavos Athanasios, Katerinopoulou Katerina, Giannakas Aris, **"Synthesis and characterization of nanocomposites with starch-glycerol-polyvinyl alcohol"**, Panhellenic Chemistry Conference, Thessaloniki 2011
10. K. Katerinopoulou, A. Giannakas, A. Ladavos **‘Preparation and characterization of acetylated starch/clay nanocomposites’** Panhellenic Conference on Solid State Physics and Materials Science, 26-29 September 2010, Ioannina.
11. G. Papakonstantinou, M.K. Daletou, A. Kotsifa, K. Katerinopoulou, T. Ioannides and S.G. Neophytides. **“Non Noble Metal Electrocatalysts for High Temperature PEM Fuel Cells”** 216th ECS Meeting, The Electrochemical Society, Vienna, Austria, October 4-9 (2009)
12. A. Kalambounias, K. Katerinopoulou, S. Giannopoulos, N. Bouropoulos. **"Composition and Characterization of Bioactive Glasses"**, 1st Two-Day Meeting of the Hellenic Society of Biomaterials 7-8 October 2006, Athens
13. A.G. Kalampounias, N. Bouropoulos, K. Katerinopoulou and S. N. Yannopoulos, **“Textural and structural studies of bioactive glasses: A comparison between CaO and MgO modified silica glasses”**, presented in the XI International Conference on the Physics of Non-Crystalline Solids, 29 October - 2 November 2006, Rhodes, Greece
14. D. Delimaris, A. Katerinopoulou, S. Makrigianni, A. Mamasioulas, M. Michalopoulou, T. Ioannidis, **“Transparent superinsulating silica aerogels”**, (poster) 5th International Exhibition and Conference on Environmental Technology (HELECO '05), HELEXPO Exhibition Center, ATHENS, 3-6 February 2005
15. E. Economopoulos, D. Delimaris, A. Katerinopoulou, S. Makrigianni, T. Ioannidis, **"Translucent monolithic SiO₂"**, 5th Panhellenic Conference on Chemical Engineering, THESSALONIKI, May 2005
16. D. Delimaris, A. Katerinopoulou, S. Makrigianni, T. Ioannidis, **"Transparent SiO₂ Superconducting Aircraft"**, 4th Panhellenic Conference on Chemical Engineering, PATRA, May 2003
17. S. Makrygianni, A. Katerinopoulou, Th. Ioannidis, **"Composition of mixed carbon gel-Metal Oxides from organic Resins"**, 3rd Panhellenic Conference on Chemical Engineering, ATHENS, May 2001

18. D. Delimaris, A. Katerinopoulou, S. Makrygianni, E. Pavlidou, E. Hatzikraniotis and T. Ioannides, **“Nanostructured Nickel and Cobalt Hydroxide Obtained by non-conventional drying techniques”**, Euromat 2001, Rimini, Italy, 10-14 June 2001

Patent

- 2004 Patent for the manufacture of transparent silica gels (together with Th. Ioannidis, D. Delimaris, S. Makrygianni).