Sumit Ranjan Sahu

Mobile: +91-9884225142

Email:srsahuiitk@gmail.com

Educational Qualifications

Year	Degree	Institute
2014-Till date	PhD (Metallurgical and Materials Engineering)	IIT Madras
2013	M. Tech (Materials Science and Engineering)	IIT Kanpur
2011	M. Sc (Chemistry)	IIT Dhanbad (ISM)
2009	B. Sc (Chemistry)	St. Xaviers College, Calcutta University
2006	Higher Secondary	West Bengal Council for Higher Secondary Education
2004	Secondary	West Bengal Board of Secondary Education

SPECIALIZATION

- Large scale manufacturing of Lithium ion battery for Electrical Vehicle Application
- Testing of lithium ion battery pack (Galvanostatic cycling, cyclic voltammetry, impedance analysis, CC/CV modes), demonstration with e-cycle and e-bike
- Synthesis of new anode materials for lithium ion battery and up scaling (includes graphite, LTO, carbon nanotube, carbon nanohorn, graphene, silicon, tin, metal oxide based materials)

TECHNICAL SKILLS

• TEM, SEM, Battery cycler (coin cell and pack level), impedance analyzer, automated pilot plant instruments for Lithium Ion Battery manufacturing, Microwave Synthesizer, Peel tester

PUBLICATIONS

- Optical property characterization of novel graphene-X (X= Ag, Au and Cu) nanoparticle hybrids
 SR Sahu, MM Devi, P Mukherjee, P Sen, K Biswas Journal of Nanomaterials 2013, Article ID 232409
- Graphene: a self-reducing template for synthesis of graphene-nanoparticles hybrids MM Devi, SR Sahu, P Mukherjee, P Sen, K Biswas RSC Advances, 5, 2015, 62284-62289
- Graphene–Metal Nanoparticle Hybrids: Electronic Interaction Between Graphene and Nanoparticles MM Devi, SR Sahu, P Mukherjee, P Sen, K Biswas *Transactions of the Indian Institute of Metals*, 69, 2015, 839-844
- Microstructure and Mechanical Properties of Pulse Laser Welded Stainless Steel and Aluminum Alloys for Lithium-Ion Cell Casings VR Rikka, SR Sahu, R Tadepalli, R Bathe, T Mohan, R Prakash, Gade Padmanabham, Raghavan Gopalan Journal of Materials Science and Engineering B, 6, 2016, 218-225
- Synthesis of graphene sheets from single walled carbon nanohorns: Novel conversion from cone to sheet morphology
 SR Sahu, Vallabha Rao Rikka, M. Jagannatham, Prathap Haridoss, Abhijit Chatterjee, Raghavan Gopalan, Raju Prakash Materials Research Express, 4, 2017, 035008

INVITED TALK

Gave an invited talk at VIT, Vellore on "Li-ion battery for EV Applications" in September 2016.