



**IUB**

**Independent University,  
Bangladesh**

**Sponsored Research  
Office of the Pro-Vice Chancellor**

## **IUB Sponsored Research Profile**

Prepared By

**Abdulla Hil Shafi**

Senior Officer, Sponsored Research

## Introduction

The Independent University, Bangladesh (IUB) is set apart from many other institutions because of its role and goal as a research university. Most of the IUB's Sponsored Research takes place within individual departments and academic units, including the institution's centers and institutes, and through partnerships IUB has developed with different entities. These activities are critical to the fulfillment of IUB's research agenda. To protect the integrity and transparency of all research activities, IUB already have specific policies and procedures that will ensure compliance with the requirements and provide a common understanding of applicable processes and guidelines within the IUB System. To fulfill these goals, the Sponsored Research office under the office of Pro-Vice Chancellor has been established since 2016.

## Sponsored Research Annual Budget from 2019-2021

SI	FY	Approved Budget (BDT)	Allocated Budget (BDT)	Additional Approval/Surplus (BDT)
1	2019-2020	78,60,000	1,60,14,635	81,54,635 (Additional Approval)
2	2020-2021	1,50,00,000	1,48,10,950	1,89,050 (Surplus)
3	2021-2022	1,52,00,000	1,51,15,381	84,619 (Surplus)

## **Activities of Sponsored Research Office**

**2019**











**2020**

**IUB Sponsored Research 2020**

SBE									
SI	Name of the Project	Grant Type	Name of the PI	Email	Department	Co-PI's Name	Project Length (months)	IRB Clearance Status	Research Project Number
1	Hospital Supply Chain Management: A Study on Private Hospitals in Bangladesh	Research	Prof. Dr. Md Mamun Habib	mamunhabib@iub.edu.bd	Management	1. Seeratus Sabah 2. Kashfia Ameen 3. Farzana Chowdhury	12	Approved	2020-SBE-01
2	Women Entrepreneurship Development and Social Capital in Bangladesh: Search for a New Paradigm	Research	Dr. A N M Shibly Noman Khan	ara@iub.edu.bd	HRM	Ms. Safia Shahn Akter	24	Approved	2020-SBE-02
3	Climate Change; Mitigation and Adaptation	Research	Dr. Md. Shahnawaz Karim	nawaz@iub.edu.bd	Economics	0	24	Approved	2020-SBE-03
4	Effectiveness of Search Engine Optimization (SEO) & Digital Marketing towards Students Enrollment in the Private Universities of Bangladesh – A Comparative Study	Research	Dr. Rezwatul Alam	rezwan@iub.edu.bd	MIS	Md. Aminul Islam	12	Approved	2020-SBE-04
5	Exploring the Factors Affecting Adoption and Continuance Intention to Use Massive Open Online Courses (MOOCs): Evidence from Bangladesh	Research	Dr. Shamsun Nahar Momotaz	azim2705@iub.edu.bd	Marketing	Sheikh Mohammad Fauzul Azim	16	Approved	2020-SBE-05



IUB Sponsored Research Grant 2020

SETS									
SI	Name of the Project	Grant Type	Name of the PI	Email	Department	Co-PI's Name	Project Length (months)	IRB Clearance Status	Research Project Number
1	The Estimated 500,000 Undocumented Electric Vehicles in Bangladesh; Survey, Analysis and Recommendations	Research	Prof. Dr. Shahriar Khan	skhan@iub.edu.bd	EEE	1. Bijoy Rahman Arif 2. Dr. Ayaz Rabbani	12	Approved	2020-SETS-01
2	Smart Grids for Reducing Blackouts and Conserving Energy	Research	Prof. Dr. Shahriar Khan	skhan@iub.edu.bd	EEE	1. Bijoy Rahman Arif 2. Dr. Ayaz Rabbani	12	Approved	2020-SETS-02
3	Design and hardware implementation of a 3KW capacity high frequency Grid Tie Inverter (GTI) for photovoltaic application	Research	Prof. Dr. Khosru M Salim	khosru@iub.edu.bd	EEE	0	12	Approved	2020-SETS-03
4	Development of an IoT-Based Real Time Integrated Solar Energy Monitoring System	Research	Prof. Dr. Md Abdur Razzak	razzak@iub.edu.bd	EEE	0	12	Approved	2020-SETS-04
5	Highly Sensitive Surface Plasmon Resonance Sensor Based on Photonic Crystal Fiber for Wide Range Refractive Index Detection	Research	Prof. Dr. Feroz Ahmed	fahmed@iub.edu.bd	EEE	Emranul Haque	12	Approved	2020-SETS-05
6	Design and Development of a Low-cost EOG-based Human Machine Interface (HMI) for Physically Challenged People	Research	Dr. Md Kafiul Islam	kafiul_islam@iub.edu.bd	EEE	Dr. Tasnuva Faruk	12	Approved	2020-SETS-06
7	Use of novel nanostructures and nanomaterials to enhance the optoelectronic performance of solar cells	Research	Dr. Mustafa Habib Chowdhury	mchowdhury@iub.edu.bd	EEE	0	12	Approved	2020-SETS-07
8	Understanding the transcriptomic responses to environmental change in Hilsa	Research	Dr. Amin Ahsan Ali	aminali@iub.edu.bd	CSE	Prof. Dr. Md Ashaful Amin	12	Approved	2020-SETS-08
9	Probabilistic Estimation of Traffic Congestion in Road Intersections for Dhaka	Research	Dr. AKM Mahbubur Rahman	akmmrahman@iub.edu.bd	CSE	Prof. Dr. Md Ashaful Amin	12	Approved	2020-SETS-09
10	Analyzing the influenza virus genome in order to predict a fitness model for influenza	Research	Ms Romasa Qasim	romasa.qasim@iub.edu.bd	CSE	0	12	Approved	2020-SETS-10
11	Exploit different SDN based platform by using Mininet Environment and OMNET++ simulator, performance analysis and implement SDN based network prototype	Research	Mr Fahad Monir	fahad.monir@gmail.com	CSE	0	12	Approved	2020-SETS-11
12	IUB-CERN collaboration project for exploring CERN's very large particle data using Machine Learning	Research	Prof. Dr. Arshad Momen	arshad@iub.edu.bd	PS	Prof. Dr. Md Ashaful Amin	12	Approved	2020-SETS-12

13	Analyzing big data from the international LOFAR and SKA telescopes to improve our understanding of the history and large-scale-structure of the universe	Research	Dr. Khan Muhammad Bin Asad	kasad@iub.edu.bd	PS	1. Prof. Dr. Md Ashaful Amin 2. Prof. Dr. Arshad Momen 3. Prof. Dr. Anandamayee Majumdar	12	Approved	2020-SETS-13
----	--	----------	----------------------------	------------------	----	--	----	----------	--------------

IUB Sponsored Research Grant 2020

SLASS									
SI	Name of the Project	Grant Type	Name of the PI	Email	Department	Co-PI's Name	Project Length (months)	IRB Clearance Status	Research Project Number
1	OUT OF THE BLACK & INTO THE 'BLUE': BAY OF BENGAL'S 'GREEN' ECONOMIC WALL	Research	Prof. Dr. Imtiaz A Hussain	imtiaz.hussain@iub.edu.bd	Global Studies and Governance Program	1. Prof. Dr. Mohd. Aminul Karim 2. Dr. Md. Nadiruzzaman	12	Approved	2020-SLASS-01
2	Re-making of Western Texts in Asia	Research	Prof. Dr Ahmed Ahsanuzzaman	ahsanuzzaman@iub.edu.bd	English and Modern Languages	1. Prof. Dr. Zakir Hossain Raju 2. Ms Raiyana Rahman 3. Ms Mushfeqa Islam	24	Approved	2020-SLASS-02
3	Women as a Transformative Agents: Trajectories of Women Empowerment	Research	Dr. Marufa Akter	jessica@iub.edu.bd	Global Studies and Governance Program	0	12	Approved	2020-SLASS-03
4	Role of Stakeholders in Response to Rohingya Crisis	Research	Ms. Jessica Tartila Suma	jessica@iub.edu.bd	Global Studies and Governance Program	Ms. Raisa Rasheeka	12	Approved	2020-SLASS-04

IUB Sponsored Research Grant 2020

SELS									
SI	Name of the Project	Grant Type	Name of the PI	Email	Department	Co-PI's Name	Project Length (months)	IRB Clearance Status	Research Project Number
1	Isolation, Identification and Molecular Characterization of Food-borne Bacterial Pathogens from Raw and Ready-to-eat Foods in Bangladesh	Research	Ashrafus Safa	asafa@iub.edu.bd	LS	0	24	Approved	2020-SELS-01
2	Screening of garlic and betel leaf extracts for controlling bacterial pathogens of fish and shellfish	Research	Dr. Md. Hafizur Rahman	hrahman@iub.edu.bd	ESM	1. Professor Dr. S. M. Sharifuzzaman 2. Dr. Ashrafus Safa	24	Approved	2020-SELS-02



### IUB Sponsored Research Grant 2020

SPPH									
SI	Name of the Project	Grant Type	Name of the PI	Email	Department	Co-PI's Name	Project Length (months)	IRB Clearance Status	Research Project Number
1	Screening of Depression in Young Adults: Simultaneous Analysis of EEG Recordings with Validated Screening Tools	Research	Dr. Tasnuva Faruk	tasnuva.faruk@iub.edu.bd	PH	Dr. Md. Kafiul Islam	12	Approved	2020-SPPH-01

**2021**



**IUB Sponsored Research Grant 2021**

**School of Business & Entrepreneurship**

SI	Name of the Project	Grant Type	Name of the PI	Email	Department	Co-PI's Name	Project Length (months)	Research Project Number
1	Mega Projects, Advanced Technology and Human Capital Formation: Potential and Experience of Bangladesh	Research	Prof. Dr. Raisul Awal Mahmood	raisul@iub.edu.bd	International Business	Hasan Md. Mahmood UI Haque	12	2021-SBE-01

IUB Sponsored Research Grant 2021

School of Engineering, Technology and Sciences

SI	Name of the Project	Grant Type	Name of the PI	Email	Department	Co-PI's Name	Project Length (months)	Research Project Number
1	Development and Establishment of an Industry-Academia Collaboration Wing at SETS	Research	Dr. Yusuf Mahbubul Islam	ymislam@iub.edu.bd	CSE	1. Dr. Md.Kafiul Islam 2. Dr.Mustafa Habib Chowdhury 3. Dr. AKM Mahbubur Rahman 4. Saurav Das	24	2021-SETS-01
2	Data Collection and Model Development: Towards Rehabilitation of Post-Stroke Paralysis Using Three-Dimensional Kinect and Wearable Sensors: Phase II	Research	Prof. Dr. Md Ashraful Amin	aminmdashraful@iub.edu.bd	CSE	Dr. AKM Mahbubur Rahman	12	2021-SETS-02
3	Online Approaches to Network Anomaly Detection: Phase 2	Research	Dr. Tarem Ahmed	tarem@iub.edu.bd	CSE	1. Dr. Thomas Kemmerich 2. Salva Daneshgadesh 3. Dr. Mohammad Faisal Uddin	24	2021-SETS-03
4	Smart and energy-efficient battery charger for electric three-wheelers operating in Bangladesh	Research	Prof. Khosru Mohammad Salim	khosru@iub.edu.bd	EEE	Mohammad Rejwan Uddin	12	2021-SETS-04
5	Design, Development and Performance Evaluation of a Multiphase DC-DC Buck Converter for 48V EV Charging Applications	Research	Dr. Md. Abdur Razzak	razzak@iub.edu.bd	EEE	0	12	2021-SETS-05
6	Design of A Highly Efficient & Non-Invasive Measurement Device of Human Blood Component Levels Using Genetic Algorithm & DNN Based Models	Research	Dr. Feroz Ahmed	fahmed@iub.edu.bd	EEE	Emranul Haque	12	2021-SETS-06
7	EEG Based Preference Classification for Neuro-marketing Application	Research	Dr. Md. Kafiul Islam	kafiul_islam@iub.edu.bd	EEE	0	12	2021-SETS-07
8	Investigation of the use of novel plasmonic metal nanoparticles to enhance the opto-electronic performance of solar cells and related practical implementation challenges	Research	Dr. Mustafa Habib Chowdhury	mchowdhury@iub.edu.bd	EEE	0	12	2021-SETS-08

IUB Sponsored Research Grant 2021

School of Liberal Arts & Social Sciences

SI	Name of the Project	Grant Type	Name of the PI	Email	Department	Co-PI's Name	Project Length (months)	Research Project Number
1	Adaptation to Mitigation in Sustainable Climate Risk Reduction (CRR): Role of State and Non-state Actors in Bangladesh	Research	Dr. Md Shanawez Hossain	shanawez@iub.edu.bd	GSG Program	1. Mr. Md. Ohidujjaman 2. Mr. Raian Hossain	12	2021-SLASS-01
2	Early Cinema in Colonial Asia: Indigenization of Film Medium in Early Twentieth Century South and Southeast Asia	Research	Prof. Dr. Zakir Hossain Raju	zhraju@iub.edu.bd	M&C	1. David Hanan 2. Hassan Abd Muthalib 3. Dr Dev N Pathak	24	2021-SLASS-02
3	Visualizing Everyday Lives of Migrants: Digital Documentation of Japanese-Bangladeshi Families in Japan and Bangladesh	Research	Raisa Rasheeka	raisa@iub.edu.bd	M&C	Professor Zakir Hossain Raju	24	2021-SLASS-03
4	Coping with Covid 19: How did the Small Business Owners in the Informal Sector Survive?	Research	Dr. Kazi Mahmudur Rahman	mahmudur.rahman@iub.edu.bd	SS&H	1. Sharmeen Ahmed 2. Dr. A .N. M. Shibly Noman Khan	12	2021-SLASS-04
5	Living with Refugee: The Experience of Host Community beside the Rohingya Camps	Research	Obydullah Al Marjuk	marjuk@iub.edu.bd	SS&H	Dr. Ranjan Saha Partha	12	2021-SLASS-05

**IUB Sponsored Research Grant 2021**

School of Environment & Life Sciences								
Sl	Name of the Project	Grant Type	Name of the PI	Email	Department	Co-PI's Name	Project Length (months)	Research Project Number
1	Assessment of water hyacinth root physiology and microbiome during heavy metal removal of the contaminated tannery wastewater in Hazaribag, Dhaka	Research	Dr. Shahima Islam	shahima@iub.edu.bd	ESM	SAQUIB AHMAD KHAN	12	2021-SELS-01
2	Unveiling the employment and population spatial structure in Dhaka Metropolitan area	Research	Dr. Tawhid Monzur	tawhmo18@iub.edu.bd	ESM	Mr. Tanvir Haroon	24	2021-SELS-02
3	Geospatial Mapping of Groundwater Quality in Cox's Bazar	Research	Ms. Tahmina Sultana	tahmina@iub.edu.bd	ESM	Dr. Md. Hafizur Rahman	12	2021-SELS-03
4	Extraction of antimicrobial peptides from catfish serum	Research	Dr. Md. Daud Hossain Khan	mkhan51@iub.edu.bd	LS	Barney Bishop	12	2021-SELS-04
5	Biosurfactant with antimicrobial potential characterized from bacteria growing in hydrocarbon contaminated sites in Dhaka	Research	Dr. Syed A K Shifat Ahmed	shifat@iub.edu.bd	LS	Dr Sabrina Moriom Elias	24	2021-SELS-05
6	Isolation and characterization of bacteriophages active against diverse bacterial pathogens as a potential resource to develop phage-based intervention tools	Start-up	Ms. Nazratun Nayeem Choudhury	naznatun@iub.edu.bd	LS	0	12	2021-SELS-06