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Nibir Mondol

Assistant Professor

Research Area Renewable energy technologies (Wind & Solar), Smart Grid, Microgrid system, (PLC, IoT and Microcontroller) based control system, Industrial automation system.

Education

Master of Science in Electrical & Electronic Engineering.

Rajshahi University of Engineering & Technology(RUET),Rajshahi.,Bangladesh(2015)

Thesis Title: [Stabilization of Wind Firm Integrated Hybrid Power System by Using STATCOM.](#)

Bachelor of Science in Electrical & Electronic Engineering.

Rajshahi University of Engineering & Technology(RUET),Rajshahi.,Bangladesh(2010)Group: Electrical & Electronic Engineering,

HSC

M.A .Majid College,Bangladesh()Group: Science,

SSC

Shalua Purna Chandra Secondary School,Bangladesh()Group: Science,

Service Records

- **Assistant Professor**

Department/Section: Energy Science and Engineering

Khulna University of Engineering & Technology(KUET),Khulna From 01-01-1970 to 01-01-1970

Working Area:Renewable Energy,Power System,Automation,PLC,Microcontroller,SCADA,HMI.

- **Assistant Engineer**

Department/Section: Engineering

Khulna Water Supply & Sewerage Authority(Khulna WASA) From 01-01-1970 to 01-01-1970

Working Area:Power System Control,Renewable Energy(Solar Power Plant Control), Sub-Station Control,PLC ,SCADA,Automation ,Generator ,Pump -Motor Control ,Government Tender Related Works,Project Submission(DPP)

- **Lecturer**

Department/Section: Electrical & Electronic

University of Information Technology and Science(UITS) From 01-01-1970 to 01-01-1970

Working Area:Renewable Energy,Power System,Biogas,Wind Energy.

- **Lecturer**

Department/Section: Electrical & Electronic

National Science Research & Technology College,Rajshahi From 01-01-1970 to 01-01-1970

Working Area:Renewable Energy,Power System

- **Senior Officer(Technical)**

Department/Section: Technical

Rural Services Foundation(RSF) From 01-01-1970 to 01-01-1970

Working Area:Sholar Home system ,Biogas,Renewable Energy.

Research Interest

Renewable energy technologies (Wind & Solar), Smart Grid, Microgrid system, (PLC, IoT and Microcontroller) based control system, Industrial automation system.

Publication

Books

Journals

8. (2022) , " Comparative investigation into key optoelectronic characteristics of semipolar InGaN blue laser diodes: A strategy to mitigate quantum-confine stark effect," **Results in Physics**, Elsevier, vol34, no.2022/1/21, pp.105246
7. (2021) , " Key photovoltaic parameters of organohalide lead perovskite quantum dot intermediate band solar cell: A numerical investigation," **Materials Today Communications**, Elsevier, vol29, pp.102884
6. Mondal,J. ,Sarker,S. K. and Das,N. M. a. S. K. (2021) , " A Novel Security Unit with Mitigating Frequency Deviation for Interconnected Power System Considering Cyberattack," **Journal of Nano and Electronic Physics**, vol3, no.2077-6772
5. Dola,S. A. ,Mondal,J. and Das,N. M. a. S. K. (2021) , " Fuzzy Logic Controller Design for Voltage, Frequency, Current and Power Control of Three-phase Distributed Generation Based Islanded Microgrid," **Journal of Nano and Electronic Physics**, vol3, no.2077-6772

2. (2021.) , " Hybrid structure based high performance SPR sensor: a numerical approach of structure optimization for DNA hybridization," **Optical and Quantum Electronics** , Springer, vol53, no.24 (2021), pp.21

1. Hossain,M. B. , Hossain,M. S. , Pathan,M. I. , Mondol,N. and Abdulrazak,L. F. (2020.) , " Numerical modeling of MoS₂graphene bilayer-based high-performance surface plasmon resonance sensor: structure optimization for DNA hybridization," **optical-engineering,USA**, International Society for Optics and Photonics, vol59, no.10, pp.105105

Conference

17. Mondal,J. and Mondol,N. (25-27 June 2022) , "Horizontal Axis Solar Tracking System to Enhance Efficiency with Accuracy Test by Machine Learning," **International Conference on Mechanical, Manufacturing and Process Engineering (ICMMPE - 2022)** , AIP, pp.109

16. (25-27 June 2022) , "Enhancing the Efficiency of Photovoltaic Panels by Cleaning and Cooling Techniques," **International Conference on Mechanical, Manufacturing and Process Engineering (ICMMPE - 2022)** , AIP, pp.107

15. (05-07 August, 2021) , "Design and Implementation of an Automatic Single Axis Solar Tracking System to Enhance the Performance of a Solar Photovoltaic Panel," **2021 International Conference on Science & Contemporary Technologies (ICSCT)** , IEEE Xplore

14. Reza,M. N. and Mondol,N. (08-09, July 2021) , "Design and Implementation of an Automatic Single Axis Tracking with Water-Cooling System to Improve the Performance of Solar Photovoltaic Panel," **International Conference on Automation, Control and Mechatronics for Industry 4.0 (ACMI 2021)** , IEEE Xplore,Department of Mechatronics Engineering ,Rajshahi University of Engineering & Technology

13. Moniruzaman,M. and M.Hasan,N. a. M. (19-21 December, 2020.) , "Design and Implementation of Smart Home Energy Management system based on IoT," **International Conference on Mechanical, Industrial and Energy Engineering 2020,ISBN: 978-984-34-9657-7** , Faculty of Mechanical Engineering, Khulna University of Engineering & Technology(KUET), Khulna-9203, pp.55

12. S.Paul,S. , N.Mondol,N. , S.Rahman,S. and Moniruzaman,F. a. (19-21 December, 2020.) , "Performance Improvement of Solar Photovoltaic Panel using Smart Water Cooling Technology," **International Conference on Mechanical, Industrial and Energy Engineering 2020,ISBN: 978-984-34-9657-7** , ICMIEE 2020, Faculty of Mechanical Engineering, Khulna University of Engineering & Technology, Khulna-9203, pp.54

4. Mondol,N. ,S.K.Das,S. and Sheikh,N. a. M. R. I. (22- 24 December 2011.) , "Design, Performance And Economic Analysis Of A Solar Home System In Remote Area Of Bangladesh," **1ST International Conference on Mechanical Engineering and Renewable Energy 2011 (ICMERE2011)** , CUET, Chittagong, pp.Page no 77

3. Mondol,N. and Sheikh,S. a. M. R. I. (22- 24 December 2011.) , "Design A Hybrid System For A Remote Area By Using Renewable Resources In Bangladesh," **ICMERE2011** , 1ST International Conference on Mechanical Engineering and Renewable Energy 2011 CUET, Bangladesh,, pp.Page no 61

2. S.K.Das,S. and N.A.Sultana,N. a. N. (18-20,December 2011.) , "Design And Implement Of A State Feedback Position Output Controller For A Maxon S-Dc Motor With dspace," **9TH International Conference on Mechanical Engineering 2011 (ICME2011)** , BUET, Bangladesh , pp.RT-025

1. Hossain,M. and M.T.Islam,N. .. a. M. (19-20, December.) , "Performance Analysis of Chirped Return to-Zero Differential Phase shift Keying Modulation Format Fiber Optic System.," **2nd international conference on Engineering Education for Sustainable Development -2009** , ICEEESD-ABS-EEE-05, pp.EEE-5