

# E.M.K. IKBALL AHAMED

August 19, 2021

## 1 Basic information

- **Name:** E.M.K. Iqbal Ahamed
- **Address:** CUET residential area, Chittagong University of Engineering and Technology, Chattogram-4349, Bangladesh.
- **Phone:** +8801737592825
- **Web:** [sites.google.com/site/ikbalab1116/](https://sites.google.com/site/ikbalab1116/)
- **Google scholar:** <https://scholar.google.com/citations?user=3vVjd8sAAAAJ>
- **Email:** [ikballahamed@cuet.ac.bd](mailto:ikballahamed@cuet.ac.bd)

## 2 Employment

- November 2020 - present:  
Assistant Professor at Chittagong University of Engineering and Technology, Chattogram-4349, Bangladesh  
*Department of Electrical and Electronic Engineering*
- April 2017- November 2020:  
Lecturer at Chittagong University of Engineering and Technology, Chattogram-4349, Bangladesh  
*Department of Electrical and Electronic Engineering*

## 3 Education

- 2017 - 2020:  
Master of Science in Electrical and Electronic Engineering, Chittagong University of Engineering and Technology, Chattogram-4349, Bangladesh.  
GPA – 4.00 in scale of 4.00.  
Thesis: *Fabrication and Characterization of  $Zn_xCd_{1-x}S$  Thin Film for Solar Cell Applications*
- 2012 - 2017:  
Bachelor of Science in Electrical and Electronic Engineering, Chittagong University of Engineering and Technology, Chattogram-4349, Bangladesh.  
CGPA – 3.95 in scale of 4.00.  
Rank– 1<sup>st</sup> among 135 Students of the department.  
Thesis: *Modelling and Simulation of Ultra-thin CIGS Solar Cells by wxAMPS*
- 2009-2011: Higher Secondary School Certificate (H.Sc.), Notre Dame College, Dhaka. GPA – 5.00 in scale of 5.00
- 2001-2009: Secondary School Certificate (S.Sc.), Bogra Zilla School, Bogra. GPA – 5.00 in scale of 5.00

## 4 Awards

- Prime Minister Gold Medal 2017 and University Gold Medal 2015

## 5 Research skills

- Synthesis and characterization of thin-film PV materials and devices
- Modelling and simulation of thin-film PV cells

## 6 List of publications

### (a) Journals

- E.M.K. Ikbali Ahamed**, N.K. Das, A.K.S. Gupta, M.N.I. Khan, M.A. Matin, N. Amin, "Structural and Optical Characterization of As-grown and Annealed  $Zn_xCd_{1-x}S$  Thin-films by CBD for Solar Cell Applications," International Journal of Renewable Energy Research (IJRER), Vol.10, No.3, pp. 1464-1475, 2020.
- N. K. Das, J. Chakrabartty, S. F. U. Farhad, A. K. Sen Gupta, **E. M. K. Ikbali Ahamed**, K. S. Rahman, A. Wafie, A. A. Alkahtanie, M. A. Matin, N. Amin, "Effect of Substrate Temperature on the Properties of RF Sputtered CdS Thin Films for Solar Cell Applications," Results in Physics, Volume 17, June 2020.

### (b) IEEE international conferences

- E. M. K. Ikbali Ahamed**, A. K. Sen Gupta, M. N. I. Khan, M. A. Matin and N. Amin, "Effect of Annealing Temperature on the Structural and Optical Properties of CdS Thin Films Deposited by CBD," 2020 IEEE Region 10 Symposium (TENSYP), pp. 1168-117, 2020.
- E. M. K. I. Ahamed**, N. K. Das, S. F. U. Farhad, M. N. I. Khan, M. A. Matin and N. Amin, "Optical Characterization of Sputter Deposited CdS Thin Films and Measurement of Deposition Rate," 2020 IEEE Region 10 Symposium (TENSYP), pp. 1010-1013, 2020.
- A. K. S. Gupta, **E. M. K. I. Ahamed**, M. Quamruzzaman, M. A. Matin, K. S. Rahaman and N. Amin, "Consequence on Optical Properties of ZnS Thin-Film Deposited by RF Magnetron Sputtering with Varying Substrate Temperatures," 2020 47<sup>th</sup> IEEE Photovoltaic Specialists Conference (PVSC), pp. 2646-2648, 2020.
- A. K. S. Gupta, **E. M. K. I. Ahamed**, M. Quamruzzaman, M. A. Matin, K. S. Rahaman and N. Amin, "Characterization of Intrinsic and Doped ZnO Thin-Films Deposited by RF Magnetron Sputtering for Chalcogenide Based Solar Cell Applications," 2019 4<sup>th</sup> International Conference on Electrical Information and Communication Technology (EICT), pp. 1-4, 2019.
- A. A. K. S. Gupta, **E. M. K. I. Ahamed**, M. Quamruzzaman, M. A. Matin, K. S. Rahaman and N. Amin, "Structural properties of bi-layer Molybdenum Thin-film deposited by RF magnetron sputtering for CZTS solar cells," 2019 5<sup>th</sup> International Conference on Advances in Electrical Engineering (ICAEE), pp. 600-603, 2019.
- E. M. K. I. Ahamed**, A. K. S. Gupta, M. N. I. Khan, M. A. Matin and N. Amin, "Structural Properties of CdS Thin-films Deposited by RF Magnetron Sputtering," 2019 5<sup>th</sup> International Conference on Advances in Electrical Engineering (ICAEE), pp. 581-584, 2019.
- E. M. K. Ikbali Ahamed**, A. K. Sen Gupta, M. Qamruzzaman and M. A. Matin, "An Efficient CZTS Solar Cell from Numerical Analysis," 2019 1<sup>st</sup> International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT), pp. 1-5, 2019.
- E. M. K. I. Ahamed**, S. Bhowmik, M. A. Matin and N. Amin, "Highly efficient ultra thin Cu(In, Ga)Se<sub>2</sub> solar cell with Tin Selenide BSF," 2017 International Conference on Electrical, Computer and Communication Engineering (ECCE), pp. 428-432, 2017.
- E. M. K. I. Ahamed**, M. A. Matin and N. Amin, "Modeling and simulation of highly efficient ultra-thin CIGS solar cell with MoSe<sub>2</sub> tunnel," 2017 4<sup>th</sup> International Conference on Advances in Electrical Engineering (ICAEE), pp. 681-685, 2017.

## 7 References

- **Dr. Mahmud Abdul Matin Bhuiyan**  
Professor, Department of Electrical and Electronic Engineering, Chittagong University of Engineering and Technology, Chattogram-4349, Bangladesh  
**Email:** [mamatin@cuet.ac.bd](mailto:mamatin@cuet.ac.bd)
- **Dr. Nowshad Amin**  
Professor of Renewable Energy and Solar Photovoltaics, Institute of Sustainable Energy (ISE), Universiti Tenaga Nasional (@The National Energy University), Jalan IKRAM-UNITEN, 43000 Kajang, Selangor, MALAYSIA  
**Email:** [nowshad@uniten.edu.my](mailto:nowshad@uniten.edu.my)