



# **Biography**

KUETdsfsdfsdf

**Dr. Md. Faruque Hossain**Professor **Research Area**Optoelectronics, Numerical

# Computation **Education**

#### **Doctor of Philosophy**

City University of Hong Kong, Hong Kong(2010)

The Outstanding Academic Performance Award for Research Degree Students†in the academic year 2008-09 . . Awarded "Research Tuition Scholarship†in the academic year 2009-10.

#### Master of Science in Electrical and Electronic Engineering

Khulna University of Engineering & Technology, Bangladesh (2006)

## **Bachelor of science in Electrical and Electronic Engineering**

Khulna University of Engineering & Technology, Bangladesh (2002) Group: Electrical and Electronic Engg.,

### **Service Records**

• Department/Section: ECE

Course Coordinator for several academic years (UG and PG) From to

• Department/Section: ECE

Laboratory-in-Charge of various labs in different academic years From to

- President, ECE Association, KUET From to
- Member, CASR, KUET From to
- Member, Academic Council, KUET From to

## **Research Interest**

# **Optoelectronics, Numerical Computation**

Integrated optical devices
Bio-photonics
Photonic and electronic packaging
FEM analysis
Numerical computation of electromagnetic fields
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My expertise, particularly, covers:

â-ª Processing of polymer materials (mixing, curing, photolithography, etc.) â-ª Thin film characterization using AFM, Nanoindentation, Surface profiler and Prism coupler â-ª Extensive FE analysis of thermo-mechanical stress in multilayer deposition of materials, curing, etching etc. including viscoelastic modeling. â-ª Design of various polymer waveguides and Bragg grating considering thermo-mechanical effects, and their fabrication and characterization â-ª FE modeling of microfluidic systems, MEMS structure and biological problems such as brain edema exploring COMSOL â-ª Laser machining, 3D Bioplotter for microfluidic devices, scaffolds for tissue engineering