



**Dr. Ashraful Ghani Bhuiyan**

Professor

**Research Area** High-efficiency solar cells. Next generation smart materials. Nanogenerators. Advanced functional materials. High-power and high-speed devices. Semiconductor growth, characterization and their devices. Modeling and simulation of devices.

## Biography

Ashraful Ghani BHUIYAN is serving as a Professor in the Department of Electrical and Electronic Engineering at Khulna University of Engineering & Technology (KUET), Bangladesh since 2009. He has served as the Dean, Faculty of Electrical and Electronic Engineering and as the Head, Dept. of Electrical and Electronic Engineering at KUET. In his academic carrier, Professor BHUIYAN has been a Visiting Professor with the University of Fukui, Japan during the years 2018-2019 and 2010-2011. He has also served as the Key EM LEADERS Person of the Erasmus Mundus Leaders projects (<http://www.emleaders.eu/>) at KUET supported by European Union. Professor BHUIYAN was the organizing chair of the 1st International Conference on Electrical Information and Communication Technology (EICT 2013). He also worked as an Invitational Research Fellow and Postdoctoral Research Fellow at the Graduate School of Engineering, University of Fukui, Japan sponsored by the Japan Society for the Promotion of Science (JSPS). He was awarded PhD and MSc from the Department of Electrical and Electronics Engineering at University of Fukui, Japan. Professor BHUIYAN started his academic career as a lecturer in 1996 at KUET after passing the BSc with a prestigious Prime Ministers Gold Medal award for his outstanding performance. Professor BHUIYAN has been involving in research for the advancement of III-nitride semiconductors and devices for the last two decades. His primary focus has been on the fabrication and characterization of III-nitride semiconductors and their alloys for future high-efficiency high-performance solar cells, energy-efficient and ultra-high-speed devices. In addition, he has also been engaged in the research of Nano-materials and devices. He has authored and co-authored numerous research articles in high impact journals along with many international prestigious conference proceedings. He also authored a book chapter. Professor BHUIYAN is a Senior Member of Institute of Electrical and Electronic Engineers (IEEE), USA and a Life Fellow of Institute of Engineers Bangladesh (IEB).

## Education

### PhD in Electronics

University of Fukui, Japan (2001-2004)

**Thesis Title:** [ArF Excimer Laser Assisted Metalorganic Vapor Phase Epitaxy: A New approach for Indium nitride \(InN\) Semiconductor growth](#)

### Master of Science in Engineering (M.Sc. Eng.)

University of Fukui, Japan (1999-2001)

**Thesis Title:** [Gallium Phosphide: A highly promising substrate material for improved quality epitaxial film of InN](#)

### Bachelor of Science in Engineering (B.Sc. Eng.)

Khulna University of Engineering & Technology (KUET), Bangladesh (1991-1996)

### Invitational Fellow

University of Fukui, Japan (2018-2019)

Awarded by Japan Society for the Promotion of Science (JSPS)

### Postdoctoral Fellow

University of Fukui, Japan (2009-2011)

Awarded by Japan Society for the Promotion of Science (JSPS)

## Service Records

- **Lecturer**  
**Department/Section:** Telecommunication Engineering  
**Bangladesh Institute of Technology, Khulna** From 01-01-1970 to 01-01-1970
- **Lecturer**  
**Department/Section:** Electrical and Electronic Engineering  
**Bangladesh Institute of Technology, Khulna** From 01-01-1970 to 01-01-1970
- **Assistant Professor**  
**Department/Section:** Electrical and Electronic Engineering  
**Khulna University of Engineering & Technology** From 01-01-1970 to 01-01-1970
- **Associate Professor**  
**Department/Section:** Electrical and Electronic Engineering  
**Khulna University of Engineering & Technology** From 01-01-1970 to 01-01-1970
- **Professor**  
**Department/Section:** Electrical and Electronic Engineering  
**Khulna University of Engineering & Technology** From 01-01-1970 to 01-01-1970

## Research Interest

**High-efficiency solar cells. Next generation smart materials. Nanogenerators. Advanced functional materials. High-power and high-speed devices. Semiconductor growth, characterization and their devices. Modeling and simulation of devices.**

## Publication

### Books

1. Bhuiyan, A. G., Hashimoto, A. and Yamamoto, A. (2004), **Advanced Materials in Electronics**, Research Signpost

**Journals**

**Conference**