Department of Electrical and Electronic Engineering
Khulna University of Engineering & Technology
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Dr. Md. Tawabur Rahman
Professor
Research Area Electrochemical/Chemical/Bio/Optical Sensors, Microfabrication & Characterization, 2D Materials (Graphene, TMDCs, etc.), Perovskite Solar Cells, MOSFETs, and Nanotechnology.

Biography

I am Dr. Md. Tawabur Rahman, currently working as a Professor in the Department of Electrical and Electronic Engineering (EEE) at Khulna University of Engineering & Technology (KUET), Khulna-9203, Bangladesh. I received PhD in Electrical Engineering from South Dakota State University, USA. I've also received both BS and MS in Electrical and Electronic Engineering from KUET. My research is focused on Electrochemical/Chemical/Bio/Optical Sensors for human health, environment, and agricultural applications. Besides sensors, I am working on microfabrication & characterization, 2D materials (Graphene, TMDCs, etc.), perovskite solar cells, MOSFETs, and nanotechnology. Please feel free to contact me if you have any questions. My research has been published as scholarly articles in peer-reviewed journals including Advanced Functional Material, Sensors and Actuators B: Chemical, IEEE Sensors Journal, ACS Applied Materials & Interfaces, ACS Applied Energy Materials, ACS Applied Nano Materials, etc.

*To know further about the ongoing research projects, group members, and collaboration, please visit Photonics Group KUET!

Google Scholar Link https://scholar.google.com/citations?user=Js5iGtsAAAAJ&hl=en&authuser=1

Researchgate https://www.researchgate.net/profile/Md-Tawabur-Rahman

Education

PhD in Electrical Engineering
South Dakota State University,(2020)
Thesis Title: Two-Dimensional Nanomaterials and Their Composites for Electrochemical Detection of Toxic Mercury Ions in Water
M.Sc. Eng. (EEE)
Khulna University of Engineering & Technology,Bangladesh(2012-2014)
Thesis Title: Theoretical Performance of MOSFET with Graphene Channel
B.Sc. in Electrical & Electronic Engineering
Khulna University of Engineering & Technology,Bangladesh(2007-2011)

Service Records

- **Professor**
  Department/Section: EEE
  Khulna University of Engineering & Technology Organization Type: *From 25-06-2024 to 01-01-1970*
- **Associate Professor**
  Department/Section: EEE
  Khulna University of Engineering & Technology *From 15-12-2022 to 24-06-2024*
- **Assistant Professor**
  Department/Section: EEE
  Khulna University of Engineering & Technology *From 12-07-2014 to 14-12-2022*
- **Lecturer**
  Department/Section: EEE
  Khulna University of Engineering & Technology *From 01-01-2012 to 11-07-2014*

Research Interest

Electrochemical/Chemical/Bio/Optical Sensors, Microfabrication & Characterization, 2D Materials (Graphene, TMDCs, etc.), Perovskite Solar Cells, MOSFETs, and Nanotechnology.

For more details, please visit
Photonics Group KUET!

Publication

Books

Journals

4. (2015) , " Theoretical Performance of GFET Using Analytical Approach ,", World Scientific Publishing Company

3. Islam,M. S. , Rahman,M. T. , Bhuiyan,A. G. and Hashimoto,A. (2015) , " Numerical Analysis on Phonon Localization of Vacancy Type Disordered Graphene ,", World Scientific Publishing Company, vol24, pp.1540002

Conference

7. Fattah,M. F. , Rahman,M. T. , Islam,M. S. , Bhuiyan,A. and Khan,A. A. (2015) , "DC and RF Characteristics of Graphene FET Using Analytical Approach," ***International Conference on Electrical Engineering and Information Communication Technology (ICEEICT)*** , IEEE

6. Rahman,M. T. , Roy,A. K. , Bhuiyan,H. M. A. R. and Bhuiyan,M. T. I. a. A. G. (2014) , "DC Characteristics of Dual Gated Large Area Graphene MOSFET," ***International Conference on Electrical Information and Communication Technology (EICT)*** , IEEE

5. Islam,M. S. , Rahman,M. T. , Bhuiyan,A. G. and Hashimoto,a. A. (2014) , "Vacancy Induced Phonon Properties of Hydrogen Passivated Graphene," ***International Conference on Electrical Information and Communication Technology (EICT)*** , IEEE

4. paul,U. , Hasan,M. , Rahman,M. T. and Bhuiyan,A. G. (2014) , "Effect of QD Size and Band-offsets on Confinement Energy in InN QD Heterostructure," ***International Conference on Electrical Information and Communication Technology (EICT)*** , IEEE

3. Islam,M. M. , Islam,M. T. , Rahman,M. T. and Bhuiyan,A. G. (2014) , "The effect of quantum dot size, interdot distance and indium content on InxGa1-xN/GaN QD-IBSC," ***International Conference on Electrical Information and Communication Technology (EICT)*** , IEEE

2. Rabin,R. , Hossain,M. ;. , ;Ahsan,M. , Mollah,M. ;. , ;Rahman,M. S. and Md.Tawabur,M. (2013) , "Sensitivity learning oriented nonmonotonic multi reservoir echo state network for short-term load forecasting," ***International Conference on Informatics, Electronics & Vision (ICIEV)*** , IEEE

1. (2013) , "ertical handover decision using fuzzy logic in a heterogeneous environment," ***International Conference on Informatics, Electronics & Vision (ICIEV)*** , IEEE