CURRICULUM VITEA

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Name	MOMTAZUL ISLAM
Father's Name	Prof. Fakhrul Islam (Late), Dept of Applied Chemistry and Chemical Engineering, Rajshahi University
Designation	Professor
Department	Department of Electrical and Electronic Engineering (Applied Physics, Electronics and Communication Engineering)
Faculty:	Faculty of Engineering (Applied Science and Technology)
Address:	Department of Electrical and Electronic Engineering Islamic University, Kushtia-7003. Bangladesh.
Fields:	Nanotechnology, Electronic Communications ,Electronics, Energy Physics, Material Physics, Electromagnetic waves and field, Measurement Science Technology, Semiconductors, Solid State Physics, Power Electronics, Power system Analysis, Optical Communication systems. High Voltage Engineering, IoT.

Administrative Experiences:

Nov-2017- Jan 2019	**Member of Islamic University Syndicate, Dean Catagory**
Nov.2017- Nov 2019	**Dean, Faculty of Applied Science and Technology, Islamic University. Dean, Faculty of Engineering.**
2018	**D Unit Admission Co ordinator**
Mar 2016- Aprl 2017	**Provost, Shoheed President Ziaur Rahman Hall.**
Mar 2010- 2012	**HEQEP Project Evaluation (No.25)**
2007-2008	**Ministry of Science and Technology Project Evaluation team member**
2006-2012	**Co-Ordinator, Diploma in ICT program at Islamic University, Ministry of Science and Technology.**
Aug 2004- Aug 2007	**Head/Chairman, Department of Applied Physics, Electronics and Communication Engineering**

ACADEMIC QUALIFICATION

Doctor of Philosophy (Ph.D.) in Physics. (August, 2005)	**Ph.D. Research** (Ag/ Au based Nanomaterials) Thesis Title : LINEAR AND NONLINEAR OPTICAL PROPERTIES OF Ag/Au BASED CLUSTERS Center for Advanced Materials Processing , Laser Laboratory

	Department of Physics Pune University, Pune, India
Master of Science (M.Sc.) (1984-1985)	Master of Science in Applied Physics and Electronics. Thesis Title: "Study the optical properties of Vacuum Evaporated Indium Oxide thin film" Result: First Class 2nd (Acc. Merit.) Medium of instruction: English
Bachelor of Science (B.Sc.) (1981-1984)	Bachelor of Science in Applied Physics and Electronics, Result: Upper 2nd Class Medium of instruction: English Rajshahi University, Rajshahi-6003, Bangladesh

CAREER HISTORY

(Post), (Organisation), (Period)

Professor **(30-05-2009 to till date)**	Department of Electrical and Electronic Engineering (Applied Physics, Electronic and Communication) Engineering, Islamic University, Kushtia-7003, Bangladesh
Course taught	Optoelectronics and Optical Fiber communication, Advance Solid State Physics, Materials and Material Analysis and Communication Engineering,Power system Analysis, Power Electronics, High Voltage Engineering
Associate Professor **(29/02/06 to 29/05/09)**	Applied Physics, Electronic and Communication) Engineering, Islamic University, Kushtia-7003, Bangladesh
Course taught	Radio and TV Engineering, Telecommunication, Computer Programming and Applied Optics.
Assistant Professor **(28/01/1999 to 28/02/06)**	Applied Physics, Electronic and Communication) Engineering, Islamic University, Kushtia-7003, Bangladesh
Course taught	Basic Electronics ,Electricity and Magnetism; Electrical Technology and Electronic Circuits
Lecturer **(28/01/1996 to 27/01/99)**	Applied Physics, Electronic and Communication) Engineering, Islamic University, Kushtia-7003, Bangladesh
Course taught	Basic Electronics ,Electricity and Magnetism; Electrical Technology and Electronic Circuits
Telecom Engineer **(Nov, 1990 to Jan,1996)** **Responsibility**	Bangladesh Rural Telecom Authority and Emirates Telecommunication Corporation (ETISALAT). UAE. Installation, Commissioning and Maintenance of PABX

PROFESSIONAL AFFILIATION/MEMBERSHIP

(Organisation), (Role), (Year), (Level).

Institute of Electrical and Electronic Engineers (IEEE), Member No.98980630
Bangladesh Electronics Society, Executive Committee Member (Rajshahi Chapter)

Bangladesh Physical Society, Bangladesh, Life Member, (National)

SELECTED PUBLICATIONS

(Publication).

1.M.M.Alam, M.Harun and Momtazul Islam, Synthesis and Characterization of TTAB coated Silver (Ag) Nanoparticles, Advanced Materials Research Vols. 264-265 (2011) pp 530-534.Transtech Publications, Switzerland.

2.M.Islam, R.C. Ayier, Size Selective Color of Electrochemically Grown tetra-octylammoniumbromide (TOAB) Coated Gold Nanoparticles, Islamic University Studies: Journal of Applied Science and Technology, Vol. 7(1), (2010), 25-30.

3.P.V. Adhyapak, M. Islam, R.C. Aiyer, U.P. Mulik, Y.S. Negi, D.P. Amalnerkar; Preparation, characterization and non-linear optical properties of pristine m-nitroaniline (m-NA) and its recycled polystyrene (Re-PS) coated single crystals, Journal of Crystal Growth. 310 (2008) 2923–2927

4.M.Humayun Kabir, Md. Khairul Islam, M.K. Rahman and Momtazul Islam, Studies on PMMA Fiber as Multimode Step Index Optical Waveguide. Islamic University Studies: Journal of Applied Science and Technology, Vol. 5(1), (2008), 155-159.

5.M.Humayun Kabir, K.M. Nasiruddin,M.Shahinuzzaman,M.K. Rahman and Momtazul Islam, To study the Transmission Characteristics of 1m Signals Over 5m Multimode Step Index PMMA Polymer Optical Fiber. Islamic University Studies: Journal of Applied Science and Technology, Vol. 5, No.2, (2008), 107- 112.

6,Jagdish W. Dadge, M Islam, A.K Dharmadhikari, S R.Mahamuni and R C. Aiyer, "Hyper-Rayleigh scattering in electrochemically synthesized Ag–Au coupled clusters" J. Phys.: Condens. Matter 18 (2006) 5405–5413.

7.Optical Studies of Zno/Ag nanojunctions Shashikant Patole, M. Islam, R.C. Aiyer, and Shailaja Mahamuni; Journal of Materials Science, 41(2006) 5602-5607(6) ; Springer

8.Y.S. Negi , P.V. Adhyapak, S.R. Damkale, R. K. Goyal, M. Islam and R.C. Aiyer ,Preparation of novel optical-grade metanitroaniline and polymethylmethacrylate-coated single crystals and their optical properties,; Material Letters, 58, 3929 (2004).

9.Preparation and Investigation of Second harmonic generation(SHG) Properties of m Nitroaniline Doped PMMA Guest-Host System for Optoelectronic Device Application, R.K. Goyal, S.R. Damkale and P. V. Adhyapak, M. Islam , R. C. Aiyer, Y.S. Negi; International Journal of Plastic Technology, Vol ; 8 , Page; 249-255, 2004

10.M. Islam, S. R. Mahamuni, and R. C. Aiyer, Optical Limiting Properties of Gold
Nanoparticles, Islamic University Studies: Journal of Applied Science and Technology, Vol. 4, No.1, 41(2005)

11.Evidence of Optical Bistability in Capped Ag Nanoparticles, M. Islam and R.C. Aiyer; Islamic University Studies: Journal of Applied Science and Technology. Vol.4, No.2,79 (2006)

12.M. Islam and R.C.Aiyer, "Fourier Transform Infrared Spectroscopy Studies Of Ag and Au Clusters"; Islamic University Studies: Journal of Applied Science and Technology. Vol.4, (2) ,69 (2006).

13.S.R. Khan and M. Islam ,Electrical Properties of Indium Oxide thin films, Rajshahi University Studies; Part-B, Vol 26. 1. 1998

14.D.Hossain, T.Pervin, M.M. Haque and Momtazul Islam, TTAB Mediated Electrochemical Synthesis And Characterization Of Zno Nanoparticles, Islamic University Studies: Journal of Applied Science and Technology. Vol. 5(2), 2008,17-20.

15.M.Islam, R.C.Ayiyer, Nonlinear Optical Properties of Electrochemically Grown Gold Nanoparticles, Islamic University Studies: Journal of Applied Science and Technology. Vol. 7(1),2010,1- 5.

16.M. M. Alam, M. Abdul Momin and Momtazul Islam Spectroscopic and Structural Characterization of TTAB Capped Electrochemical Grown ZnO Nanoparticles, Jahangir
Nagar University Journal of Science,

17.Md. Abdul Momin, M. M. Alam and Momtazul Islam; Electrochemical synthesis and optical evaluation of tetradecyltrimethyl ammonium bromide capped Ag nanoparticles. Journal of Bangladesh Electronics Society (Accepted for Published).
18.Md. Asraful Alam, M. M. Alam Md. Abdul Momin and Momtazul Islam, Synthesis and Photoluminescence Evaluation of TTAB Capped ZnO/Ag Nanoparticles, Journal of Applied Science and Technology (BOU), (Accepted).
19.F. Katun, M. M. Alam and Momtazul Islam; Fabrication of Visible Photoluminescent Porous Silicon, J. Applied Science and Technology; 05(01), (2007) 35
Proceeding
20."Preparation of Optical Grade Poled Polymer Films Based on m-Nitroaniline doped PMMA and Their Second Harmonic Generation for Optoelectronic Device Applications." Y.S. Negi, R.K. Goyal, 21.S.R. Damkale and P. V. Adhyapak, M. Islam and R. C. Aiyer , 6th International Conferences on Optoelectronics, Fibre optics and Photonics:14th
– 16th December, Photonics 2003 at Cochin, India.
22."Preparation of Optical Grade m-Nitoaniline (m-NA) and PMMA Doped Single Crystals and Their Optoelectronic Properties Negi Y. S. , Adhyapak P. V. , DamkaleS. R. , Goyal K, Islam M.,Aiyer R. C. 6th International Conferences on Optoelectronics, Fibre optics and Photonics: 14th– 16th December, Photonics 2003 at Cochin, India.
23."Second Harmonic Generation of Electrochemically Grown Gold Nanoparticles" M. Islam, S. R. Mahamuni and R. C.Aiyer*, National Conference on Materials and their applications (NCMA – 2004), March-11-13, 2004.,Department of Physics,Kurukshetra University, Kurukshetra, India .
24.Y.S. Negi, R.K. Goyal, R.C.Aiyer and M. Islam, "Preparation and Optical Characterization of new Poled Polymer film based on m-Nitrianiline(m-NA) doped Polycarbonate(PC) and their applications in Optoelectronics". National Conference on Materials and their applications (NCMA – 2004), March-11-13, 2004.,Deapartment of Physics,Kurukshetra University, Kurukshetra, India
25.M. Islam, S.R. Mahamuni and R. C. Aiyer, "Optical Switch Using Gold Nanoparticles" NSPTS – 9, Department of Electronic Science, University of Pune. Pune- 411007. 6th - 8th March, 2004.
26.M. Islam, S.R. Mahamuni and R. C. Aiyer, "Second Harmonic Generation of Electrochemically Grown Ag/Au Bimetallic Nanoparticles", Raman Memorial Conference, Department of Physics, Pune University, Pune. 25th-26th February, 2004.

SUPERVISION
Ph.D. Level
(Name of Degree), (Name of Candidates), (Title of Thesis), (Academic Session), (Status)
Doctor of Philosophy Degree, Ibrahim Abdullah, Routing in Mobile Sensor Network, session : 2008-2009, Ongoing.
Doctor of Philosophy, Md. Abdul Momin, Structural and Optical Evaluation of silver and Gold based Nanoparticles Protected by Biomimetic materials, 2009- 2010. Ongoing.

Master of Philosophy (M.Phil) Level
(Name of Degree), (Name of Candidates), (Title of Thesis), (Academic Session), (Status)
M.Phil., "Synthesis and Optical Characterization of semiconductor Nanostructures" M. Phil thesis submitted by Md. Monjarul Alam to Islamic (March 2008) University, Kushtia, Bangladesh for the Award of M. Phil Degree. Reg. No. 075
Session : 2005-2006, Degree Awarded
M.Phil, "Synthesis and Characterization of Ag Nanoparticles"
M.Phil thesis to be submitted by Md. Abdul Momin to Islamic University, Kushtia, Bangladesh. for the Award of M. Phil Degree. Reg. No. 091, Session: 2005-2006. Degree Awarded.

Post Graduate Level

(Name of Degree), (Name of Candidates), (Title of Thesis), (Academic Session), (Status)

Master of Science (M.Sc.), Md. Mehedi Hasan, Photoluminescence behavior Zinc Sulphid Nanoparticles, session:2010-11,Ongoing.

Master of Science (M.Sc.), Md. Mahabubul Alam, Structural and Optical Evaluation of Cadmium Sulfide (CdS) Nanoparticles, Session :2009-2010, Result on Process.

Master of Science (M.Sc.),Sumon Kumar Shaha, Structural and Optical Properties of TTAB mediated Gold (Au) Nanoparticles, session : 2008-2009. Degree Awarded.

Master of Science (M.Sc.), Sharmin Sultana Shimul, Synthesis and Optical Characterization of Electrochemically Grown Copper Oxide (CuO) Nanoparticles, Session : 2007-2008. Degree Awarded.

Master of Science (M.Sc.), Fatema Khatun, Fabrication of Luminescent Porous Silicon, Session : 2006- 2007, Degree Awarded.

Master of Science (M.Sc.), Mohammad Harun, Synthesis and Characterization of TTAB coated Silver (Ag) Nanoparticles, Session : 2006-2007. Degree Awarded.

Master of Science (M.Sc), Md.Ashraful Islam, Synthesis and Photoluminescence Evaluation of Tetradecyltrimethyl Ammonium Bromide (TTAB) Capped ZnO/Ag Nanoparticles, 2005-2006, Degree Awarded.

Master of Science (M.Sc), Md. Delwar Hossain, Studies of Zinc Oxide (ZnO) Nanoparticles, Session : 2004-2005, Degree Awarded.

Master of Science (M.Sc), Md. Tarequzzaman, Performance Analysis of an OFDM Wireless Link in a Rayleigh Fadding Channel with Imperfect timing Synchonization Errors, Session : 2002-2003. Degree Awarded.

Master of Science (M.Sc), Md. Masudur Rahman, Design and Construct an Intelligent Vehicle system. Session : 2003-2004, Degree Awaded.

First Degree Level (4TH YEAR)

(Name of Degree), (Title of Project), (Academic Session)

Bachelor of Science (B.Sc.), Design and Construct Low Cost Video Transmitter, 2009- 2010

Bachelor of Science (B.Sc.), Design and Construct 100m Range Wireless Communication System, 2008-2009.

Bachelor of Science (B.Sc.), Laser Torch Based Voice Transmitter and Receiver, 2006- 2007.

Bachelor of Science (B.Sc.),Design and Construct Pulse Forming Network, 2006-2007.

Bachelor of Science (B.Sc.), Design and Construction of Solar Cell from Power Transistor, 2005-2006.

Bachelor of Science (B.Sc.), Project on Seismic Sensor, 2004-2005

Bachelor of Science (B.Sc.),Digital Voltmeter interfacing with the Microcontroller at MEGAS, 2003-2004.

Bachelor of Science (B.Sc.),Measurement of Dielectric Constant of a Liquid. 2002- 2003.

Bachelor of Science (B.Sc.), Construction of a Helium Neon Gas Laser, 2002-2003

Bachelor of Science (B.Sc.), A Project on Estimation of Core loss and Coercive Force for a Ferromagnetic Core Materials of a Transformer. 2002-2003

M.Sc. Thesis Evaluation

(Name of Degree), (Title of Project), (Academic Session)

Master of Science (M.Sc.), Studies of the Structural and Optical Properties of Vacuum Evaporated ZnxCd1-xS ($0 \leq x \leq 1$) Thin Films; 2002-2003, Dept of Physics, Dhaka University.

Master of Science (M.Sc), To study the effect of Ionization on optoelectrical Properties of Natural and Synthetic Polyers; 2000-2001, Dept. of Applied Physics & Electronic Engineering, Rajshahi University.

Master of Science (M.Sc), Development of Chemical Bath Deposition (CBD) technique for LaF3 Passivation of PS. 2002-2003. Dept. of Applied Physics & Electronic Engineering, Rajshahi University.

Master of Science (M.Sc), Investigation on Vacuum Evaporated LaF3 passivated porous Porous Silicon Heterostructure for Photonic Application; 2002-2003, Dept. of Applied Physics & Electronic Engineering, Rajshahi University.

Master of Science (M.Sc), Synthesis and Characterization of Silicon Nanowire Required for Solar Cells. 2009-2010, Dept. of Applied Physics & Electronics & Communication Engineering, Dhaka University.

Master of Science (M.Sc), Investigation on the influence of Lacl3 concentration and Annealing temperature on the structural Compositional and Electrical properties of Chemical – Bath Deposition LaF3 on porous silicon-(PS). 2002-2003. Dept. of Applied Physics & Electronic Engineering, Rajshahi University

TEACHING

(Course Title), (Academic Session), (No of Student), (No of Contact Hours).

Post Graduate

Cellular Mobile Communcation

2005/2006, 60, 80

Materials and Materials Analysis,

2007/2008/2009/2010/2011-2018, 100, 200.

First Degree Level

(Course Title), (Academic Session), (No of Student), (No of Contact Hours).

Advanced Solid State Physics

2008/2009/2010/2011-2018, 160, 160.

Optoelectronics and Optical Fiber communication 2007-2022, 100, 200.

Basic Electronics

2005/2006, 80,80

Electronic Circuits and Devices

2005/2006, 80,80

Basic Electronics ,Electricity and Magnetism

1998/1997, 50, 80

Electrical Technology and Electronic Circuits.

1999/2000,50, 80

Radio and TV Engineering

2000/2001, 50, 80

Scholarship/Fellowship:

1. Bangladesh Government Higher Education Scholarship
2. Rajshahi University fellowship
3. Indian Council for Cultural Relationship (ICCR) Scholarship

(Professor Momtazul Islam)