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S 18.2	<b>The Use of Inclined Tuyer and its Effect on the Compatibility of Downdraft Gasifier Fed by Rice Husk and Wood Sawdust</b> Anak Agung Susastriawan <sup>1</sup> , Harwin Saptoadi <sup>2</sup> , and Purnomo <sup>2</sup> <sup>1</sup> Institut Sains & Teknologi AKPRIND, Yogyakarta <sup>2</sup> Universitas Gadjah Mada, Yogyakarta	Indonesia
S 18.3	<b>Co-Firing Cassava Rhizome and Eucalyptus Bark in a Fluidized-Bed Combustor Using Reburning: Combustor Performance and Time-Related Bed Behavior</b> Chhaina Se <sup>1</sup> , Vladimir I. Kuprianov <sup>1</sup> , and Pichet Ningduangdee <sup>2</sup> <sup>1</sup> Sirindhorn International Institute of Technology, Thammasat University <sup>2</sup> Phetchaburi Rajabhat University, Phetchaburi	Thailand
S 18.4	<b>Synergistic Treatment Strategy for Efficient Release of Reducing Sugar from Orange Peel during Acid and Enzymatic Treatment Process</b> Ria Majumdar, Umesh Mishra, and Biswanath Bhunia National Institute of Technology Agartala, Tripura	India
S 18.5	<b>Preparation of Fuel Pellets and Extraction of Natural Dyes from Falling Leaves to be Used as Sensitizer in Dye Sensitized Solar Cell</b> Adarsh Kumar Pandey <sup>1</sup> , Syed Shahabuddin <sup>1</sup> , Jesbains Kaur <sup>1</sup> , R. Saidur <sup>1</sup> , Muhammad Shakeel Ahmad <sup>2</sup> , Nasrudin Abd Rahim <sup>2</sup> , and Sahar Tariq <sup>3</sup> <sup>1</sup> Sunway University, Selangor, Malaysia <sup>2</sup> University of Malaya, Kuala Lumpur, Malaysia <sup>3</sup> University of Punjab, Lahore, Pakistan	Malaysia
S 18.6	<b>The Effects of Graphene on Microstructural and Thermal Properties of Calcium Chloride Hexahydrate PCM</b> Jesbains Kaur <sup>1</sup> , Nurfatihah Jamil <sup>1</sup> , Syed Shahabuddin <sup>1</sup> , Adarsh Kumar Pandey <sup>1</sup> , Saidur Rahman <sup>1</sup> , Fitwi Yohaness <sup>2</sup> , and Baljit Singh <sup>3</sup> <sup>1</sup> Sunway University, Selangor <sup>2</sup> Universiti Malaysia Pahang <sup>3</sup> University Teknologi MARA, Shah Alam	Malaysia
S 18.7	<b>The Metal Oxide Nanoparticles doped Polyaniline based Nanocomposite as Stable Electrode Material for Supercapacitors</b> Syed Shahabuddin <sup>1</sup> , Adarsh Kumar Pandey <sup>1</sup> , Jesbains Kaur <sup>1</sup> , R. Saidur, Nurul Aquilla Mazlan <sup>1,2</sup> , and Siti Nor Atika Baharin <sup>2</sup> <sup>1</sup> Sunway University, Selangor <sup>2</sup> University Technology MARA, Kuala Pilah, Negeri Sembilan	Malaysia

<b>S 19: Wind: Operation and Stability</b>		
<b>Ref. No.</b>	<b>Title, Authors, Affiliation</b>	<b>Country of Origin</b>
S 19.1	<b>Control of Doubly Fed Induction Generator of Variable Speed Wind Turbine System using Neural Network</b> Nanami Gana Lantewa and Nurraddeen Magaji Bayero University, Kano	Nigeria
S 19.2	<b>Evaluation and Mapping of Wind Energy Potential over Southern Part of India using ANN and GIS Approach</b> Khalid Anwar and Sandip Deshmukh BITS Pilani, Hyderabad Campus	India
S 19.3	<b>An Evaluation of Potential Rise in a Wind Turbine Generator Earthing System during a Direct Lightning Strike</b> Raghavender Goud Deshagani <sup>1</sup> , Ramesh Rayudu <sup>1</sup> , Ciaran P. Moore <sup>1</sup> , and Tony Auditorey <sup>2</sup> <sup>1</sup> Victoria University of Wellington <sup>2</sup> Line Tech Consulting Ltd.	New Zealand
S 19.4	<b>A Proposed Method for Calculating Earth Electrode Length for a Wind Turbine Generator Grounding System</b> Raghavender Goud Deshagani <sup>1</sup> , Tony Auditorey <sup>2</sup> , Ramesh Rayudu <sup>1</sup> , and Ciaran P. Moore <sup>1</sup> <sup>1</sup> Victoria University of Wellington <sup>2</sup> Electrical Specialist Services (EES)	New Zealand
S 19.5	<b>Optimal Placement and Sizing of DG Based on Single Phase Wind Turbine Generator in Distribution System</b> Panaya Sudta, Noppamate Weerachayapornkul, Weerakorn Ongsakul, Jai Govind Singh and Nikhil Sasidharan Asian Institute of Technology	Thailand
S 19.6	<b>Modeling and Comparative Performance Analysis of Different Bladed Vertical Axis Wind Turbine (VAWT)</b> Hafeez Khoharo, Laveet Kumar, and Muhammad Sharif Jamali Mehran University of Engineering and Technology, Jamshoro, Pakistan	Pakistan
S 19.7	<b>An Optimized ANN Measure-Correlate-Predict Method for Long-term Wind Prediction in Malaysia</b> Yong Kim Hwang <sup>1</sup> , Mohd Zamri bin Ibrahim <sup>1</sup> , Ali Najah Ahmed <sup>2</sup> , and Aliashim Albani <sup>1</sup> <sup>1</sup> Universiti Malaysia Terengganu <sup>2</sup> Universiti Tenaga Nasional, Selangor, Malaysia	Malaysia
S 19.8	<b>Computational Fluid Dynamics Studies on the Wind Speed Characteristics of an Improved Diffuser Design</b> Fajril Mardiansah, Aditya Dwi Putranto, and Hilda Rasnia Hapsari Universitas Gadjah Mada, Yogyakarta	Indonesia

<b>S 20: Smart Grid and Green Energy Integration II</b>		
<b>Ref. No.</b>	<b>Title, Authors, Affiliation</b>	<b>Country of Origin</b>
S 20.1	<b>Optimization of Virtual Power Plant Topology with Distributed Generation Sources</b> Elena N. Sosnina, Andrey V. Shalukho, Ivan A. Lipuzhin, Alexander Yu Kechkin, and Alexander A. Voroshilov Nizhny Novgorod State Technical University n.a. R.E. Alekseev	Russia
S 20.2	<b>Optimal Planning and Operation of Battery Energy Storage Systems in Smart Grids Using Improved Genetic Algorithm Based Intelligent Optimization Tool</b> Kannathat Mansuwan <sup>1,2</sup> , Peerapol Jirapong <sup>1</sup> , Sattawat Burana <sup>1</sup> and Panida Thararak <sup>1</sup> <sup>1</sup> Chiang Mai University, Chiang Mai <sup>2</sup> Provincial Electricity Authority, Bangkok	Thailand
S 20.3	<b>Using Experts' Opinions and Multi-Criteria Decision Analysis to Determine the Weighing of Criteria Employed in Planning Remote Area Microgrids</b>	Australia

	Taskin Jamal, Tania Urmee, G.M. Shafiullah, and Farhad Shahnia Murdoch University, Perth	
S 20.4	<b>The Development of Wave Energy Converter System Using Hydraulic Power Take Off at Terengganu Shoreline</b> Nur Hafizah Tul Huda Ahmad, Mohd Zamri Ibrahim, Siti Juwairiyah A. Rahman, Aliashim Albani, and Safina Mohad School of Ocean Engineering, Universiti Malaysia Terengganu	Malaysia
S 20.5	<b>Performance Analysis of LTE in Rich Multipath and Rural Environments for Wireless Communication in Smart Grid</b> Md. Ariful Islam, Israt Jahan, Md. Jakaria Rahimi, and Jai Govind Singh Asian Institute of Technology, Pathumthani	Thailand

<b>S 21: Optimization and Planning Analysis</b>		
<b>Ref. No.</b>	<b>Title, Authors, Affiliation</b>	<b>Country of Origin</b>
S 21.1	<b>Optimizing Generation Mix using Markovitz mean-Variance Theory</b> Arjun C. Unni, Weerakorn Ongsakul, Rajanivedha Ramakrishnan, and Shubham Tiwari Asian Institute of Technology	Thailand
S 21.2	<b>PSO based Unit Commitment of a Hybrid Microgrid System</b> Rajanivedha Ramakrishnan, Jai Govind Singh, and Weerakorn Ongsakul Asian Institute of Technology	Thailand
S 21.3	<b>Maintenance Record Reported Form Computerized using a Personal Computer</b> Ming-Jong Lin Jia-Nan Power Supply Branch, Taiwan Power Company	Taiwan
S 21.4	<b>Control of DC Motor using Genetic Algorithm based PID Controller</b> Shubham Tiwari, Ankit Bhatt, Arjun C. Unni, Jai Govind Singh, and Weerakorn Ongsakul Asian Institute of Technology	Thailand
S 21.5	<b>A Probabilistic Approach for Power Loss Minimization in Distribution Systems</b> S.M.G. Mostafa <sup>1</sup> and Jai Govind Singh <sup>2</sup> <sup>1</sup> EEE Department, IIUC, Chittagong, Bangladesh <sup>2</sup> Asian Institute of Technology, Pathumthani	Bangladesh

<b>S 22: Energy Transition Forecasting</b>		
<b>Ref. No.</b>	<b>Title, Authors, Affiliation</b>	<b>Country of Origin</b>
S 22.1	<b>One Step Ahead, Two Steps Backwards: Energy Transitions and Coal in Developing Countries</b> Rafia Zaman <sup>1</sup> , Christian Hofer <sup>2</sup> and Thomas Brudermann <sup>2</sup> <sup>1</sup> Khulna University, Khulna, Bangladesh <sup>2</sup> University of Graz, Austria	Austria
S 22.2	<b>Solar – Grid Hybrid System – A Cost Effective and Improved Renewable Energy Utilization Approach</b> M.S. Muhit and Asif Karim American International University	Bangladesh
S 22.3	<b>Hour-Ahead Solar Forecasting Program Using Back Propagation Artificial Neural Network</b> Tanawat Laopaiboon <sup>1</sup> , Weerakorn Ongsakul <sup>1</sup> , Pradya Panyainkaew <sup>2</sup> , and Nikhil Sasidharan <sup>3</sup> <sup>1</sup> Asian Institute of Technology, Thailand <sup>2</sup> Provincial Electricity Authority, Bangkok <sup>3</sup> National Institute of Technology, Calicut, India	Thailand
S 22.4	<b>One hour Ahead Short-Term Electricity Price Forecasting Using ANN Algorithms</b> Ayushi Yadav <sup>1</sup> , Ayush Sahay <sup>2</sup> , Mukh Raj Yadav <sup>1</sup> , Somiya Bhandari <sup>1</sup> , Abha Yadav <sup>1</sup> , and Kishan Bhushan Sahay <sup>3</sup>	India

	<sup>1</sup> Madan Mohan Malaviya University of Technology, Gorakhpur <sup>2</sup> Lucknow University, Lucknow <sup>3</sup> Delhi Technological University, Delhi	
S 22.5	<b>A Two Stages Pattern Recognition for Time-of-Use Customers based on Behavior Analytic by using Gaussian Mixture Model and K-mean Clustering: a Case Study of PEA, Thailand</b> Pornchai Chaweewat, Jai Govind Singh and Weerakorn Ongsakul Asian Institute of Technology	Thailand