

Resume of Prof. Dr. A.B.M. Obaidul Islam

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Professional Summary

Accomplished academic and organizational leader with extensive experience in Physics research, University teaching, and higher education governance. Recognized for significant contribution to scientific research, political engagement, and institutional leadership, including roles as Vice-Chancellor at Bangladesh Open University, Chairman and Professor at the Department of Physics, University of Dhaka and executive positions in major professional, political organizations and alumni associations. Demonstrates expertise in Materials Science and Photovoltaic solar cell research, complemented by substantial experience in policy advocacy, organizational leadership, and cross-cultural collaboration. Renowned for integrity, strategic vision, and a steadfast commitment to advancing scientific knowledge, educational excellence, and public service in Bangladesh and beyond.

Objectives

As Professor of Physics at the University of Dhaka and an active participant in national and international academic forums, I am committed to building dynamic, outcome-oriented administrative frameworks that align with both national development goals and global best practices. My career reflects a strong commitment to effective governance, innovative research, and fostering environments where academic and organizational objectives are achieved with integrity and strategic foresight.

Academic Qualifications

- **Doctor of Engineering** (in Materials Engineering): Toyama University, Japan. Year- 1999.
- **Master of Science** (in Solid State Physics): Department of Physics, University of Dhaka. Year- 1988; Gade/class: First class
- **Bachelor of Science** (Honours): Department of Physics, University of Dhaka. Year- 1987; Gade/class: First class.
- **Higher Secondary Certificate**: Govt. P. C. College, Bagerhat, Jessore Board, Year- 1984. Grade/Division: First division.
- **Secondary School Certificate**: S. P. Rashidia High School, Jessore Board, Year- 1982. Grade/Division: First division.

Academic Positions

- **Professor (Grade – 1)** in 2008: Department of Physics, University of Dhaka.
- **Associate Professor** in 2002: Department of Physics, University of Dhaka.
- **Assistant Professor** in 1999: Department of Physics, University of Dhaka.
- **Lecturer** in 1994: Department of Physics, University of Dhaka.
- **Adjunct Faculty:** Bangladesh University of Science and Technology (BUET), North South University, Ahsanullah University of Science and Technology, South East University, Eastern University and Presidency University.

Research Experiences

- **Postdoctoral Research:** University of Twente, The Netherlands as Erasmus Mundus Fellow.
- **Postdoctoral Research:** Sheffield Hallam University, U.K. as Commonwealth Academic Staff Fellow.
- **Postdoctoral Research:** Darmstadt University of Technology, Germany as Alexander von Humboldt Foundation Fellow.
- **Ph.D. Research:** Toyama University, Japan as Japanese Government Scholarship (Monbusho) program.
- **Visiting Researcher:** University of Toyama, Japan as Japan Student Services Organization (JASSO) Fellow.
- **Visiting Researcher:** Darmstadt University of Technology, Germany as Alexander von Humboldt Foundation Fellowship.
- **Visiting Researcher:** Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy as Regular Associateship of ICTP, Italy.
- **Research Associate:** Rajasthan University, Jaipur, India under the fellowship program of Abdus Salam International Centre for Theoretical Physics (ICTP).
- Supervised more than 30 students in home and abroad for their M.Sc. and M.Phil. degrees.

Publications and Attending Conferences

- Published around 40 research articles along with book chapter in peer-reviewed reputed National and International Journals.
- Actively participated in numerous national and international conferences, seminars, symposiums and workshops with various roles: invited speaker, oral presenter, poster presenter, session chair, etc.
- Published several articles in popular daily national Newspapers of Bangladesh related to education, politics, and national development of Bangladesh.

Selected Journal Papers and Book Chapter:

1. M.J. Alam, M.H. Doha and O. Islam; “*Characterization of electrodeposited ZnSe Thin Films*”; (In preparation).
2. M.I. Hossain, K.A.M.H. Siddiquee, **O. Islam**, M.A. Gafur, M.R. Qadir, S.N. Rahman and N.A. Ahmed; “*Characterization of Electrodeposited ZnTe Thin Films*”; J. Optics **48** (2019) 295.
3. M.H. Rashid, J. Rabeya, M.H. Doha, **O. Islam**, P. Reith, G. Hopman and H. Hilgenkamp; “*Characterization of Single Step Electrodeposited Cu₂ZnSnS₄ Thin Films*”; J. Optics **47** (2018) 256 - 262.
4. S. Halder, M.A.K. Pathan, **O. Islam**, M.A. Gafur, M.R. Qadir, S. Islam, N. Khatun and S.H. Sarkar; “*Effect of Zn Incorporation in Electrodeposited CdTe Thin Films*”; Bang. J. Phys. **20** (2016) 33.
5. M.H. Doha, M.J. Alam, J. Rabeya, K.A.M.H. Siddiquee, S. Hussain, **O. Islam**, M.A. Gafur, S. Islam, N. Khatun, and S.H. Sarkar; “*Characterization of Chemically Deposited ZnS Thin Films on bare and conducting glass*”; Optik **126** (2015) 5194 - 5199.
6. M.I. Hossain, M. Kamruzzaman, A.B.M.O. Islam; “*Effects of Temperature in Electrodeposition of ZnTe Thin Films*”; J. Mater. Sci.: Mater. Electro. **26** (2015) 1756.
7. K.A.M.H. Siddiquee, M.A.K. Pathan, S. Alam, **O. Islam** and M.R. Qadir; “*Characterization of CdS and CdTe Thin Films and Investigation of the Influence of CdCl₂ on CdTe/CdS Structure*”; Optik **124** (2013) 4383.
8. S. Alam, M.A.K. Pathan, K.A.M.H. Siddiquee, **A.B.M.O. Islam**, M.A. Gafur, D.K. Saha, M. Mori and T. Tambo; “*Optical and structural characterization of CdSe and CdTe layers and fabrication of a CdTe/CdSe structure*”; Optik **124** (2013) 2165.
9. M.A.K. Pathan, K.A.M.H. Siddiquee, S. Alam, **O. Islam** and M.A. Gafur; “*Structural and Optical Characterization of CdS and CdHgTe Thin Films for the Fabrication of CdHgTe/CdS Structure*”; J. Mater. Sci.: Mater. Electro. **24** (2013) 745.
10. M.R.I. Chowdhury, G. Mustafa, D.K. Saha, S. Hussain, and **A.B.M.O. Islam**; “*Air annealing effects on the structural, morphological, optical and electrical properties of chemically deposited CdS thin films*”; Dhaka Univ. J. Sci., **60** (2012) 283.

11. M.R.I. Chowdhury, J. Podder, and **A.B.M.O. Islam**; “*Synthesis and characterization of manganese sulphide thin films deposited by spray pyrolysis*”; Cryst. Res. Technol., **46** (2011) 267.
12. R.I. Chowdhury, M.A. Hossen, G. Mustafa, S. Hussain, S.N. Rahman, S.F.U. Farhad, K. Murata, T. Tambo and **A.B.M.O. Islam**; “*Characterization of chemically deposited cadmium sulfide thin films*”; Int. J. Mod. Phys. B **24** (2010) 5901.
13. Al-Mamun, S. Hussain and **A.B.M.O. Islam**; “*A comparative study of chemically-deposited and vacuum-evaporated copper selenide thin films*”; Bang. J. Phys. **7- 8** (2009) 97.
14. M.Z. Molla, R.I. Chowdhury, G. Mustafa, S. Hussain, K.S. Hossain, S.N. Rahman, N. Khatun, N.A. Ahmed, S.F.U. Farhad, K. Murata, T. Tambo and **A.B.M.O. Islam**; “*Characterization of chemically deposited silver sulfide thin films*”; Int. J. Mod. Phys. B **23** (2009) 5695.
15. M.R.I. Chowdhury, M.S. Hossain, M.S. Islam, F. Sabeth, G. Mustafa, S.F.U. Farhad, D.K. Saha, F.A. Chowdhury, S. Hussain and **A.B.M.O. Islam**; “*Characterization of electrodeposited cadmium selenide thin films*”; Proceedings of the 24th European Photovoltaic Solar Energy Conference and Exhibition, Hamburg, Germany, 21-25 September, 2009, pp 3077.
16. **A.B.M.O. Islam**, N.B. Chaure, J. Wellings, G. Tolan and I.M. Dharmadasa; “*Development of electrodeposited ZnTe layers as window materials in ZnTe/CdTe/CdHgTe structure*”; Mater. Character. **60** (2009) 160.
17. M.N. Islam, M.A. Gafur, **A.B.M.O. Islam** and A.H. Khan; “*Fabrication and investigation of the AC electrical properties of pure polypropylene (PP) and polypropylene-banana fiber (PP-b) composites*”; Bang J. Phys. **3** (2007) 65.
18. **O. Islam**, N.B. Chaure, J. Wellings, G. Tolan and I.M Dharmadasa; “*Development of electrodeposited ZnTe layers for applications in thin film PV solar cells*”; Ceylon J. Science **12** (2007) 33.
19. B.K. Sarker, **A.B.M.O. Islam**, F. Ahmed and A.H. Bhuiyan; “*Optical and dielectric properties of PVC, PVA and their blends*”; Polymers and Polymer Composites **14** (2006) 651.
20. Al-Mamun, **A.B.M.O. Islam** and A.H. Bhuiyan; “*Structural, electrical and optical properties of copper selenide thin films deposited by chemical bath deposition technique*”; J. Mater. Sci.: Mater. Electro. **16** (2005) 263.
21. Al-Mamun and **A.B.M.O. Islam**; “*Bath parameter dependence of chemically-deposited copper selenide thin films*”; Int. J. Mod. Phys. B **18** (2004) 3063.
22. **A.B.M.O. Islam**, A. Thissen, A. Klein and W. Jaegermann; “*Deposition of the layered-semiconductor SnS₂ onto H-terminated Si(111) surfaces: failure of van der Waals epitaxy and possible implications*”; Surf. Sci. **572** (2004) 476.

23. Al-Mamun and **A.B.M.O. Islam**; “*Characterization of copper selenide thin films deposited by chemical bath deposition technique*”; Appl. Surf. Sci. **238** (2004) 184.
24. **A.B.M.O. Islam**, and C. Tatsuyama; “*Characterization of GaS-deposited GaAs surface by XPS and PL*”; Indian J. Phys. **78** (7) (2004) 547.
25. Al-Mamun, S.H. Firoz and **A.B.M.O. Islam**; “*Detection of crystal structure of chemically-deposited copper selenide thin films*”; Indian J. Phys. **78A** (2004) 377.
26. **A.B.M.O. Islam** and C. Tatsuyama, “*Sulfur Passivation of III-V Semiconductor Surfaces*”, in; III-V Semiconductor Heterostructures: Physics and Devices, Edited by Will Z. Cai, Research Signpost Publisher, India, 37/661 (2) (2003) 57.
27. R. Fritsche, E. Wizotski, A. Thissen, **A.B.M.O. Islam**, A. Klein, W. Jaegermann, R. Rudolph, D. Tonti and C. Pettenkofer; “*Steps of Preparation of a Ga-Se half-sheet termination layer on Si(111) for electronic passivation*”; Surf. Sci. **515** (2002) 296.
28. R. Fritsche, E. Wizotski, **A.B.M.O. Islam**, A. Thissen, A. Klein, W. Jaegermann, R. Rudolph, D. Tonti and C. Pettenkofer; “*Electronic passivation of Si(111) by Ga-Se half-sheet termination*”; Appl. Phys. Lett. **80** (2002) 1388.
29. M. Mori, K. Tsukada, **Obaidul A.B.M. Islam**, T. Tambo, C. Tatsuyama and T. Ito; “*Interface formation between S/GaS and diamond films*”; New Diamond and Frontier Carbon Technology **11** (2001) 331.
30. **A.B.M.O. Islam**, T. Tambo and C. Tatsuyama; “*Passivation of GaAs surface by GaS*” Vacuum **59** (2000) 894.
31. F-U-Z. Chowdhury, **A.B.M.O. Islam** and A.H. Bhuiyan; “*Chemical analysis of the plasma-polymerized diphenyl thin films*”; Vacuum **57** (2000) 43.
32. **A.B.M.O. Islam** and A.H. Bhuiyan; “*Electrical Properties of electrodeposited copper selenide thin films*” Bangladesh J. Sci. Res. **18** (2000) 175.
33. **A.B.M.O. Islam**, Y. Nishiyama, T. Tambo, C. Tatsuyama and T. Ito; “*Characterization of GaS-deposited CVD diamond films by AES and XPS*”; Appl. Surf. Sci. **159/160** (2000) 588.
34. **A.B.M.O. Islam**, Y. Nishiyama, T. Tambo, C. Tatsuyama and T. Ito; “*Interface formation between GaS and CVD diamond films*”; Surf. Sci. **448** (2000) 1.
35. **A.B.M.O. Islam**, T. Tambo and C. Tatsuyama; “*Growth temperature dependence of GaS thin films on GaAs(001) surface*” J. Appl. Phys. **85** (1999) 4003.
36. **A.B.M.O. Islam**, K.K. Lim, Y. Dokai, T. Tambo, C. Tatsuyama, N. Jiang, A. Hatta, T. Ito and A. Hiraki; “*Surface modification of B-doped diamond films by GaS*”; Diamond Films and Technology **8** (1998) 271.

37. **A.B.M.O. Islam**, K. Asai, K.K. Lim, T. Tambo and C. Tatsuyama; “*Interface formation between layered-compound GaS and GaAs(111)A surface*”; Surf. Sci. **416** (1998) 295.
38. **A.B.M.O. Islam**, K. Asai, K.K. Lim, T. Tambo and C. Tatsuyama; “*Initial stage of the growth of GaS thin films on GaAs*”; Appl. Surf. Sci. **123/124** (1998) 508.
39. **O. Islam**, A.H. Bhuiyan and S. Ahmed; “*IR and dielectric studies of plasma-polymerized m-xylene thin films*”; Thin Solid Films **238** (1994) 191.

**Administrative
Work Experiences**

- Vice-Chancellor, Bangladesh Open University.
- Chairman, Department of Physics, University of Dhaka.
- House Tutor, Fazlul Haq Muslim Hall, University of Dhaka.
- Assistant House Tutor, Fazlul Haq Muslim Hall, University of Dhaka.
- Assistant House Tutor, Shahidullah Hall, University of Dhaka.

**Notable Award/
Scholarship/
Fellowship**

- Trustee, Association of Commonwealth Universities (ACU) Trustee Board, UK Charity Commission, UK.
- Council, Association of Commonwealth Universities (ACU), UK
- Erasmus Mundus Fellowship for Postdoctoral Research in the Netherlands.
- Japan Student Services Organization (JASSO) Fellowship for research in Japan.
- Commonwealth Academic Staff Fellowship for Postdoctoral Research in U.K.
- Alexander von Humboldt Foundation Fellowship for Postdoctoral Research in Germany.
- Japanese Government (Monbusho) Scholarship for Ph.D. research in Japan.
- Regular Associateship of the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy.

Professional Affiliations

- President: Alumni Association of German Universities in Bangladesh (AAGUB).
- Former General Secretary (2009 and 2010): Dhaka University Teacher's Association (DUTA).
- Former Secretary General (2009): Federation of Bangladesh University Teachers Association (FBUTA).
- Former Joint-Secretary (2004 and 2005): Dhaka University Teacher's Association (DUTA).
- Former Elected EC Member (2007, 2011- 2014): Dhaka University Teacher's Association (DUTA).
- Senate Member (Five times: 2004 – till date): University of Dhaka.
- Syndicate Member: Khulna University, Khulna.
- Syndicate Member: Pabna University of Science and Technology, Pabna
- Syndicate Member: Rabindra University, Sirajgonj.
- Syndicate Member: BRAC University.
- Former President: Dhaka University Club
- Fellow: The Bangladesh Physical Society (BPS).
- EC Member: Association of Humboldt Fellows in Bangladesh (AHFB).
- Member: The Bangladesh Association for the Advancement of Science (BAAS).
- Former General Secretary: Japanese Universities Alumni Association in Bangladesh (JUAAB).
- Former Joint-Secretary: Japanese Universities Alumni Association in Bangladesh (JUAAB).
- Former Chairman: Managing Committee, Dhaka City College.
- Former Chairman: Managing Committee, University Women's Federation College, Dhanmondi, Dhaka.
- Former Chairman: Managing Committee, Selimabad College, Morelgonj, Bagerhat.
- Former Member: Bangladesh Council for Scientific and Industrial Research (BCSIR).

Language Proficiency

English, Japanese, German, Dutch, Arabic and mother tongue Bengali.

Country Visited

Japan, Malaysia, Thailand, China, India, Nepal, UAE, Germany, Austria, Italy, Spain, Poland, Luxemburg, France, UK, The Netherlands, and Kenya.