Brief CV

Name: Prof. Ali Bumajdad
Kuwait University, Khaldiya Campus, Block 3, Al Firdous Street, Building 31KH, 2nd floor, Chemistry Department, office no. 27, Khaldiya, Kuwait., **Phone:** +965 24985543 (office), +96524987738 (lab), +965 99411998 (Mobile), **E-mail:** a.bumajdad@ku.edu.kw

Prof. Ali Bumajdad received a B.Sc. from Kuwait University in 1995, and a M.Sc. and a Ph.D. from University of Bristol, in 1996 and 2000, respectively. After that he started his faculty career at Kuwait University, Department of Chemistry. He was promoted to associate professors in 2006 and to full professors in 2014. His specialty is related to nanomaterials and nanotechnology with focus on surfaces and colloidal properties of nanomaterials. In his research, he targeted materials with environmental, renewable energy, sensors, and green chemistry applications. He was well trained on using neuron scattering facilities and he visited several times Rutherford Appleton Laboratory (ISIS, UK), Institut Laue-Langevin (ILL, France), National Institute of Standards and Technology (NIST) Center for Neutron Research (Gaithersburg, USA) and Oakridge National Lab (ORNL, USA). He was the chair of the first Kuwait International Nanotechnology Conference and Exhibition that was held in 2016. Prof. Bumajdad is a Fellow of the Royal Society of Chemistry (**RSC**) and International Representative to RSC in Kuwait. In 2013, he was Awarded the Scientific Production Prize, Kuwait Foundation for Advancement of Science, KFAS. Prof. Bumajdad was visiting professor to University of Bristol (2003-2004) and to Calgary University, Canada (summer 2011), University of Newcastle, UK, and University of Northern British Colombia, Canada (2016-2017). Prof. Bumajdad is a reviewer to over 50 international Journal and so far, he published 69 research articles and presented over 85 abstracts in international conferences. He was the main supervisor of 12 M.Sc. students and 5 Ph.D. students. He conducted so far 11 research project as principal investigator and 11 as co-investigator.

Research Interest:

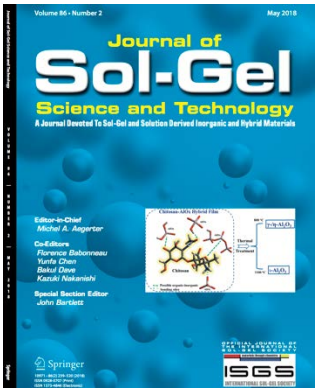
Prof. Bumajdad specialty is nanomaterials and nanotechnology with focus on surfaces and colloidal properties of nanomaterials. I targeted materials with environmental, renewable energy, sensors, and green chemistry applications (e.g. pure and doped CeO_2, TiO_2 and ZnO, MgO, SiO_2, ZrO_2, Al_2O_3, Fe_2O_3, Ag, Au, Ni, graphene, carbon nanotube, functionalized activated carbon …etc). He also work on green fabricating nanomaterials using natural resources to be used for environmental applications (e.g. microbial synthesis of Noble metal to be used as environmental catalysts, energy saving built-nanomaterials, removal of organics and heavy metals from contaminated water by nanomaterials, CO_2 fixation, converting waste materials into value-added product, green phtocatalysis, ….etc). Prof. Bumajdad also expert in the field of detergents, soaps and cosmetics. He is also expertise in the laboratory and chemcial safety, heterogeneous catalysis, chemistry of cement and concrete, and enhancing oil recovery

Selected Publications:

1. Al-Omani, S.; **Bumajdad, A.**; Al Sagheer, F. A.; J.; Zaki M. I. 'Surface and related bulk properties of titania **nanoparticles** recovered from Aramid-Titania hybrid films: A novel attempt', ***Materials Research Bulletin***, 2012, 47, 2208-3316.

2. **Bumajdad A.**; Madkour M., Understanding the superior photocatalytic activity of noble metals modified titania under UV and visible light irradiation, ***PCCP***, 2014, 16 (16), 7146 – 7158. **(Prospective articles, selected for front cover).**

2. **Bumajdad, A.**, Al-Ghareeb, S., Madkour, M., Al Sagheer, F., Zaki M. I.'Synthesis of MgO **nanocatalyst** in water-in- oil microemulsion for CO oxidation', ***Reaction Kinetics, Mechanisms and Catalysis***, 2017, 99, 345 - 359.
3. **Bumajdad, A.**, Al-Ghareeb, S., Madkour, M., Al Sagheer, F., Non-noble, efficient catalyst of unsupported α-Cr_2O_3 **nanoparticles** for low temperature CO Oxidation, ***Scientific Report***, 2017, 7: *14788* | DOI:10.1038/s41598-017-14779-x.
4. Aqeel, T., Heather F. Greer, H. F., **Bumajdad, A.** 'Novel synthesis of crystalline mesoporous tin dioxide doped with **nanogold'** ***Kuwait Journal of Science***, 2018, 45(2), 89-99.
5. Kupwade-Patil, K., Palkovic, S. D., **Bumajdad, A**., Soriano, C., Buyukozturk, O., Use of Silica Fume and Natural Volcanic Ash as a replacement to Portland Cement: Micro and Pore structural Investigation using NMR, XRD, FTIR and X-ray Micro Tomography, ***Construction and Building Materials***, 2018, 158, 574-590.
6. Kupwade-Patil, K., Chin, S., Ilavsky, J., Andrews, R. N., **Bumajdad, A**., Buyukozturk, O., Hydration kinetics and morphology of Cement Pastes with Pozzolanic Volcanic Ash studied via Synchrotron based Techniques, ***Journal of Materials Science***, 2018, 53, 1743-1757.
7. **Bumajdad, A.** Nazeer, A. A., Al-Sagheer, F., Nahar, S., Zaki, M. I., Controlled synthesis of ZrO_2 **nanoparticles** with tailored size, morphology and crystal phases via organic/inorganic hybrid films, ***Scientific Reports***, 2018, 8:3695.
8. Al Sagheer, F., Nahar; S., Nazeer, A. A., **Bumajdad, A.**, Zaki, M. I., High-temperature stable transition aluminas **nanoparticles** recovered from sol-gel processed chitosan-AlOx organic-inorganic hybrid films", ***Journal of Sol-Gel Science and Technology***. 2018, 86, 410-422. https://doi.org/10.1007/s10971-018-4617-y. (**selected for front cover).**



9. Madkour, M., **Bumajdad, A.,** Al Sagheer, F., To what extent do polymeric stabilizers affect **nanoparticles** characteristics?, ***Advances in Colloid and Interface Science***, In press.