MD. SHAFIUZZAMAN KHAN KHADEM
Lecturer
Electronics & Telecommunication Engineering Dept
University of Liberal Arts Bangladesh (ULAB)
H-56, Road – 4/A, Dhanmondi R/A, Dhaka-1209, Bangladesh
shafi@ulabd.net, skkhadem@yahoo.com

CAREER OBJECTIVE: To be a specialist in the field of Sustainable Energy Technology and Environment

HIGHLIGHTS OF QUALIFICATIONS

- More than 6 years research experience in university research centre, development organizations.
- More than 1 year teaching experience on electronics, physics and sustainable energy technology
- Working experience in global project - SWERA by UNEP/GEF; Wind Energy Study by JICA
- Able to perform laboratory experiment on different types of solar electrical and thermal systems.
- Proficient in using MS Word, Excel, Power Point; Programming Language: C; Circuit Analysis: PSPICE, MATLAB/Simulink; Energy Assessment and Analysis: WAsP, RETScreen, HOMER, ViPOR; GIS mapping: AutoCad Map, Arc View; Computer Networking
- Strong organizational skills, desire to achieve, accomplish and exceed objectives and goals
- Hard working, responsible, enthusiastic and excellent team player
- Excellent communication and interpersonal skills

RELEVANT EXPERIENCE

Research Experience

Wind Energy
- Feasibility Analysis of Grid Connected Wind Power Generation in Bangladesh (on going - RERC)
- Tech-economic analysis of Wind Home System and Wind/PV/Diesel hybrid power system
- Wind speed measurement and resource assessment over Bangladesh

Solar Photovoltaic
- Designing of micro-controller based MPPT for power conversion (on going - ULAB)
- Feasibility analysis of Grid Connected Roof-top PV system for Bangladesh (on going - RERC)
- Analysis of low cost LED-Solar Home System

Solar Thermal
- Economic Analysis of Solar Water Heating System for hotels / hospitals / domestic uses
- Environmental effects of energy uses in the built environment for heating/cooling system
- HVAC system design for residential house in Dhaka, Bangladesh
- Development of MbO, Cu_2O, Cr_2O_3, CuS black selective surface coating for solar absorber

Solar Radiation
- Set up of automatic data acquisition system for measurement of Solar radiation
- Estimation of Solar radiation over Bangladesh using sunshine and cloud cover data
- Optimization of tilt angle for solar collector

Professional training

- Physics for Renewable Energy – trained in **ICTP**, Trieste, Italy
- Renewable based Hybrid Power Systems using HOMER, ViPOR and Hybrid2 - trained by **NREL**, USA.
- RETScreen - trained by **UNEP** and **TERI**.
- International Training on Solar Energy Technology – in IIT**, Delhi,** India.
- Wind Atlas Analysis and Application Program (WAsP) – trained by **RISOE**, Denmark.

Meeting & Conferences

- Attended a number of International Conferences (EuroSun2004, WCRE, Renewables2004, RETRUD03, ICRESD etc) and meetings (SWERA) in home and abroad

Publications

- Ten (10) research papers – accepted and published in the Local and International Journal.
- Eight (8) research papers – presented and published in the Local and International Conference

EDUCATION

M.Sc and B.Sc (hons) - Applied Physics & Electronics 2000 and 1999
(Presently renamed - Applied Physics, Electronics & Communication Engineering)
University of Dhaka, Bangladesh (1st Class in both)

M.Sc Thesis : Study the optical and thermal characteristics of Molybdenum black coating and optimization of thickness.

WORK HISTORY

Lecturer (Oct 2006 – Present)
Dept of Electronics & Telecommunication Engineering, University of Liberal Arts Bangladesh

- Theoretical and practical coursework on Electronic Devices & Circuits, Digital Electronics, Physics, Analog Communication

Researcher (part time) (Apr 2007 – Present)

- "Study on verification of wind observation at Feni"
  a project of Japan International Cooperation Agency (**JICA**), Bangladesh

Research Associate (Jan 2001 – Sept 2006)
Renewable Energy Research Centre, University of Dhaka, Bangladesh

- Coordinating and Monitoring of RERC projects
- Provide research support to the research students
- Resource person for "Solar & Wind Energy Resource Assessment (SWERA) – Bangladesh"
  a part of the global project of **SWERA** (http://swera.unep.net) funded by **UNEP / GEF**

Faculty member (part time) (Nov 2001 – May 2002)
Economics Alumni Computer Hall, Department of Economics**,** DU, Bangladesh

- Theoretical and practical class on Computer fundamentals and programming

Research fellow (Jan 2000 –Dec 2000)
Renewable Energy Research Centre, University of Dhaka

- Measurement and estimation of solar radiation
- Research on selective surface coating for solar absorber devices

AWARDS AND ACHIEVEMENTS

- Government scholarship – for Secondary School Certificate achievement
- Government scholarship – for Higher Secondary Certificate achievement
- University scholarship – for Bachelor of Science (B.Sc Hon's) achievement

COUNTRY VISITED

France, Germany, Denmark, Italy, Croatia, UAE, Malaysia, Sri Lanka, Nepal, India

HOBBIES AND INTERESTS

Reading, Traveling and Gardening

REFERENCES AVAILABLE UPON REQUEST