

Thesis Submissions of Ph.D - Energy Science and Engineering

Submission Year	RollNo	Name	Project	Thesis Title
2000	90417401	Nand Kumar Singh		<u>Theoretical and Experimental Investigations of Performance and Loads on a Horizontal-axis Wind Turbine</u>
2002	99417301	Ashok S.		<u>Industrial Load Management</u>
2003	93417701	M. Philip Soris Fernando		<u>Development of Space-Time Kinetics Technique to Analyze Localized Perturbations in Pressurized Water Reactor</u>
2003	95417702	Sugilal G.		<u>Natural Convection in a Joule-heated Liquid Pool</u>
2003	97417301	Karumuri Subbarayudu		<u>Liquid fuels from thermochemical conversion of biomass</u>
2003	98417701	Sameer Maithel		<u>Energy Utilisation in Brick Kilns</u>
2004	00417401	Chatterjee Arup Kumar		<u>Hydrogen Oxygen Fuel Cell and Energy Storage by Carbon Nano-Materials</u>
2004	98417401	piyali das		<u>studies on pyrolysis of sugarcane bagasse and cashew nut shell for liquid fuels</u>
2005	98417004	Satishchandra Vasudeo Joshi		<u>Development of a Test Procedure for Testing the Thermal Performance of a Thermosyphon-type Solar Domestic Water Heating System</u>
2005	98417702	Pradeep Kumar Dadhich		<u>Modeling of Isolated Photovoltaic-Battery-Diesel Generator Hybrid System</u>
2006	02417701	Ashish Prakash Agalgaonkar		<u>On viability and planning aspects of distributed generation</u>
2007	02417401	James Varghese		<u>Energy integration of fired heaters</u>
2007	03417301	Rajesh N Patel		<u>Extraction of Natural Phenols from Biomass Pyrolysis Oil</u>
2007	99417302	P. S. Adwani		<u>Natural circulation in single and multiple channels</u>
2008	01417702	Vishal R. Sardeshpande		<u>BENCHMARKING AND ENERGY EFFICIENCY OF GLASS FURNACES</u>
2008	02417301	JAYARAMAIAH.G.V.		<u>VOLTAGE CONTROL STRATEGIES FOR STAND-ALONE SELF-EXCITED INDUCTION GENERATOR</u>
2008	02417402	Indu R. Pillai		<u>Diffusion of Renewable Energy Technologies</u>
2008	03417004	Manish Shakdwipee		<u>ANALYSIS OF RENEWABLE HYDROGEN OPTIONS</u>
2008	04417301	Kulkarni Govind Narayan		<u>Design and optimization of solar thermal systems</u>
2009	03417401	M.Prakash		<u>Analysis of Convective Loss from a Solar Cavity Receiver</u>

2009	04417001	Arun P.	<u>Optimal Design of Isolated Power Systems</u>
2009	04417302	Kamoji Mahesh A	<u>Experimental investigations on conventional, helical and modified Savonius wind rotors</u>
2010	02417702	Debabrata Datta	<u>Analytical and level set method based numerical study for two-phase stratified flow in a plane channel dissipating uniform heat flux and a square duct</u>
2010	03417001	Lokhande Makarand Mohankumar	<u>Operation of Induction Motors in Induction Connected Microgrids</u>
2010	04417801	Sarika Tyagi	<u>Studies on Direct Methane Proton Exchange Membrane fuel cel</u>
2010	06417801	Panchal Ashish Kiranbhai	<u>Silicon quantum dots embedded in silicon nitride multilayer prepared using hot-wire chemical vapour deposition for solar cell applications</u>
2011	05417001	Vikrant Ashok Chaudhari	<u>Design and Development of Low Concentrator c-Si Solar Cells</u>
2011	06417001	Anindita Roy	<u>Optimal Design of Wind-battery systems for Isolated application</u>
2011	06417701	Obaidurrahman Khalilurrahman	<u>Spatial Instability Analysis in Large Light Water Reactors</u>
2011	07417302	Kashinath Nimba Patil	<u>Development and Modeling of Carbon Nanotubes (CNTs) Synthesis Process</u>
2012	05417002	Shendage Dadasaheb Jagannath	<u>DESIGN AND DEVELOPMENT OF STIRLING ENGINE</u>
2012	08417301	Chudasama Mahipalsinh Chandras	<u>Application of Dynamic Phasor Models for the Analysis of Power Systems with Phase Imbalance</u>
2013	04417701	Naveen Kumar	<u>Investigations on start-up of natural circulation systems</u>
2013	07417802	Aneesh Chintaman Gangal	<u>Ammonia Borane as Hydrogen Storage Material</u>
2013	08417001	Kale Paresh Govind	<u>Fabrication and Characterization Of Silicon Quantum Dot Solar Cell</u>
2013	09417301	Sudhansu Sekhar Sahoo	<u>HEAT TRANSFER MODELLING AND ANALYSIS OF CAVITY RECEIVER USED IN LINEAR FRESNEL REFLECTOR SOLAR THERMAL SYSTEM</u>
2014	07417601	Vineet Ramkrishna Panchal	<u>Investigations of a Low-Pressure Plasma System for Synthesis and Functionalization of Iron-Based Nanoparticles</u>
2014	09417003	Nitin Dutt Chaturvedi	<u>Water and Energy Targeting for Batch processes</u>
2014	09417302	Ravindra Dadaji Jilte	<u>Investigations on heat losses of solar cavity receivers of different shapes</u>
2014	10417003	H. S. V. S .Kumar Nunna	<u>Multi-Agent Based Energy Management in Smart Distribution Systems</u>
2014	10417303	Bade Mukund Haribhau	<u>INDIRECT HEAT INTEGRATION OF ENERGY SYSTEMS</u>
2015	06417702	A. John Arul	<u>Adjoint Theory Based Efficient Computational Approaches to Uncertainty Propagation and Reliability Evaluation of Passive Systems</u>
2015	08417702	Lalit kumar sahuo	<u>Energy efficiency in Opencast Mining</u>
2015	08417704	Tapobrata Dey	<u>Root Cause Analysis of Issues Related to Scale-up of Planar Solid Oxide Fuel Cell</u>
2015	09417002	Alok Mani Tripathi	<u>Graphene and Tin Based Composites Anode for Lithium-ion Battery.</u>
2015	09417701	Baburajan Kutty Parackal	<u>Investigations on CHFinHorizontal Tubes under LPLF Conditions</u>

2015	10417001	Sudeep Sarkar	OLIVINE AND LAYERED TYPE CATHODE MATERIALS FOR LITHIUM-ION BATTERY APPLICATIONS
2015	10417006	Rahul. R	Surface Electrochemistry of Pd-based Catalysts and Pt-based Core-shell Nanostructure Relevant to Oxygen Reduction Reaction in Acid Media
2016	07417702	Santosh Kumar Dubey	Experimental and Numerical Investigation of Heat Transfer Behaviour in Supercritical Fluid Using Freon 22
2016	08417002	neelam	Growth and Study of Polarity Controlled Zinc Oxide Nanorod Film by Chemical Bath Deposition
2016	08417703	Ravva Srinivasa Rao	Development of Models and Methodologies for containment Hydrogen Distribution Studies
2016	09405405	Wasim Feroze G. S.	Impedance and dielectric spectroscopy of polymer electrolyte membranes
2016	09417001	Sminu B	Studies in Underground Coal Gasification
2016	10417002	Praveen Kumar G	Stabilization of fast pyrolysis oil derived from wood through esterification
2016	10417005	Soni Nimish Navin	Virtual Inertia in AC Microgrids - Transient response and stability analysis
2016	10417302	Mangesh Suryabhan Thakare	Design and Optimization of Photovoltaic Thermal(PVT) Systems
2016	10417401	Nalajala Naresh	Synthesis of shape-controlled palladium nanoparticles and their platinum-coated counterparts - the importance of the exposed facets and surfactant removal on the electrochemical characteristics
2016	10417603	SOUMYADEEP SINHA	Development of Conducting Zn-based Wide Bandgap Materials by Atomic Layer Deposition
2016	10417605	Mehul Chandrakant Raval	Characterization of Nickel Silicide Formation and Background Plating with Associated Process Optimization for Silicon Solar Cells based on Ni-Cu-Sn metallization
2016	10417702	Tejal Kanitkar	An Integrated Modelling Framework for Energy, Economy, and Emissions in India
2016	10417704	Laakshmana Sabari C	Modeling of Operational and Commercial Processes in Power Systems Using Standards Framework
2016	114170001	Krishna Priya G.S.	Carbon Constrained Power Sector Planning
2016	114170003	Jay Dhariwal	Building energy simulation based design optimization
2016	114170004	Devendra Pareek	Synthesis and Characterization of Cu₂ZnSnX₄ (X: O, S, Se, Te) Absorber Materials
2016	114174001	Ishan Sharma	Evolutionary Multi-Objective Optimisation of a Complex Steady-State Process Flowsheet – The ‘Surrogate-Assisted’ Approach
2016	114174003	Sonal Keshawrao Thengane	A study of Nitric Oxide and Hydrogen production based on Chemical Looping
2016	114176003	Hemant Kumar Singh	Plasmonics based Light-Trapping Structures for c-Si Solar Cell Applications
2016	124176004	Desai Nishith Babubhai	Design and Optimization of Solar Thermal Power Plants

2017	08417003	Bandana Singha	<u>Impact of Boron Rich Layer on p-type Emitter Formation in n-type Crystalline Silicon Solar Cells</u>
2017	08417705	Lala Ram Bishnoi	<u>Air Leakage and Aerosol Transport through Cracks in Concrete</u>
2017	08417801	Shankargouda Sudhinath Jinnapp	<u>INVESTIGATIONS ON SOLAR THERMOELECTRIC COGENERATION</u>
2017	10417802	Shah Pinkeshkumar Rameshchandr	<u>Influence of Soy-lecithin as Bio-additive with Straight Vegetable Oil on CI Engine Characteristics</u>
2017	114174002	Pratham Arora	<u>Techno-enviro-economic evaluations of biomass gasification for the production of ammonia from synthesis gas utilizing multi-scale modeling</u>
2017	114176006	Devika Choudhury	<u>Development of Inorganic-Organic Hybrid Thin Films by Atomic and Molecular Layer Deposition</u>
2017	124170001	Dharmendra Kumar Dheer	<u>Improvement of Stability Margin and Transient Response in Inverter Dominated Microgrids</u>
2017	124170004	Bhosale Amit Chandrakant	<u>Study and development of unitized regenerative fuel cell</u>
2018	10417004	Raj Kumar Saini	<u>CFD Based Analysis of Flow Phenomena in Disc and Doughnut Pulsed Column and Stirred Tank Photo Bioreactor</u>
2018	10417604	Tejwani Ravi Gopaldas Lata	<u>Remote monitoring system for solar photovoltaic</u>
2018	114170005	Rhythm Singh	<u>Analysis of the Potential and Impact of Grid-Connected Rooftop Solar Photovoltaic Technology</u>
2018	114170006	Naval Vishwanath Koralkar	<u>CFD-DEM Simulation to Study the Effect of Drag Models on the Bubbling Fluidized Beds</u>
2018	114174004	Kaushik Choudhury	<u>Time-Resolved Whole Field Investigation of The Phenomena of Laser Produced Plasma-Induced Shockwaves in the Media of Different Densities</u>
2018	114174005	Bhanushali Sushrut Sandeep	<u>Thermo-physical Properties and Applications of Copper Nanomaterials with Discrete Morphologies</u>
2018	114176001	Rai Dharmendra kumar Rajdeo	<u>Ultra Thin Silicon Nitride by Hot-wire Chemical Vapour Deposition for Photovoltaic Applications</u>
2018	114176002	DHIRAJ B MAGARE	<u>Estimation of Environmental Parameter Effects on Field Performance of Three Different Technology Photovoltaic Modules under Indian Environment</u>
2018	124170002	Chandan Das	<u>Stability and performance enhancement of protected Cu₂O photocathodes for water reduction</u>
2018	124174002	Jayesh Manohar Sonawane	<u>Development and investigation of conducting polymer electrodes for microbial fuel cells</u>
2018	124176001	Soham Ghosh	<u>DEVELOPMENT OF SENSITIZED SOLAR CELL BY INVERTED ARCHITECTURE</u>

2018	134174002	Sowmiya T	Hybrid Ionic liquid Electrolytes for Lithium Battery Applications
2018	134176002	Kulkarni Onkar Vitthal	New Control Methods for Static Distributed Generators in AC Supply Systems
2018	134177003	Sameena Naz Manzoor Ahmad Mali	Studies on catalytic ozonation process based pretreatment system for complex industrial wastewater treatment
2019	09417004	Joshi Amruta Pravin	Analysis of recombination activity of nickel and copper in silicon solar cells
2019	09417801	Bhaskar Rahul Nandi	Thermal Storage for Solar Thermal Power Plants
2019	10417301	P. Somasundaran	Simulation and characterization of shunts in photovoltaic cells and modules
2019	114176007	Shivani Singh	A Study of Polyoxyanion type Lithium Iron Silicate Cathode for Lithium-Ion Battery.
2019	114177001	Arvind Kumar Mathur	Improving the accuracy of the interface current method for solving the integral transport equation
2019	114177004	Rajendrasinh Bahadursinh Solan	Reliability Assessment of Passive Safety Systems in Nuclear Power Plants
2019	124170012	Ratikanta Nayak	Polymer Electrolyte Membrane for High Temperature Fuel Cell Application
2019	124176002	Anand Selvin S.	Inorganic Metal Oxide Charge Transport Layers for Planar Perovskite Photovoltaics
2019	124176003	Ashish Kumar Singh	Cu₂ZnSn(S_xSe_{1-x})₄ Synthesis from Electrodeposited Metal Precursors-An Investigation on Origin of Impurity Phase Formation and S/Se Replacement Reaction
2019	124177001	Mahendra Prasad	Prediction of Wall Thinning due to Flow Accelerated Corrosion under Turbulent Flow in Pipes
2019	134170002	Sweta Shriniwasan	Mechanisms and Phenomena Governing the Kinetics of Hydrogen Sorption in Mg-Based Materials
2019	134170004	Ammu Susanna Jacob	Analysis of Hybrid Energy Storage System suitable for Microgrids
2019	134170007	Ananta Kumar Sarkar	Development of Cathode Materials for Sodium-ion Battery.
2019	134173001	Patil Vijay Sahebrao	Experimental Investigation of Heat Transfer Characteristics of Circular Jets Impinging onto a Concave Surface with and without Coolant Ejection
2019	134174004	C. V. Manohar	ELECTROLYTE DEVELOPMENT BASED ON IONIC LIQUIDS FOR ECO-FRIENDLY SODIUM ION BATTERY
2019	144178001	Kamble Amol Gulabrao	Effect of additives, heat treatment and mechanical deformations on hydrogen storage properties of BCC alloys.
2019	154176003	Jani Das	Variability Analysis of Isolated Renewable Energy Systems
2019	164172002	Hazem Karbouj	Mitigation of Voltage and Frequency Stability Issues in Wind Integrated Power System