# **Project Scientist C biodata:**

- a. Name: Pavan Srinivas Veluri
- **b.** Qualifications: B.Sc (Chemistry, PCU), M.Sc. (IITB), Ph.D in Lithium-ion batteries (IITB)
- c. Designation: Project Scientist C

### d. Contact information:

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### e. Experience:

7 years of research experience broadly in the avenues of material synthesis, electrode preparation, cell fabrication and electrochemical analysis in the field of Lithium-ion batteries. Worked as a project engineer at National Centre for Photovoltaic Research and Education (NCPRE) at IIT-Bombay, India from February-July 2017. I have been attached to International Advanced Research centre for Powder Metallurgy and New Materials (ARCI) Hyderabad, India as a project scientist (Middle level) since August 2017.

#### f. Research areas of interest:

- Lithium-ion batteries
- Nanostructured materials for energy storage
- Advanced materials for lithium and sodium-ion batteries
- Supercapacitors and Lithium-ion capacitors

# g. List of journal publications:

- P. M. Pratheeksha, P. S. Veluri, P. J. Danial, T. N. Rao, and S. Anandan, Solid state synthesis of LiNi0.5Mn0.3Co0.2O2 as a high energy density cathode for high energy lithium-ion battery application" (Manuscript under review in Chemistry Letters, 2019).
- **2.** P. S. Veluri and S. Mitra, "Enhanced high rate performance of α-Fe<sub>2</sub>O<sub>3</sub> nanotubes with alginate binder as a conversion anode", RSC Advances, 2013, 3, 15132-15138.
- SN Beznosov, PS Veluri, MG Pyatibratov, A Chatterjee, DR MacFarlane, O. Fedorov and S, Mitra, "<u>Flagellar filament bio-templated inorganic oxide materials-towards an efficient</u> <u>lithium battery anode</u>", Scientific Reports, 2015, 5, 7736.

- 4. P. S. Veluri, A. Shaligram and S. Mitra, "Porous α-Fe<sub>2</sub>O<sub>3</sub> nanostructures and their lithium storage properties as full cell configuration against LiFePO<sub>4</sub>", Journal of Power Sources, 2015, 293, 213-220.
- 5. P. S. Veluri and S. Mitra "Iron phosphide (FeP) synthesis, and full cell lithium-ion battery study with a [Li (NiMnCo) O 2] cathode", RSC Advances, 2016, 6, 87675-87679.
- P. S. Veluri and S. Mitra "Conversion Anode and Intercalation Cathode Based High Rate Capable Full cell for Practical Lithium-ion Battery Applications", ChemElectroChem, 2017, 4, 686-691.
- Sergei N. Beznosov, Michael G. Pyatibratov, Pavan Srinivas Veluri, Sagar Mitra, and Oleg V. Fedorov, "A way to identify archaellins in halobacterium salinarum by flagella tagging", Central European Journal of Biology, 2013, 8(9), 828-834.
- Uttam Kumar Sen, Sudeep Sarkar, Pavan Srinivas Veluri, Shivani and Sagar Mitra, "Nano Dimensionality: A way towards better Li-ion storage", Nanoscience and Nanotechnology Asia, 2013 [Invited Review article]
- S. Mitra, P. S. Veluri, A. Chakraborthy and R. K. Petla, "Electrochemical Properties of Spinel Cobalt Ferrite Nanoparticles with Sodium Alginate as Interactive Binder", ChemElectroChem, 2014, 1, 1068-1074.
- S. Sarkar, P. S. Veluri, and Sagar Mitra, "Morphology controlled synthesis of layered NH<sub>4</sub>V<sub>4</sub>O<sub>10</sub> and the impact of binder on stable high rate electrochemical performance", Electrochimica Acta, 2014, 132, 448-456.

#### h. List of patents:

- Pavan S. Veluri and Sagar Mitra, "Conversion anode and intercalation cathode based high rate capable full cell for lithium ion battery", Indian Patent (Application No.201621027395) dt. 11 August 2016.
- i. Conferences:
- Pavan Srinivas Veluri, K Nanaji, Srinivasan Anadan, Tata N. Rao, "Increasing the energy density of supercapacitor using a battery electrode", 4th International Meeting on Carbon MEMS: New Horizons, December 5-7, 2018, IIT Hyderabad, India.

- 2. Pavan Srinivas Veluri and Sagar Mitra, 4<sup>th</sup> International Symposium on Energy and Environment: ACCESS [MAGEEP], December 9-12, 2012, Mumbai, India.
- S. Mitra, U. K. Sen, A. M. Tripathi, P. S. Veluri, Lithium-ion storage: Advanced High Rate and Energy Anode materials, 37<sup>th</sup> International Conference and Exposition on Advanced Ceramic and Composites (ICACC), 2013, FL, USA, 27 January-1<sup>st</sup> February, 2013.
- Pavan Srinivas Veluri and Sagar Mitra, International conference on Nanotechnology, Nanomaterials and thin films for energy applications (NANOENERGY), February 19-21, 2014, London, UK.
- j. Photograph:

