

## PUBLICATIONS

### A. Book Publication

1. Afzal Ahmed, "Development of UAV Borne Search and Detection System for Disaster Area", Lambert Academic Publishing, 13 March 2017

### B. Peer Reviewed Journal

1. **Afzal Ahmed**, Eshrat Jahan Esha, A S M Sadique Shahriar, Iftekhar Alam, "Drought Monitoring in the Coastal Belt of Bangladesh By Landsat Time Series Satellite Images", Lecture Notes in Civil Engineering, Springer Nature, vol. 9, pg. 941-956, 2017
2. **Afzal Ahmed**, MD. Kamrul Hasan , Eshrat Jahan Esha, "Water Body Mapping and Monitoring using Landsat Time Series Satellite Images", Journal of Remote Sensing GIS & Technology, MAT Journals Publications, 2017
3. M. Tauhid Ur Rahman, Md. Rasheduzzaman, Md Arman Habib, **Afzal Ahmed**, Syed Mohammed Tareq, Shah Md Muniruzzaman, "Assessment of fresh water security in coastal Bangladesh: An insight from salinity, community perception and adaptation", Ocean & Coastal Management, 137 (2017) 68-81
4. **Afzal Ahmed**, Ground Based Search and Rescue Operation during Cyclone Hazard in the Coastal Area of Bangladesh: A Disaster Management Perspective, UITS Journal, 2012
5. Masahiko Nagai, Tianen Chen, Ryosuke Shibasaki, Hideo Kumagai, and **Afzal Ahmed**, "UAV-Borne 3-D Mapping System by Multi-Sensor Integration", IEEE Transactions on Geoscience and Remote Sensing, vol. 47, no. 3, March 2009.

### C. Conference Proceedings

1. Rafsun Ahmad, Jebunnesa Rahman, Maliha Tabassum and **Afzal Ahmed**, 19-21 December 2018, Mapping Spatio-Temporal Pattern of Land Surface Temperature (LST) of Dhaka Metropolitan Region and its Implication on Land Use Change", 4th International Conference on Advances in Civil Engineering 2018 (ICACE 2018), CUET, Chittagong, Bangladesh.
2. Afsana Alam Akhie, Iftekhar Alam Dipta and **Afzal Ahmed**, 13-15 December 2017, "Impact of Regional Climate Change on Human Health: A Situation Analysis for Diarrhea around Dhaka City". International Conference on Engineering Research, Innovation and Education (ICERIE 2017), SUST, Sylhet, Bangladesh
3. **Afzal Ahmed**, December 27, 2015, "A study to assess the urban slum health risk of Dhaka City." International Conference on Climate Change and Water Security (ICCWS'15), MIST, Dhaka, Bangladesh
4. Farzana Rahman, Sheikh Nur-A-Mobishir Hasan, December 14-15, 2015, Mustafa Touhedul Alam, Md. Rezwanur Rahman and **Afzal Ahmed**. "Identification of Hazardous Road Locations & Black Spots on Dhaka-Barisal National Highway." 1<sup>st</sup> International Conference on Advances in Civil Infrastructure and Construction Materials (CICM'15) MIST, Dhaka, Bangladesh
5. **Afzal Ahmed** and Farzana Rahman, August 7-8 2015, "Assessing major environmental hazards of construction projects in Dhaka city", 2<sup>nd</sup> International conference on Innovative Engineering Technologies (ICIET'2015), Bangkok, Thailand

6. **Afzal Ahmed**, Masahiko NAGAI, Tianen CHEN, Ryosuke SHIBASAKI, 19 June 2009, “Aspect of data handling and processing for UAV borne search and detection system development”, Proceedings of the Geoinformation Forum 2009, Pacifico Yokohama, Japan.
7. **Afzal Ahmed**, Masahiko NAGAI, Tianen CHEN, Ryosuke SHIBASAKI, 11 November 2008, “UAV Borne Search and Detection System Development for Disaster Area: Application of Fish-eye lens”, Proceedings of the 29<sup>th</sup> Asian Conference on Remote Sensing, Colombo, Sri Lanka.
8. **Afzal Ahmed**, Masahiko NAGAI, Tianen CHEN, Ryosuke SHIBASAKI, 3-11 July 2008, “UAV Based Monitoring System and Object Detection Technique Development for a Disaster Area”, International Society for Photogrammetry and Remote Sensing, XXI<sup>th</sup> Congress, Beijing, China.
9. **Afzal Ahmed**, Masahiko NAGAI, Tianen CHEN, Ryosuke SHIBASAKI, “UAV Based Surveillance for Geographic and Manmade Object Detection”, 12-16 November 2007, Proceedings of the 28<sup>th</sup> Asian Conference on Remote Sensing, Kuala Lumpur, Malaysia.
10. Masahiko NAGAI, Tianen CHEN, **Afzal Ahmed**, Ryosuke SHIBASAKI, 11 November 2008, “UAV-Based Mapping System by Multi-Sensor Integration”, Proceedings of the 29<sup>th</sup> Asian Conference on Remote Sensing, Colombo, Sri Lanka.
11. Masahiko NAGAI, Tianen CHEN, **Afzal Ahmed**, Ryosuke SHIBASAKI, 11 July 2008, “UAV Borne Mapping by Multi Sensor Integration”, International Society for Photogrammetry and Remote Sensing, XXI<sup>th</sup> Congress, Beijing, China.
12. Masahiko NAGAI, Tianen CHEN, **Afzal Ahmed**, Ryosuke SHIBASAKI, 12-16 November 2007, “UAV borne Mapping System for River Environment”, Proceedings of the 28<sup>th</sup> Asian Conference on Remote Sensing, Kuala Lumpur, Malaysia.
13. **Afzal Ahmed**, K.S. Rajan, Ryosuke SHIBASAKI, 3-7 November 2001, “Modeling agricultural land use change in Bangladesh: Farmer as an agent of change”, Proceedings of the 20<sup>th</sup> Asian Conference on Remote Sensing, Singapore

## **OTHERS**

### **Consultancy (Environment Specialist)**

- Water Quality and Solid Waste Expert of the project title “Monitoring Environmental Changes in Cox’s Bazar following Rohingya Influx” funded by the International Organization for Migration (IOM), July 01 ~ December 31, 2018
- Environment and Disaster Management Expert (Part-time) of Sheltech Consultants (Pvt.) in the project “Preparation of Detailed Area Plan (2016-2035)” for DMDP Area of RAJUK (February 17, 2018 ~ July 31, 2018)
- Environmental Specialist of JPZ-IRGDSL Joint Venture for the consultancy service for “Preparation and submission of a high quality environment friendly master plan for the BEPZA Economic Zone project (February 11, 2018 ~ May 31, 2018)
- Consultant of BEPZA for the “Consultancy Services for Environmental Laboratory Operations at DEPZ and CEPZ of BEPZA” (January 01, 2017 ~ October 30, 2017)
- Consultant of World Bank for the “Consultancy Services for Environmental Laboratory Operations at DEPZ and CEPZ of BEPZA” (April 01, 2016 ~ December 31, 2016)

### **Project**

- Member of the Sub Project Management Team (SPMT) of Higher Education Quality Enhancement Project (CP 3143) funded by World Bank, December 01, 2015 ~ October 30, 2017

Project Title: “Establishment of Advanced Climate Change Study Laboratory at MIST”

### **Session Chair**

- Session Chair of Technical Session-3 of the International Conference on Climate Change and Water Security (ICCWS 2015), 27 December 2015, Military Institute of Science and Technology, Mirpur Cantonment, Dhaka, Bangladesh
- Session Chair of ‘Climate Change due to Meteorological Factors’ of the International Conference on Climate Change Impact and Adaptation (I3CIA-2013) during 14-16 November, 2013 at Dhaka University of Engineering & Technology (DUET), Gazipur, Bangladesh

#### **Technical Committee Member**

- Member of the “Committee for Manpower and Curriculum development”, Bangladesh Water Development Board (BWDB), Ministry of Water Resources, Bangladesh, November 2018~
- Member of Scientific and Technical Committee of Conference on Climate Change and Water Security (ICCWS 2015), 27 December 2015, Military Institute of Science and Technology, Mirpur Cantonment, Dhaka, Bangladesh
- Member of Scientific and Technical Committee of Conference on Advances in Civil Infrastructure and Construction Materials (CICM 2015), 14-15 December, 2015, Military Institute of Science and Technology, Mirpur Cantonment, Dhaka, Bangladesh
- Member of International Technical Committee of Conference on Climate Change Impact and Adaptation (I3CIA-2013), 14-16 November, 2013, Dhaka University of Engineering & Technology (DUET), Gazipur, Bangladesh

#### **Professional Affiliation**

- Member, Bangladesh Society of Geo-Informatics (BSGI)
- Member, The Institution of Engineers (IEB), Bangladesh, Membership no: M-30146
- Member of Executive Committee, Rain Forum, Dhaka

#### **Presentation**

- Invited Speaker, “Unmanned aerial vehicle borne remote sensing techniques”, Masters Course on GIS and Remote Sensing, Bangladesh University of Engineering and Technology (BUET), May 2010.
- Presenter, “*A seminar on applicability of modern remote sensing tool in disaster management in Bangladesh*”, Ministry of Defense, Dhaka, Bangladesh, January 2010
- Presenter, “*Unmanned aerial vehicle borne tool for quick response in disaster*”, ADB Headquarter, Manila, Philippines, 8 August 2009

#### **Training Conducted**

- Resource Person for ‘Training on Occupational Health, Safety and Industrial Environmental Management’ of BEPZA personnel, 18-22 March, 2017, MIST, Dhaka
- Resource Person for ‘Training program for capacity building for the environmental counselors of BEPZA’, MIST, Dhaka, 2014~2015
- Resource Person for ‘Training on GIS Database Management and Application in Climate Change’, June 26, 2011, Dhaka University of Engineering and Technology, Gazipur
- Resource Person for ‘Certificate Course on GIS and Remote Sensing’, 23<sup>rd</sup> December 2012 ~ 10<sup>th</sup> January 2013, Military Institute of Science and Technology, Dhaka

#### **Training Attended**

- Hands-on Orientation on Outcome-based Education (OBE), June 19, 2019, Institution of

## Engineers, Bangladesh

- Specialized training on ArcGIS Enterprise Edition and Online GIS, December 04~08, 2017, ESRI Singapore
- IRCA Registered Lead Auditor Course on Occupational Health & Safety Assessment Series OHSAS (18001:2007), May 24~28, 2016, arranged by SGS Bangladesh
- Training Programme on 'Urban Rainwater Harvesting and Decentralized Wastewater Management System', September 23~27, 2012, Dhaka, arranged by WaterAid Bangladesh
- Training Programme on 'Landslides Risk Management in South Asia', May 2~8, 2011, arranged by the SAARC Disaster Management Centre in Collaboration with the Department of Geology, Tribhuvan University, Kathmandu, Nepal
- Short course on 'Remote Sensing and GIS in Water Management', 02~06 September 2006, arranged by the Institute of Water and Flood Management, Bangladesh University of Engineering and Technology, Dhaka