

Vivekanand P. Gondane

Assistant Professor,

Department of Physics,

Dada Ramchand Bakhru Sindhu Mahavidyalaya, Nagpur-17

Contact: +919834643970, **Email:** gondane.vivekanand@gmail.com;

Educational Credentials:

Ph.D. 2017

Indian Institute of Technology Bombay

M.Sc. in Physics 2009

Post Graduate Teaching Department of Physics Campus, R.T.M. Nagpur University, Nagpur

B.Sc. with Physics, Chemistry, Math 2006

J.M. Patel College Bhandara, R.T.M. Nagpur University, Nagpur

H.S.S.C 2003, State Board, Nagpur

Additional Qualification

Cleared CSIR-JRF/NET in Physics 0258/0395 rank

Cleared GATE in Physics (AIR-531)

Cleared JEST in Physics (Percentile-96.89)

Project undertaken during PhD in IIT Bombay, Sponsored by Applied Materials India, Pvt.Ltd.

Project: “Synthesis and Characterization of Solid State Electrolyte (LLZO) for Li ion Battery”

Review: The project was undertaken for the synthesis of LLZO material as a solid state electrolyte for Li-ion battery through three different routes for maximum ionic conduction and developing pin-hole free membrane through various sintering studies.

List of Publications

Journals

1) A. Jena, S. P. Mohanty, P. Kumar, J. Naduvath, **V. Gondane**, P. Lekha, J. Das, H. K. Narula, S. Mallick and P. Bhargava, ‘Dye Sensitized Solar Cells: A Review’, **Transactions of The Indian Ceramic society** **71(1) (2012) 1-16**

2) **Vivekanand Gondane**, Parag Bhargava, ‘Tuning flat band potential of TiO₂ using an electrolyte additive to enhance open circuit voltage and minimize current loss in dye sensitized solar cells’, **Electrochimica Acta** **209 (2016) 293-298**

3) **Vivekanand Gondane** and Parag Bhargava, 'Acetylacetone: a promising electrolyte solvent for dye sensitized solar cells', **RSC Adv. 6 (2016) 37167**

Book Chapter

Amrut Agasti, Lekha Peddikakkandy, Rahul Kumar, Shyama Prasad Mohanty, **Vivekanand Gondane**, Sudhanshu Mallick, Parag Bhargava, Dye sensitized solar cells, **Springer Handbook of Inorganic Photochemistry**, Edited by Detlef Bahnemann and Antonio Otavio T. Patrocinio Page no. 1137-1214 (**Springer**) **2022**

Conferences:

1)**Vivekanand Gondane** and Parag Bhargava, 'In situ combustion synthesis of TiO₂ in dye sensitized solar cells', International Conference on Materials Science & Technology 01st - 04th March, 2016 Conference Centre, University of Delhi, India (Poster presentation)

2)**Vivekanand Gondane** and Parag Bhargava, 'Role of Thioacetamide in electrolyte in Dye sensitized solar cells' International Conference on Hybrid and Organic Photovoltaics (HOPV-16 held from 28th June to 1st July 2016 in Swansea, UK.(Poster presentation)
