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Esam bakir received his B.S., M.Sc. and Ph.D. degrees from Ain Shams University, Cairo, Esam bakir has supervised 5 research students that led to M.Sc. and Ph.D. degrees being awarded in spectroscopy, material (nano) sciences, applied photochemistry and environmental photochemistry including photocatalysis. About 4 research publications have appeared in the literature. He has participated in international conferences "Solar Series, Nanotech Insight 05, and four international workshops on environmental photochemistry, starting from 2006- 2010.

Education

Ph.D in Inorganic Chemistry and Photochemistry from Ain shams University, Cairo, Egypt in 2008 (under supervision of Prof. M. S. A. Abdel-Mottaleb) M.Sc. in Inorganic Chemistry and Photochemistry from Ain shams University, Cairo, Egypt in 2005 (under supervision of Prof. M. S. A. Abdel-Mottaleb) B.Sc. in chemistry (Very good honors), June 2001, from Faculty of Science, Ain Shams University, Cairo.

Academic Nominations and Appointments

Lecturer, the Faculty of Science, Ain shams University, Cairo, Egypt 2008 until now. Demonstrator and Assistant Lecturer, Chem. Dep. Fac. Sc. Ain Shams Uni.2001-2005.

Courses:

- 1- Electroanalytical chemistry
- 2- Environmental chemistry
- 3- Instrumental analysis
- 4- Kinetic methods of analysis
- 5- Nanotechnology
- 6- Inorganic chemistry
- 7- Bioinorganic chemistry

Research Interest

Spectroscopy, Material (Nano) Sciences, and Environmental Photochemistry

Publications

- 1. Essam Bakier and M.S.A. Abdel-Mottaleb Factors affecting light energy transfer in some samarium International Journal of Photoenergy Volume 7(2005), Issue 1, Pages 51-58
- Esam Bakeir, G. M. Attia, Maria Lukyanova, Boris Lukyanov, and M. S. A. Abdel-Mottaleb Effect of Tb and Sm Ions on the Photochromic Behavior of Two Spiropyrans of Benzoxazine Series in Solution Research Letters in Physical Chemistry Volume 2008 (2008), Article ID 314898.
- 3. Essam Bakir Photophysical properties of clozapine and determination of its concentration by using Eu(III)—dipicolinic acid complex as photo probe. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy Volume 75, Issue 1, January 2010, Pages 490-492.
- 4. Amal Fadl Abdelkader, Raifa Ahmed Hassanein, Mohamed Mahmoud Abo-Aly, Mohamed Said Attia and Esam Mohamed Bakir Screening the bio-safety of wheat produced from pretreated grains to enhance tolerance against drought using physiological and spectroscopic methods. Food and Chemical Toxicology Volume 48, Issue 7, July 2010, Pages 1827-1835
- Determination of melamine in different milk batches using a novel chemosensor based on the luminescence quenching of Ru(II) carbonyl complex M.S. Attia, E.Bakir, AymanA. Abdel-aziz, M.S.A.Abdel-mottaleb, Talanta 84 (2011) 27–33.
- 6. Highly Selective Recognition on Enatioselective of R(+) and S(-)-1,1-Bi(2-Naphthol) Using of Eu(dap)3 Complex as Photo Probe, Esam Bakir, <u>Journal</u> of Fluorescence (2011).

7. Published papers in conferences

1. Essam Bakier, M.S.A. Abdel-Mottaleb et al

- Photochromic tautomerism of 2,4,5-triarylimidazole molecules and their complexes with Terbium ion, Egypt conference solar06 (2006)
- 2. Essam Bakier, M.S.A. Abdel-Mottaleb et al Thermo-and Photo-responsive Complexes of Photoisomerizable Spiro-Benzoxazine Derivatives with some Lanthanide ions, Egypt conference solar08 (2008).
- 3. Essam Bakier, M.S.A. Abdel-Mottaleb et al Lanthanide Ions Doped ZnO Nano-Disks as Luminescent Materials For Textile Tagging, Egypt conference solar10 (2010).

Supervised M.Sc. and Ph.D. Thesis

- Mona supervised by Abdel-Mottaleb M.S.A, Esam Bakir and et al. Production and Efficiency Testing of Inorganic Nanophotocatalysts For Water Treatment. M.Sc. Thesis, Photoenergy Center and Department of Chemistry, Faculty of Science, Ain Shams University (2010).
- Doaa supervised by Abdel-Mottaleb M.S.A , Esam Bakir and et al. M.Sc. Thesis, Photoenergy Center and Department of Chemistry, Faculty of Science, Ain Shams University (2010)
- Mohmed Saber supervised by Abdel-Mottaleb M.S.A, Esam Bakir and et al. Preparation of nano materials and its application in photocatalytic.
 M.Sc. Thesis, Photoenergy Center and Department of Chemistry, Faculty of Science, Ain Shams University (2009)
- Mostafa Hussein supervised by Abdel-Mottaleb M.S.A, Esam Bakir and et al. Preparation of some photoactive nano-materials and its application in photocatalysis and solar cell fabrication M.Sc. Thesis, Photoenergy Center and Department of Chemistry, Faculty of Science, Ain Shams University (2010)
- 5. Saeed El-Sayed supervised by Abdel-Mottaleb M.S.A, Esam Bakir and et al. Preparation nano luminescent materials for textile tagging Ph.D.. Thesis, Photoenergy Center and Department of Chemistry, Faculty of Science, Ain Shams University (2009).