

## Program Schedule

### Day 1: 17 December (Thursday) 2009

#### Registration

Time : 10:00 to 15:00

Venue: University Lobby

#### Inauguration

Time: 15:00 to 16:00

Venue: UIU Auditorium

#### Snacks/Tea break

Time: 16:00 to 16:30

#### Plenary Session 1

Time :16:45 to 17:30

Venue: UIU Auditorium

Topic: Role of Renewable Energy in Mitigating the Need for Large Central Station Power Plants

Speaker: Professor Saifur Rahman

Department of ECE and Director, Advanced Research Institute, Virginia Tech, VA, USA

### Day 2: 18 December (Friday) 2009

#### Plenary Session 2

Time : 9:30 to 10:10

Venue: Room No.- GF1

Topic: Electric Power from the Sun: the Status of Photovoltaic Technology and important Trends in Research

Speaker: Dr. Hansjörg Gabler

Senior expert and advisor, Centre for Solar Energy and Hydrogen Research, Stuttgart, Germany,

#### Tea break\*

Time: 10:10 to 10:25

#### Technical Sessions:

##### SESSION A1: SOLAR PV

Time: 10:30 to 12:00, Venue: GF1

1.	<b>Techno-economic Feasibility of Grid Connected Solar PV System in Bangladesh</b> Md. Alam Hossain Mondal , A. K. M. Sadrul Islam
2.	<b>Interconnection of PV Based Generator and Its Impact on Bangladesh Power System Stability</b> Rakibuzzaman Shah , and N.Mithulananthan
3.	<b>Energy Cost Calculations for a Solar PV Home System</b> M. Rezwana Khan and Md. Fayyaz Khan
4.	<b>Microcontroller Based Sinusoidal PWM Inverter for Photovoltaic Application</b> S. M. Mohaiminul Islam, Gazi Mohammad Sharif
5.	<b>Design &amp; Construction of Microcontroller Based maximum power point PWM Charge Controller for Photovoltaic Application</b> Gazi Mohammad Sharif, S. M. Mohaiminul Islam, Khosru Mohammad Salim

**SESSION A2: SOCIO-ECONOMIC ASPECTS OF RE**

**Time: 10:30 to 12:00, Venue: Room 103**

1.	<b>A Novel Technology Utilizing Renewable Energies to Mitigate Air Pollution, Global Warming &amp; Climate Change</b> M. Amirthalingam
2.	<b>An Economic Analysis of Solar PV Micro-Utility in Rural Areas of Bangladesh</b> Faisal Ahammed, Abdullahil Azeem
3.	<b>Promoting 'Off the Grid' School: Application of RET to Develop Educational Infrastructure in Bangladesh</b> Md. Mohataz Hossain, Md. Nawrose Fatemi
4.	<b>Marketing and Financing of Solar Home Systems in Bangladesh: Assessment of Success</b> Shakila Aziz, Shahriar A. Chowdhury, H Irak Al-Hammad
5.	<b>Sustainable Construction and Approaches for Greener Homes</b> Shahriar Shams and A K M Sadrul Islam

**SESSION A3: WIND ENERGY**

**Time: 12:00 to 13:30, Venue: GF1**

1.	<b>Performance of a Stationary Vertical Axis Vane Type Rotor Tested in a Wind Tunnel</b> Faizul Mohammad Kamal, Md. Quamrul Islam
2.	<b>Harmony Search Algorithm to Improve Cost Reduction in Power Generation ,System Integrating Large Scale Wind Energy Conversion System</b> Sukayapong Ngonkham and Panhathai Buasri
3.	<b>Wind Turbine Aerodynamics and Aeroacoustics at University of Stuttgart - An Overview of Research and Development</b> M. Kamruzzaman, K. Meister, Th. Lutz1, M. K'uhn and E. Kr'amer
4.	<b>Wind Energy - An Innovative Solution to Global Warming</b> Shantanu Pal

**SESSION A4: SOLAR THERMAL**

**Time: 12:00 to 13:30, Venue: Room 103**

1.	<b>Solar Passive Cooling/Heating of Building at Bikaner in Rajasthan, India</b> O.P. Jakhar, Dr. A.N. Mathur
2.	<b>Study on the Pressure Drop in the Plate Heat Exchanger Channel</b> Zhenhua Jin, Lixuesong, Kwang Song Lee, Jongsoo Lee, Hyo-min Jeong, Han-Shik Chung
3.	<b>Reactivation of a Silica Gel Moist Air Dehumidifier Using Solar Heat</b> A. K. M. Iqbal Hussain
4.	<b>Concentrating Solar Power (CSP) and Its Prospect in Bangladesh</b> Nafisa Noor, Sadid Muneer
5.	<b>Performance Study of an Indigenously Built Flat Plate Solar Water Heater</b> Shakir Rahman, Sajedul Hossain Sarker and Saiful Huque

**Lunch break\***

Time: 13:30 to 14:30

**SESSION A5: SOLAR PV**

**Time: 15:00 to 16:30, Venue: GF1**

1.	<b>Photovoltaic Maximum Power Point Tracking Battery Charge Controller</b> Md. Imran Khan, M. Raihanul Islam, Md. Zahangir Mozumder and K. M. Rahman
2.	<b>Potential of Roof Top PV-systems for Supplying Electricity in Residential Area Scharnhäuser Park</b> Aneta Strzalka, Md. Zahid Hasan Siddiquee, Ursula Eicker
3.	<b>Solar Recharging Stations: Selling Hours of Solar Lighting</b> Leon Gaillard, Andreas Schroeter
4.	<b>A Feasibility Study of an On-grid Solar Home System in Bangladesh</b> Sanjida Moury, R. Ahshan
5.	<b>Performance Enhancement of PV Solar System by Diffused Reflection</b> Rizwan ur Rahman, Dewan Ishtiaque Ahmed, Mufrad Ahmed Fahmi, Tithi Tasnuva, Md. Fayyaz Khan

**Tea break\***

Time: 16:30 to 16:45

**Plenary Session 3**

Time : 16:45 to 17:25

Venue: GF1

Topic: Energy from Rice Husk and Its Value Addition

Speaker: Prof. A.K.M. Sadrul Islam,

Mechanical & Chemical Engineering Dept., Islamic University of Technology (IUT)

**SESSION A6: BIOMASS AND BIOGAS**

**Time: 17:30 to 19:15, Venue: GF1**

1.	<b>New Alternative Energy from Solid Waste Plastics</b> Moinuddin Sarker, ASM Din Mohammed, Mohammad M. Rashid, Nicholas Schiralli, Ashiquz Zaman, Aminul Kabir, Sadikur Rahman, Kamrul Islam, and Mohammad Molla
2.	<b>Biogas Generation from Leafy Biomass &amp; Vegetable Wastes by Application of Ultrasound</b> J. Mallick, K. L. Narayana, S. Khuntia, D. Singh and R. Barik
3.	<b>Durability Issues of Running Diesel Engine with Crude Palm Oil</b> Saiful Bari
4.	<b>Wood Biomass Supply Model for Bioenergy Production in Northwestern Ontario</b> Md. Bedarul Alam <sup>1</sup> , Chander Shahi <sup>2</sup> , Reino Pulkki <sup>3</sup>
5.	<b>Prospect of Agro-Industrial Residues as Feedstock of Biodiesel</b> Abu Yousuf, Domenico Pirozzi
6.	<b>Importance of Clean Biomass Combustion for the Air Quality in Residential Areas</b> Md. Aynul Bari, Johannes Brodbeck, Michael Struschka, Guenter Baumbach, Bertram Kuch, Guenter Scheffknecht

**Day 3: 19 December (Saturday) 2009**

**Plenary Session 4**

Time : 9:30 to 10:10

Venue: GF1

Topic: Renewable Energy Initiatives by Infrastructure Development Company Limited in Bangladesh

Speaker: S. M. Formanul Islam, Director and Secretary, IDCOL, Bangladesh

**Tea break\***

Time: 10:15 to 10:30

## Technical Sessions:

### SESSION B1: SOCIO-ECONOMIC ASPECTS OF RE

Time: 10:30 to 12:00, Venue: GF1

1.	<b>Brunnstein Hütte: An Eco Friendly Off Grid Alpine Hut</b> Hans-Gerhard Holtorf, Shahriar A. Chowdhury, Shakila Aziz, Hans-Peter Gallenberger
2.	<b>Environmental Impact of Rice Husk Briquette Fuel Use in Bangladesh: A Case Study of Mymensingh</b> M. Ahiduzzaman , AKM Sadrul Islam
3.	<b>Carbon Trading and the Clean Development Mechanism: An Opportunity for Bangladesh</b> Shakila Aziz, Shahriar A. Chowdhury
4.	<b>Advancement of Renewables and the Role of CDM in Developing Asian Nations</b> Noim Uddin

### SESSION B2: SOLAR PV

Time: 10:30 to 12:00, Venue: Room 103

1.	<b>Performance of Solar Home Systems in Rural Bangladesh</b> Shahriar A. Chowdhury, S. M. Raiyan Kabir, S. M. Moududul Islam, Radwanul Hasan Siddique, A.T.M. Golam Sarwar
2.	<b>Optimized Solar Home System Package Design: Bangladesh Perspective</b> Shahriar A. Chowdhury, A.T.M. Golam Sarwar, M. Rezwana Khan
3.	<b>Technical Appraisal of Solar Home System Equipments in Bangladesh</b> Shahriar A. Chowdhury, S. M. Raiyan Kabir, S. M. Moududul Islam
4.	<b>An Efficient Method of Solar Panel Energy Measurement System</b> Golam Mostafa, Fayyaz Khan
5.	<b>A Theoretical Analysis of Optimizing Solar Irradiance: Bangladesh Perspective</b> Shamsun Nahar, A.T.M. Golam Sarwar and Shahriar A. Chowdhury

### SESSION B3: WIND ENERGY

Time: 12:00 to 13:30, Venue: GF1

1.	<b>Sensorless Peak Power Point Tracking System for Small Scale Wind Turbine Generators</b> Md. Wasi Uddin, Md. Yiasin Sumon, Rajib Goswami, Md. Rahimul Hasan Asif and K. M. Rahman
2.	<b>Predictive Control of Wind Energy Conversion System</b> M. Bayat, H. Kazemi Karegar
3.	<b>Implementation of Offshore Wind Farm &amp; the Challenges Related to It</b> Zamshed Iqbal Chowdhury , Md. Shahiduzzaman
4.	<b>Irregular Wind Gust at Sitakundu of Bangladesh</b> M. M. Alam, A. K. Azad

**SESSION B4: SOLAR PV**

**Time: 12:00 to 13:30, Venue: Room 103**

1.	<b>A Numerical Analysis on CdS:O Window Layer for Higher Efficiency CdTe Solar Cells</b> Aminul Islam, M. A. Matin, Mohammed Mannir Aliyu , Yusuf Sulaiman and Nowshad Amin
2.	<b>Analysis of High Efficiency Amorphous Silicon Single and Multijunction Solar Cells</b> M. Iqbal Kabir, Norhayati Mohd Zainee and Nowshad Amin
3.	<b>Enhancing the Efficiency of CdTe Thin Film Solar Cells by Inserting Novel Back Contact Buffer Layers</b> M. A. Matin, Azliza Binti Azlan, and Nowshad Amin
4.	<b>Study and Design of Drinking Water Hydropower Project for Rural Electrification</b> B. Adhikary, P. Kafle, and S. Thapa
5.	<b>Role of Snubber in Reduction of Pulsation Produced during Compression of Promising Environment-Friendly Hydrogen Energy by Experiment and CFD</b> M. Sq. Rahman, J. S. Woo, T. W. Joung, B. H. Kim, H. S. Chung & H. M. Jeong

**Lunch break\***

Time: 13:30 to 14:30

**SESSION B5: OTHER RENEWABLES**

**Time: 14:30 to 16:00, Venue: GF1**

1.	<b>Study of Wave Energy Potential in Tonekabon (N Iran)</b> Hadi Molaei Tavana
2.	<b>Investigation on the Performance of Pico-hydro Generation System Using Consuming Water Distributed to Houses</b> H. Zainuddin, A. Khamis, M. S. Yahaya, M. F. M. Basar, J. M. Lazi1 and Z. Ibrahim
3.	<b>Power Generation Using Tidal Energy by Artificial Floating Dam without Turbine</b> Md. Dilder Hossain
4.	<b>A Permanent Magnet Generator with PCB Stator for Low Speed Marine Current Applications</b> Sanjida Moury, M. Tariq Iqbal
5.	<b>Young Australian behavioral intentions to adopt climate change actions and their perceptions of barriers to the utilization of renewable energy.</b> Mir Rabiul Islam

**SESSION B6: OTHER RENEWABLES**

**Time: 14:30 to 16:00, Venue: Room 103**

1.	<b>Deep Cycle Solar Battery for Sustainable Solar Home System</b> Syed Ishtiaque Ahmed, Nazmun Nahar, Md. Zakir Hossain
2.	<b>Renewable Energy Scenario of Bangladesh: Physical Perspective</b> Md. Zunaid Baten, Emran Md. Amin, Anika Sharin, Raisul Islam and Shahriar A. Chowdhury
3.	<b>Wave Energy Prospect of Bangladesh</b> Md. Junayed Sarker, Imranul Karim, Shirajum Munir
4.	<b>Renewable Energy Usage in the Telecommunication Sector of Bangladesh: Prospect and Progress</b> Shahriar A. Chowdhury, Vishwajit Roy, Shakila Aziz

**Tea break\***

Time: 16:00 to 16:15

### Plenary Session 5

Time : 16:15 to 16:55

Venue: Room No.- 103

Topic: Sustainable Energy for Development - Opportunities & Challenges for Bangladesh

Speaker: Dr. Khurshed-Ul-Islam, Senior Adviser, German Development Cooperation (gtz).

### SESSION B7: BIOMASS AND BIOGAS

Time: 16:55 to 18:25, Venue: GF1

1.	<b>The Potential of Generating Energy from Solid Waste Materials in Bangladesh</b> Md. Shahedul Amin, Kazy Fayeen Shariar, Md. Riyasat Azim, Shahriar A. Chowdhury
2.	<b>Waste to Energy: A Lucrative Alternative</b> Imrul Kayes, A.H. Tehzeeb
3.	<b>Prospects of Electricity Generation from Municipal Solid Waste of Dhaka City</b> A. Hamid Khan, M. Fayyaz Khan
4.	<b>Technology Development for Bio-crude Oil from Pyrolysis of Renewable Biomass Resource</b> Mohammad Rofiqul Islam, Momtaz Parveen, Md. Rabiul Islam and Hiroyuki HANIU
5.	<b>Experimental Investigation on Direct Use of Raw Jatropha Oil for Domestic Illumination Purpose</b> Nazam Us Sakib, Mohammad Hashib Sarker, Md. Junayed Sarker, Nahyan Mahmud
6.	<b>Reduction of Hydrogen Sulfide (H<sub>2</sub>S) from Poultry Based Biogas by Aeration Technique</b> Muhammad Shahriar Bashar, Md. Naimul Haque, Md. Yunus Miah, Mashudur Rahaman, S. M. Asaduzzaman Sujan, Sujit Kumar Banik, M. Khaleq-uz-zaman, A. N. M. Zobayer

### Day 4: 20 December (Sunday) 2009

#### Excursion to RE sites.

Time : 9:00 – 17:00

Venue: Kapasia, Gazipur [Visit: Solar PV (SHS), Biogas and Biomass Gasification based Power Plant]

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\*All refreshment will be served in UIU Auditorium