

Speaker of Session Rutgers

POROUS MATERIALS AND STRUCTURES FOR ENERGY APPLICATIONS



M. Khalid Hossain has received his Master of Science (M.Sc) degree in Applied Physics, Electronics and Communication Engineering from the Islamic University, Kushtia, Bangladesh in 2009. During his M.Sc program, he mainly focused on the preparation of amorphous $\text{Fe}_{73.5}\text{Cu}_1\text{Nb}_3\text{Si}_{13.5}\text{B}_9$ magnetic ribbon by a rapid quenching method; then, the nanostructure and ultra-soft magnetic properties were developed by heat treatment. He has been a research scientist of the Institute of Electronics, Bangladesh Atomic Energy Commission (BAEC), Dhaka, Bangladesh since 2012. His interest interests include energy materials, micro/nano fabrication, thin films, photovoltaic devices and advanced functional materials. He has published 17 SCI articles as author and co-author in various reputable peer reviewed journals.



A. A. Mortuza is working as a Scientific Officer in Bangladesh Atomic Energy Commission (BAEC). He received his B.Sc. (Hons.) and M.Sc. degree in Applied Physics & Electronic Engineering from the University of Rajshahi, Bangladesh. He has a teaching experience of more than three years as a lecturer in the Department of Medical Physics & Biomedical Engineering, Gono Bishwabidyalay (university), Bangladesh. Later he joined as a Scientific Officer in BAEC in 2014. Mr. Mortuza is interested in thin film light absorbing material for solar cell application. He is also interested in wide-bandgap semiconductor for photonic application.



S. K. Sen received his B.Sc and M.Sc degree in Physics from the Jagannath University, Dhaka, Bangladesh in 2009 and 2010, respectively. After completing his M.Sc, he joined the Bangladesh Atomic Energy Commission as a scientist in 2016. He is now working as a research scientist in the Bangladesh Atomic Energy Commission. His research interest mainly focuses on renewable energy, solar photovoltaic devices, condensed matter physics, thin film technology, functional materials, 2D materials synthesis etc.



M. K. Basher received his B.Sc. and M.Sc. degree in Applied Physics, Electronics & Communication Engineering from the University of Chittagong, Chittagong, Bangladesh in 2007 and 2008, respectively. He also completed a M. Phil degree in Material Science from the Bangladesh University of Engineering and Technology, Dhaka, Bangladesh. After completing M.Sc., he joined the Bangladesh Atomic Energy Commission as a scientist in 2012. He is now working as a research scientist in the Institute of Electronics, Bangladesh Atomic Energy Commission. His research interest mainly focuses on nanostructured materials and energy materials.



M. T. Rahman received his B.Sc. (Eng.) and M.Sc. (Eng.) degrees in Materials Science and Engineering from the University of Rajshahi, Bangladesh in 2014 and 2015, respectively. During his M.Sc. program he fabricated ceramic nanoparticles (Fe_2O_3 , TiO_2 and NiFe_2O_4) dispersed in HDPE and UPR polymer matrix as novel nanocomposites to evaluate the mechanical, thermal, optical, and electrical properties of the fabricated nanocomposite. Currently, he is working as a research fellow in BAEC and BCSIR. His research interest mainly focuses on nanomaterials for bio-medical applications, nanocomposites, thin films and photovoltaic devices.



M. N. H. Mia received his B.Sc. and M.Sc. degree in Applied Physics, Electronics & Communication Engineering from the Islamic University, Kushtia, Bangladesh in 2003 and 2004, respectively. After completing his M.Sc., he joined the Bangladesh Atomic Energy Commission as a scientist in 2009. He is now working as a research scientist and divisional head of the VLSI technology laboratory in the Bangladesh Atomic Energy Commission. His research interest mainly focuses on nanostructured thin films for device applications.



M. A. S. Haque did his B.Sc and M.Sc in Applied Physics and Electronics from the University of Dhaka. Now he is working as Chief Scientific Officer and Director of the Institute of Electronics, Atomic Energy Research Establishment, Bangladesh Atomic Energy Commission (BAEC).



M. Hoq received his B.Sc. and M.Sc. degrees in Applied Physics and Electronics from the University of Dhaka, Bangladesh in 1980 and 1981, respectively. After completing M.Sc., he joined the Bangladesh Atomic Energy Commission as a scientist in 1985. Currently, he is acting as Chairman of Bangladesh Atomic Energy Commission, Dhaka, Bangladesh. He has conducted research as well as received training from several countries including U.S.A, Germany, Austria, Korea, Singapore, Vietnam, India etc. His research area is related to radiation effect on semiconductor device and increase the efficiency of solar cell.