Sudipta Seal
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Professional Preparation

Indian Institute of Tech. (IIT), India	Metallurgical and Mat. Sci. and Eng.	B-Tech (Hons), 1990
University of Sheffield, Sheffield, UK	School of Engineering Materials	MMet, 1992
University of Wisconsin, (UWM), WI	Materials Eng. & Surface Studies	Ph.D., 1996
Lawrence Berkeley Lab, University of California, Berkeley, CA	Synchrotron Mat. Sci.	Postdoc, 1997

Appointments

- 2017 Jul Chair, Materials Science and Eng., University of Central Florida, Orlando, FL
- 2014- Interim Chair, Materials Science and Eng., University of Central Florida, Orlando, FL
- 2009-17 Director, Materials Center (AMPAC) and Nanocenter (NSTC), University of Central Florida
- 2005- Professor, AMPAC, MMAE, University of Central Florida, Orlando, FL
- 2001-2005 Nanoinitiative Coordinator, University of Central Florida, Orlando, FL
- 2002-2005 Associate Professor, University of Central Florida, Orlando, FL
- 1997-2002 Assistant Professor, University of Central Florida, Orlando, FL
- 1991-1997 Engineer (Management), TATA Steel, India

Products (* REU or UG, **Underrepresented)

1. Miriana Hijaz, Soumen Das, Ismail Mert, Ankur Gupta, Zaid Al-Wahab, Calvin Tebbe, Sajad Dar, Jasdeep Chhina, Shailendra Giri, Adnan Munkarah, Sudipta Seal and Ramandeep Rattan, R. Ratan, Folic acid tagged Nanoceria as a novel therapeutic agent in ovarian cancer, *BMC Cancer*, 16:220, 2016.
2. Erez Eitan, Emmette R. Hutchison, Nigel H. Greig, David Tweedie, Hasan Celik, Kenneth W. Fishbein, Richard G. Spencer, Soumen Das, Susheela Chigurapathi, Srinivasulu Chigurupati, Sudipta Seal and Mark P. Mattson, Combination Therapy with Lenalidomide and Nanoceria Ameliorates Symptoms and Pathology in CNS Autoimmunity, *Experimental Neurology*, 273,151-60, 2015.
3. Sayle, Thi; Sakthivel, Tamil; Das, Soumen; Seal, Sudipta; Zhang, Xueqiang; Ptasinska, Sylwia; Sayle, Dean, Activity Mapping of Defect Engineered Ceria Nanoparticles, Nanocubes and Mesoporous Architectures, *Chemistry of Materials*, *28* (20), 7287–7295, 2016.
4. J. Chen, S. Patil, S. Seal and J. McGinnis, "Rare earth nanoparticles prevent Retinal degeneration induced by intracellular peroxides", *NATURE Nanotechnology*, 1(2), 142-150, 2006.
5. Turkowski, Volodymyr; Babu, Suresh; Le, Duy; Haldar, Manas; Wagh, Anil; Hu, Zhongjian; Karakoti, Ajay; Gesquiere, Andre; Law, Benedict; Mallik, Sanku; Rahman, Talat; Leuenberger, Michael; Kumar, Amit; Seal, Sudipta, Linker-induced anomalous emission of organic-molecule conjugated metal-oxide nanoparticles, *ACS NANO*, *6* (6), pp 4854–4863, 2012.

Other Significant Products

1. Humaira Taz, Tamilselvan Sakthivel, Nana Yamoah, Connor Carr, Dhananjay Kumar, Sudipta Seal, and Ramki Kalyanaraman, Transparent ferromagnetic and semiconducting behavior in Fe-Dy-Tb based amorphous oxide films, *Scientific Reports* (Nature Publishing), 6, 27869-2016.
2. J. Dowding, S. Das, A. Kumar, T. Dosani, R. McCormack**, A. Gupta; T. Sayle, D. Sayle, L. vonKalm, S. Seal, W. Self, Cellular Interaction and Toxicity Depends On Physiochemical Properties and Surface Modification of Redox Active Nanomaterials, *ACS NANO*, *7*, 4855-4868, 2013.

3. J. D. Gaynor*, A. S. Karakoti, T. Inerbaev, S. Sanghavi, P. Nachimuthu, V. Shutthanandan, S. Seal and S. Thevuthasan, Enzyme-free Detection of Hydrogen Peroxide from Single layer(s) of Cerium Oxide Nanoparticles Immobilized on Poly(4-vinylpyridine) SAMs, *J of Materials Chemistry*, 1(28), 3431-3514, 2013.
4. Vanessa Moosavifazel[RET], A. Kumar, H. J. Cho, S. Seal, Laboratory research motivated chemistry classroom activity to promote interests among students towards science, *J of Nanotechnology Education*, 6, 25-29, 2014.
5. U. Bhatta, I. Ross, T. X. T. Sayle, D. C. Sayle, S. C. Parker, D. Reid, S. Seal, A. Kumar, G. Moebus, Cationic surface reconstructions on cerium oxide nanocrystals: An aberration corrected HRTEM study, *ACS NANO*, *6* (1), 421–430, 2012.

Synergistic Activities

- Scholarly Recognition: Selected only: 2000, 2004 College of Engineering Researcher of the Year, 2002 Excellence in Graduate Teaching, College of Engineering/Computer Science, UCF, 2002 ONR Young Investigator Award (ONR YIP), 2002, 2008 Research Incentive Award and Researcher of the Year, UCF, ASM IIM Lecturer Award, JSPS fellow award – NIMS, Japan, UCF Millionaires Club, 2005-2006 Alexander Von Humboldt Fellow (Faculty), Germany, 2008 – Royal Academy of Eng. Dist. Prof. Fellowship, Imperial College, London, Fellow American Society of Materials (FASM), Fellow American Advancement of Association of Science (FAAAS), Fellow of American Vacuum Society (FAVS), Fellow of Institute of Nanotechnology (FIoN), Fellow of National Academy of Inventors (FNAI), Fellow of American Institute of Medical and Biological Engineers (FAIMBE), Fellow of Electrochemical Society (FECS), Member of ASM, TMS, AVS, MRS, ECS, AAAS, and Tau-Beta-Pi professional societies. University Distinguished Professor, Pegasus Professor Award, UCF Trustee Professor, ASM International Board of Trustees, College of Engineering Faculty Excellence Award. Inducted to Florida Inventors Hall of Fame, and World Academy of Ceramics Fellow, H index: 96, Citation > 38,000, Issued Patents:>74