



**Indian Institute of Technology (Indian School of Mines), Dhanbad**

**Filed Patent Details for the year 2018-19**

Sl. No.	Patent Application Number	Title	Inventor(s)	Department
1	201831022071	Soya lecithin quantum dots as antiagglomerants and methodology of preparing the same	Prof. Vikas Mahto	Petroleum Engineering
2	201831022160	Biopolymeric Super absorbent hydrogel and its preparation thereof	Prof. Sagar Pal	Department of Chemistry
3	201831008017	Novel System for regenerating and reusing nZVI/ZVI Particles in waste water treatment.	Prof. Alok Sinha	Environmental Science & Engineering
4	201831026697	Process for the preparation of Noval sunflower oil derived gemini surfactants of non-ionic nature and compositions thereof for enhanced oil recovery application.	Prof. Ajay Mandal	Petroleum Engineering
5	201831036761	A process for preparation of cyclic/acyclic alkenes	Ms. Sneha Shah, Prof. Biswajit Chowdhury	Department of Chemistry

**Published Patent Details for the year 2018-19**

Sl. No.	Patent Application Number	Title	Inventor(s)	Department	Publication Date
1	201631037159	A process for the preparation of bio-coagulant using Moringa oleifera seed biomass for the removal of fine particles from coal washery effluent	Prof. S. R. Samadder, Gaurav Vilas Kapse	Environmental Science & Engineering	05-04-2018
2	201631037148	Selective flocculation of iron	Prof. Sagar Pal, , Amit	Applied Chemistry	05-04-2018

		ore from mixture of inorganic gangues using carboxymethyl amylopectin functionalized with poly (acrylic acid)	Kumar Sarkar, Abhay Sharnkar Patra, Prof. N. R. Mandre		
3	201731004136	Friction Stir welding joint sample machining apparatus & method	Dr. Ratnesh Kumar, Prof. Somnath Chattopadhyay	Mechanical Engineering	08-10-2018
4	201731017005	Low Power ,portable smart device for real time monitoring of mine environment and methods thereof	Prof. Tanmoy Maity, Mayank Sharma	Mining Machinery Engineering	16-11-2018
5	201731023466	A high frequency virtual reactor in Power system with dispersed generators to control fault current and method of Operation.	Prof. Pradip Kumar Sadhu,	Electrical Engineering	11.01.2019
6	201731025244	A system of photovoltaic integrated solar induction heating and solar thermal heating using high frequency full bridge series resonant inverter under VSI (Voltage Source Inverter) mode and method for the same.	Prof. Pradip Kumar Sadhu	Electrical Engineering	18.01.2019
7	201731028010	A system of Photovoltaic Integrated Solar Induction heating using high frequency full bridge series resonant Inverter under CSI (Current Source Inverter) mode and solar thermal heating and method for the same.	Prof. Pradip Kumar Sadhu	Electrical Engineering	08.02.2019
8	201731030886	"Model-Predictive-Current-Control For Speed Regulation Of Brushless Doubly-Fed Reluctance Generator"	Prof. Sukanta Das	Electrical Engineering	01.03.2019

9	201731033087	A system of Photovoltaic Integrated Solar Induction heating and solar thermal heating using High Frequency Full Bridge Series Resonant Inverter under ZSI (Z-Impedance Source Inverter) Mode for Load Impedance Matching and method for the same	Prof. Pradip Kumar Sadhu	Electrical Engineering	22.03.2019
10	201731047389	An arrangement for replacement of bypass diode by relay in a solar photovoltaic system.	Prof. Tanmoy Maity, Dr. Yogesh Kumar Chauhan , Deptt. of EE, GBZU, Greater Noida, Mr. Ankur Kumar Gupta	Mining Machinery Engineering	07.12.2018

**Grant Patent Details for the year 2018-19**

<b>Sl. No.</b>	<b>Patent Number</b>	<b>Title</b>	<b>Inventor(s)</b>	<b>Department</b>	<b>Grant Date</b>
1	293820 (887/KOL/2010)	A method and device for concentration of solar radiation and obtaining concentrated plane beam	Prof. Pankaj Kumar Jain,	Fuel, Mineral & Metallurgical Engineering	05-03-2018