



International Conference on the Developments in Renewable Energy Technology (ICDRET)

4th International Conference on the Developments in Renewable Energy Technology [ICDRET 2016]

Program Schedule

Day 1: January 7 (Thursday) 2016

Reporting (Registration & Kit collection)

Time: 10:00AM to 03:00PM

Venue: Room-206

Inauguration

Time: 03:00PM to 04:00PM

Venue: UIU Auditorium

Speech from sponsors

Time: 04:00PM to 04:45PM

Venue: UIU Auditorium

Snacks/Tea break

Time: 04:45PM to 05:30PM

Venue: Room-412

Plenary Session P1

Time: 05:30PM to 06:15PM

Venue: UIU Auditorium

Topic: **Governance, Decentralisation and Energy: Towards a Research Agenda**

Speaker: **Dr. Ed Brown**

Loughborough University

Day 2: January 8 (Friday) 2016

Technical Sessions A1, A2 (9:00AM-10.30AM)

Session A1, Venue: Room-212

Time: 9:00 AM-10.30AM

Biomass and Biogas

Paper Title	Authors
1 Electricity generation form pretreated palm oil mill effluent using Klebsiella Varicicola as an inoculum in Microbial Fuel Cell.	Amirul Islam, Maksudur Khan, Abu Yousuf, Woon Wai, Cheng Kui
2 Bryophyllum Pinnatum Leaf Fueled Cell: An Alternate Way of Supplying Electricity at the Off-grid Areas in Bangladesh	Mehedi Hasan, Kamrul Khan
3 Prototype Design and Overview of a Low Price Microbial Fuel cell	Sheikh Shehab Uddin, Abu Hena Shatil, Kazi Shoffiuddin Roni, Walid Abdullah Bin
4 Prospect of Karanja (Pongamia pinnata) Biodiesel as an Alternative Energy Source in Bangladesh	Md. Zihadul Alam, Rumana Subnom Subnom, Jannatul Fardous Mug Mugdho
5 From Strain to Extraction: A Review to Produce Biodiesel from Microalgae in Bangladesh	Shitab Ishmam, Wasel Rahman, Shabab Bin Karim, Sayedus Salehin, A.K.M. Sadrul Islam

Session A2, Venue: Room-214

Time: 9:00 AM-10.30AM

RE from Solar Thermal and Mini & Micro Hydro

	Title	Authors
1	Development and Testing of a Two-axis Tracking Spherical Solar Cooker	A. N. M. Mizanur Rahman
2	Development and Performance Test of an Evacuated Tube Solar Water Heater	A. N. M. Mizanur Rahman
3	Performance of droop based load controller in interconnected micro hydro power plants.	Rojesh Dahal, Brijesh Adhikary; Shailendra Jha
4	Computational and Experimental Study of an Ultra-Low Head turbine	Pradeep Parajuli, Pratik Koirala, Nischal Pokharel
5	Reduction of Cooking Energy and CO ₂ emission using Heat Retention Cooker for Rice Cooking	Sayedus Salehin, A.K.M. Sadrul Islam, A.N.M. Zobayer

Tea break

Time: 10:30AM to 10:50AM

Venue: Room-412

Professor Rashid Best Paper Presentation Award

Time: 10:50AM to 11:00AM

Venue: Room-412

Plenary Session P2

Time: 11:00AM to 11:30AM

Venue: UIU Auditorium

Topic: **Solar Powered Pumps: A Cost-Effective Solution for Irrigation**

Speaker: **Md. Enamul Karim (Pavel)**

Head of Renewable Energy, Infrastructure Development Company Limited (IDCOL), Bangladesh

Speech from Sponsors

Time: 11.30AM-12.00PM

Venue: UIU Auditorium

Prayer break and Lunch

Time: 12:00PM to 02:30PM

Venue: Room-412

Technical Sessions B1, B2, B3 (2.30PM-4.00PM)

Session B1, Venue: Room-212

Time: 2:30PM-4:00PM

PV Applications

	Title	Authors
1	An Investigation into the Efficiency of Silicon Carbide Based Power Inverters	Ali Maswood
2	Performance Comparison of Mirror Reflected Solar Panel with Tracking and Cooling	A. N. M. Mizanur Rahman, Sheikh Md. Shahin Alam,

- | | | |
|---|--|--|
| 3 | A Snapshot of Energy Efficient Off Grid Appliance Market in Bangladesh | Hasna Khan, Asma Haque, Syful Hoque, Kaysar Ahmed, Rafiur Rahman, Tanvir Ahmed, Rashedul Alam. |
| 4 | Prospect of Solar PV based Power Generation in the Marshy Lands of Bangladesh: An Analysis Through RET Screen Software | Kashfia Naz Nikita, Sk Nazmul Islam, Sarafat Islam, Mithun Saha |
| 5 | Meshed PV Systems | Walter Commerell, Rudy Müller, Phocos, Shanmuganandam, Sattya Bhattacharjee |

Session B2, Venue: Room-214

Time: 2:30PM-4:00PM

Large Renewable Systems

- | Title | Authors | |
|--------------|---|--|
| 1 | 100% Electrification and Renewable based Ethiopian Power Sector Development Strategies | Md Alam Hossain Mondal, Elizabeth Bryan; Claudia Ringler; Mark Rosegrant |
| 2 | Electric efficiency of the lighting technology of auto industry: recent development and future prospect | Muhammad Sifatul Alam Chowdhury, Al Mahmudur Rahman |
| 3 | Ramp Rate Analysis of Roof-top PV on Distribution Grids for Large Cities in Australia | Md Rabiul Islam |
| 4 | Five Years of Solar Mini Grid Service in Sandwip Island of Bangladesh | Hasna Khan, Asma Haque |
| 5 | Impacts of Renewable Energy Integration into the High Voltage (HV) Networks | GM Shafiullah |

Session B3, Venue: Room-215

Time: 2:30PM-4:00PM

Hybrid Systems

- | Title | Authors | |
|--------------|---|---|
| 1 | Designing of an Optimized Building Integrated Hybrid Energy Generation System | Md. Rayhan Sharif, Md. Hafezur Rahman Chowdhury; Md. Nafeez Rahman; Md. Asaduzzaman Shoeb |
| 2 | Design and Economic Feasibility Analysis of Autonomous Hybrid Energy System For Rural Bangladesh | H.M. RAFEED LEON, Md. Saifur Rahman, Muaser Muaser Uddin Ahmed; Md. Sadiqul Islam, Md. Asaduzzaman Shoeb, |
| 3 | Assessing a rural electrification program in Malaysia: system performance analysis on 11 solar PV-diesel hybrid systems | Richard Blanchard, Abdul Mahmud |
| 4 | Voltage Regulation in Solar-Wind Hybrid Energy System using LTC3784 | Tazrin Hassan Rini, M. Abdur Razzak |
| 5 | Techno-Economic Analysis of a Hybrid PV Wind- Diesel Energy System for Sustainable development at Coastal Areas in Bangladesh | SK Shezan, A Hossain, M Farzana, A. Z. M Salahuddin |

Tea

Time: 4:00PM to 4:30PM

Venue: Room-412

Dinner

Time: 7:30PM

Venue: EFES, 13, Gulshan South Avenue, Gulshan-1, Dhaka-1212

Day 3: January 9 (Saturday) 2016

Technical Sessions C1, C2 (9:00AM-10:30AM)

Session C1, Venue: Room-212

Time: 9:00AM-10:30AM

PV Technology-I

	Title	Authors
1	P-Spice Based Study of Environmental Effect on the Performance of the Solar PV Module	Avijit Saha, Fayyaz Khan, Naznin Nahar
2	Internal Quantum Efficiency of Si-Drift Solar Cells with Nonuniformly and Heavily Doped Emitter	Md. Iqbal Chowdhury, Md. Huque
3	Performance of CZTS _x Se _{1-x} Solar Cell with Various Mole Fractions of Sulfur for Different Buffer Layers	Sudipto Saha, MD Zubair Rafique; Shahidul Hassan
4	Modeling of J-V Characteristics of CZTS Based Thin Film Solar Cells Including Voltage and Space Dependent Electric Field in the Absorber Layer	Md. Iqbal Chowdhury, Ayesha Ayesha, Kulsum Kulsum, Shamara Silvi
5	Modeling of Graphene/SiO ₂ /Si(n) Based Metal-Insulator-Semiconductor Solar Cells	Md. Iqbal Chowdhury, Muhammad Islam, Md. Hasan, Rifat Sami

Session C2, Venue: Room-214

Time: 9:00AM-10:30AM

Wind Energy

	Title	Authors
1	Impacts of Fixed Speed Wind Generators on Static Voltage Stability of Distribution Systems	Mohammed Haque
2	RET SCREEN Based Feasibility Study on the Prospect of Wind Power Generation along the Coastal Region of Chittagong, Bangladesh.	Sadreza Nizam Uddin, Md. Bodrudduza, B.K.M. Mizanur Rahman, Fayyaz Khan
3	A study on Data Accuracy by Comparing Between the Weibull and Rayleigh Distribution Function to Forecast the Wind Energy Potential for Several Locations of Bangladesh	Syed Reza, Pallabi Zaman, Arif Ahammad, Ifrat Zaman Ifty, ; Ashif Mohammad, Md. Faysal Nayan,
4	Analysis of Air Foils and Design of Blades for a Low-Speed 250W Horizontal Axis Wind Turbine Suitable for Coastal Areas of Bangladesh	Mahtab Murshed, Md. Yeasin Arafat, IM. Abdur Razzak,
5	Design and Analysis of an In-Runner Permanent Magnet Alternator for Low-Speed Wind Turbine	Md. Yeasin Arafat, Mahtab Murshed; M. Abdur Razzak,

Tea break

Time: 10:30PM to 11:00PM

Venue: Room-412

Technical Sessions D1, D2, D3 (11:00 AM-12:30PM)

Session D1, Venue: Room-212

Time: 11:00 AM-12:30PM

PV Technology-II

	Title	Authors
1	Comparative Study between the Simulated and Commercially available Si- based Solar Panel	Dr. Md. Faruk Hossain, Md. Robin Khan, Sadia Binte Shahid Shahid
2	Construction of Mix-Dye Based Dye-Sensitized Solar cells to Absorb Light in Ultraviolet to Near Infrared Solar Spectrum	Md. Akhtaruzzaman, A. K. M. Hasan, T. H. Chowdhury, M. Aizat., N. Amin, M. Idriss, A. Islam
3	Dye-Sensitized solar cells: Sensitized with triple dyes in ultraviolet to near infrared	Ashrafur Islam, Md. Akhtar Uzzaman, Towhid H. Chowdhury, Idriss M. Bedja, Liyuan Han, Antoine Mirloup, and Raymond Ziessel
4	High Performance and Stable Molybdenum Telluride PV Cells with Indium Telluride BSF	Mrinmoy Dey, Maitry Dey
5	Antimony Telluride as a Novel BSF for Highly Stable Ultra-Thin CdTe Solar Cells	Mrinmoy Dey, Maitry Dey, M. A. Matin, Nowshad Amin

Session D2, Venue: Room-214

Time: 11:00 AM-12:30PM

RE Education and Policy Matters

	Title	Authors
1	Key Features and Curriculum Model for Renewable Energy Master Programmes	Michael Golba, Andreas Guenther
2	Developing an Open Access Monitoring Device for Off-Grid Renewables	Richard Blanchard, Matt Little
3	Differential Evolution Algorithm Based Load Frequency Control in a Two-Area Conventional and Renewable Energy Based Nonlinear Power System	Muhammad Zamee, Kazi Islam, Ashik Ahmed; Kazi Zafreen
4	Prediction of Solar Irradiation in Bangladesh Using Artificial Neural Network (ANN) and Data Mapping Using GIS Technology	Khan Md. Rabbi, Indrajit Nandi, Abu Shoaib Saleh, Faiaz Faisal, Satyajit Mojumder
5	A Multi Criteria Decision Making Methodology for Selecting a Renewable Energy Option	S Ponnambalam, Samantha Islam; Hon Loong Lam

Session D3, Venue: Room-215

Time: 11:00 AM-12:30PM

Control and Circuits-I

	Title	Authors
1	Simulink Based Performance Analysis of Lead Acid Batteries with the Variation of Load Current and Temperature.	Md.Abdul Gaffar, Md. Enamul Huq Sabuj,Fatima Mostafa, Tanvir Istiaque,Fayyaz Khan
2	Performance Study of Lead-Acid Battery in a Solar Car under Different Traffic and Weather Conditions	Imran Bin Jafar, Abdullah Al Mahmud; Asif Zaman, Mosaddequr Rahman
3	Testing and Performance Analysis of 1KW Locally Made Grid-Tie Photovoltaic Inverter Using Thin Film Solar Panel	Mohammad Rejwan Uddin, Khosru Salim,Md. Jasim Uddin,Saila Ishrat Annie
4	Design, Construction and Implementation of a Highly Efficient, Lightweight and Cost Effective Charger for Electric Easy Bikes	Md. jasim Uddin, Khosru Salim,M. Ishtiaque Rahman, Mohammad Rejwan Uddin
5	Design and implementation of a Micro Controller Based Portable Solar Charge Controller Tester	Shahriar Chowdhury, Fayyaz Khan,Mahmud Ibrahim

Prayer break and Lunch

Time: 12:30PM to 02:30PM

Venue: Room-412

Technical Sessions E1, E2, E3 (2:30PM-4:30PM)

Session E1, Venue: Room-212

Time: 2:30PM-4:30PM

Control and Circuits-II

	Title	Authors
1	Study of Traditional and Z-source Converter under Variable Fuel-Flow-Rate of PEMFC	Muhammad Musthafa Roomi, Ali Maswood; Md Shafquat Ullah Khan,
2	Solar Power Controller to Drive Load at Constant Power under Insufficient Solar Radiation	Md. Tanvir Ahammed, Md. Rafiqul Islam
3	Evaluation of Level-Shifted and Phase-Shifted PWM in Multilevel PUC Inverter for PV Applications	MOHD TARIQ, Md. Tauquir Iqbal,Atif Iqbal, Ali Maswood, Mohammad Meraj
4	Fuzzy Logic Control of Buck Converter for Photo Voltaic Emulator	MOHD TARIQ, Md. Tauquir Iqbal
5	Control of Bidirectional DC/DC Converter for Back to Back NPC-based Wind Turbine System under Grid Faults	Md Shafquat Ullah Khan, Ali Maswood, Hossein Dehghani Tafti,

Session E2, Venue: Room-214

Time: 2:30PM-4:30PM

RE from Solid waste, PZT and Wave

	Title	Authors
1	A Study on Anaerobic Co digestion of Municipal solid waste and tannery solid waste	MOHAMMAD MAZED, Shilpy Basak
2	Design and Analysis on Biogas Producing from Wastes of Dhaka City	Md. Moniruzzaman, M. Muhibbullah
3	A Wave-to-Wire Model of Ocean Wave Energy Conversion System Using MATLAB/Simulink Platform	Jakir Hossain
4	Power Generation for Auto Street Light Using PZT	Mrinmoy Dey, Tawhida Akand, Sadeka Sultana

Session E3, Venue: Room-215

Time: 2:30PM-4:30PM

Socio-Economic Aspects of RE

	Title	Authors
1	Biogas Based Chain Business: A Road to Sustainable Rural Development	Md. Amimul Ehsan, Choton Kanti Das; Mahadi Hasan
2	Incorporating the Institutions' Perspective into a Proposed Model for Assessing Success of Solar Home System Implementations	Hans-Gerhard Holtorf, Tania Urmee; Martina Calais; Trevor Pryor
3	Socioeconomic impact of a rural microgrid	Shailendra Jha, Petter Stoa, Kjetil Uhlen
4	Economic and Environmental Assessments of Solar Home Systems in Bangladesh	Md. Mustafizur Rahman, Sayedus Salehin, A.K.M. Sadrul Islam
5	Energy Usage Pattern of Off-grid Population in Bangladesh	Hasna Khan, Asma Haque; Kaysar Ahmed, Rafiur Rahman, Tanvir Ahmed, Rashedul Alam
6	A Techno-economic Assessment for Charging Easy Bikes Using Solar Energy in Bangladesh	Md. Mustafizur Rahman, A.K.M. Sadrul Islam, Md. Abdullah Al-Matin, Md. Abdullah Hil Baky

Tea

Time: 4:30PM to 5:00PM

Venue: Room-412

End of the conference
