

## SUST Research Centre, Shahjalal University of Science and Technology , SUST

### List of Approved Projects (General) FY2023-24 by University Grants Commission (Code 3631108)

SL	Project ID	Dept	Title of the Project	Name of the Researcher (PI & CI)	Duration	Approved Budget	Allocated Amount for 2023-24	Comments
1	PS/2023/1/01	CHE	Design and synthesis of novel hybrid perovskite materials containing planar $\pi$ -conjugated ligands with large birefringence.	PI: Dr. Belal Ahmed, Associate Professor, Dept. of CHE & CI: Ramkrishna Saha, Associate Professor, Dept. of CHE, SUST	1 year			
2	PS/2023/1/02	CHE	Groundwater quality assessment in different regions of Bangladesh and development of a low-cost efficient arsenic removal filter for rural circumstances	PI: Prof. Dr. Mohammad Abul Hasnat, Department of Chemistry, SUST	1 year			
3	PS/2023/1/03	CHE	Design, synthesis, and characterization of triazole modified pyridyl-triazole ligands for transition metal (Co, Ru, and Pd) complexes	PI: Professor Dr. Md. Mahbubul Alam, Dept. of CHE, SUST	1 year			
4	PS/2023/1/04	CHE	Coordination polymer/MOFs of N/O donor ligand with Zr, Ce, Cu, Ni and Cd: Synthesis, characterization, photocatalytic and electrical properties	PI: Professor Dr. Md. Azharul Arafath, Dept. of CHE, SUST	1 year			
5	PS/2023/1/05	CHE	Multifunctional g-C <sub>3</sub> N <sub>4</sub> -C <sub>x</sub> Bi <sub>1-x</sub> OBr <sub>1-y</sub> nanocomposites for electrochemical energy and related applications	PI: Professor Dr. Md. Nizam Uddin, Dept. of CHE, SUST	1 year			
6	PS/2023/1/08	CHE	Inclusion of platinum nanoparticles (Pt NPs) on sulphonic acid grafted graphene oxide (HO <sub>3</sub> S-GO) to prepare catalyst for proton exchange membrane fuel cell (PEMFCs)	PI: Professor Dr. Nur Uddin Ahamad, Dept. of CHE, SUST	1 year			
7	PS/2023/1/09	CHE	Preparation of water soluble supramolecular complexes of thiadiazolines using $\beta$ -cyclodextrin as host	PI: Dr. Dipen Debnath, Professor, Department of Chemistry, SUST	1 year			

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8	PS/2023/1/10	CHE	Design, Synthesis, Characterization, and Study on Optical Properties of Series of New $\pi$ -conjugated electron donor and electron acceptor groups linked asymmetrically substituted arylalkynes	PI: Professor Dr. Mostafizur Rahman, Dept. of CHE & CI: Professor Dr. Ashraful Alam, Dept of CHE, SUST	1 year			
9	PS/2023/1/11	CHE	Study on the fabrication of Graphene Oxide-Cellulose Nanocrystal composite membrane to remove dyes & heavy metals from wastewater	PI: Professor Dr. Syed Shamsul Alam, Dept. of CHE, SUST	1 year			
10	PS/2023/1/13	CHE	Synthesis and physico-chemical properties of Nickel (II), Copper (II) and Cobalt (II) complexes of ligands containing 2-(2-alkyloxy)benzylidenehydrazine carbothioamide with long chain alkoxy linkages	PI: Professor Dr. Rockshana Begum, Dept of CHE, SUST	1 year			
11	PS/2023/1/14	CHE	Flexible Platinum-reduced Graphene Oxide-alkylamine hybrid for Precise Detection of Biomolecules	Professor Dr. Mohammad Razaul Karim, Department of Chemistry, SUST	1 year			
12	PS/2023/1/19	MAT	Implementations of the matrix methods for combinatorial aspects of posets and lattices.	PI: Mohammad Salah Uddin, Assistant Professor, Department of Mathematics & CI: Md. Shah Noor, Professor, Department of Mathematics, SUST	1 year			
13	PS/2023/1/21	MAT	Modelling phytoplankton species coexistence under a fluctuating environment considering dynamic energy budget approach	PI: Dr. Md. Alamgir Kabir, Associate Professor, Dept of MAT & CI: Md. Azizul Fazal, Lecturer, Dept. of OCG, SUST	1 year			
14	PS/2023/1/22	MAT	Theory of codes and its MacWilliams type dualities	PI: Dr. Himadri Shekhar Chakraborty Associate Professor, Department of Mathematics & CI: Dr. Syed Md. Omar Faruk, Associate Professor Dept. of Mathematics, SUST	1 year			

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15	PS/2023/1/23	MAT	A model-based Study to eradicate the effect of COVID-19 Based on the Vaccination.	PI: S. M. Saydur Rahman Assistant Professor, Department of Mathematics & CI: Dr Pabel Shahrear, Professor, Department of Mathematics, SUST	1 year			
16	PS/2023/1/24	MAT	Some Important Classes of Fuzzy Ideals and Filters in Heyting Algebras	PI: Professor Dr. Md. Rashed Talukder, Dept of MAT & CI: Professor Dr. Shamsun Naher Begum, Dept of MAT, SUST	1 year			
17	PS/2023/1/25	PHY	Sol-gel synthesis, structural, magnetic and optical properties of Pr <sub>2</sub> CoCrO <sub>6</sub> double perovskite	PI: Professor Dr. Abdul Hannan, Department of Physics, SUST	1 year			
18	PS/2023/1/26	PHY	Investigation of Two Boson Exchange radiative correction in electron-nucleon and electron-nuclei elastic scattering to extract the internal structure of the target particles.	Dr. Jaseer Ahmed, Assistant Professor, Department of Physics & CI: Dr. Md. Enamul Hoque, Associate Professor, Department of Physics, SUST	1 year			
19	PS/2023/1/27	PHY	Improved understanding of severe monsoonal flood event at June 2022 over the Northeastern region of Bangladesh	PI: Dr. Tanvir Ahmed, Associate Professor, Department of Physics & CI: Mr. Rony Basak, Assistant Professor, Department of Geography and Environment, SUST	1 year			
20	PS/2023/1/28	PHY	Measurements of the Columnar NO <sub>2</sub> , SO <sub>2</sub> , and O <sub>3</sub> over South Asia using satellites and ground-based instruments.	PI: Professor Dr. Md. Shah Alam, Department of Physics, SUST	1 year			
21	PS/2023/1/32	STA	An application of Generalized Estimating Equations (GEE) to detect the effect of microcredit on poverty reduction	PI: Dr. Mohammad Ohid Ullah Professor, Department of Statistics SUST	1 year			

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22	PS/2023/1/34	STA	Spatial Statistical Modelling of Chronic Diseases among Geriatric Population in Sylhet District	PI: Dr. Mohammad Romel Bhuia, Associate Professor, Department of Statistics & CI: Abdullah Al Islam Lecturer, Department of Statistics, SUST	1 year			
23	PS/2023/1/35	STA	Evaluation of User Satisfaction with Quality Services and Resources of University Libraries in Sylhet, Bangladesh	PI: Professor Dr. Md. Azizul Baten, Dept. of Statistics, SUST	1 year			
24	PS/2023/1/36	STA	Bayesian Hierarchical Modelling of Non-Communicable Diseases among Adult Population in Sylhet	PI: Professor Dr. Luthful Alahi Kawsar, Dept. of STA & CI: Dr. Mohammad Anamul Haque, Lecturer, Dept. of STA, SUST	1 year			
25	PS/2023/1/37	STA	Investigation into quality frame work and stakeholder perception on curriculam development at higher education institution in Bangladesh	PI: Professor Dr. Md. Kabir Hossain, Dept. of Statistics, SUST	1 year			
26	PS/2023/1/38	STA	Understanding Extreme Foods and Their Impact on Crops Availability in the Sylhet Region: A Probabilistic Deep Learning Approach	PI: Professor Dr. Khalidur Rahman, Dept. of Statistics, SUST	1 year			
27	PS/2023/1/39	OCG	Developing a citizen science approach for coastal ecosystem monitoring	PI: Dr. Subrata Sarker, Assistant Professor, Department of Oceanography & CI: Mahnaz Islam Sonia, Assistant Professor, Department of Oceanography, SUST	1 year			
28	PS/2023/1/40	OCG	Seasonal Distribution of Microplastic Contamination in Sediment from the South-East Coast of Bangladesh	PI: Md. Shajjadur Rahman, Assistant Professor, Dept. of OCG & CI: Faisal Subhan, Lecturer, Dept. of OCG, SUST	1 year			
29	PS/2023/1/42	OCG	Microplastics Pollution in the Surface Waters and Sediments in the Central Coastal Zone of Bangladesh	PI: Muhammad Mizanur Rahman, Assistant Professor, Dept. of OCG & CI: Abu Bakkar Siddique, Lecturer, Dept. of OCG, SUST	1 year			

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30	LS/2023/1/01	BMB	Isolation, In-vitro screening, and characterization of salt-tolerant growth-promoting microbes from the soil sample of Sylhet, Bangladesh.	PI: Professor Dr. Ajit Ghosh, Dept. of BMB, SUST	1 year			
31	LS/2023/1/02	BMB	Determine the relationship between serum uric acid and dyslipidemia in the young adult population in Bangladesh	PI: Aporajita Das Trisha, Lecturer, Dept. of Biochemistry and Molecular Biology & CI: Masuma Akter Assistant professor, Institute of Modern Language, SUST	1 year			
32	LS/2023/1/03	BMB	Screening of novel antibiotics from natural sources through in silico and in vitro approaches.	PI: Mohammad Abdullah-Al-Shoeb, PhD, Associate Professor, Department of BMB & CI: Saad Been Mosharof, Lecturer, Dept. of MEE, SUST	1 year			
33	LS/2023/1/04	BMB	Surveillance and environmental risk assessment of heavy metal induced resistant genes in MDR bacteria from the untreated sewage disposed river water of the Northeastern region of Bangladesh.	PI: Moshiul Alam Mishu, Assistant Professor, Dept. of BMB & CI: A K M Ashikuzzaman, Lecturer, Dept. of MEE, SUST	1 year			
34	LS/2023/1/05	BMB	Skin metagenomic analysis for hunting non-traditional antibacterial therapeutics against drug-resistant bacterial pathogens	PI: Dr. Mst. Arzuba Akter, Associate Professor, Dept of BMB & CI: G. M Nurnabi Azad Jewel, Assistant Professor, Dept of GEB, SUST	1 year			
35	LS/2023/1/06	BMB	In vivo and in silico Evaluation of Anti-tumor Effects of Natural Products Using Swiss Albino BALB/c Mice Model and Deciphering Possible Mechanism.	PI: Dr. Shamim Ahmed, Professor, Department of Biochemistry and Molecular Biology, SUST	1 year			
36	LS/2023/1/07	GEB	Study the association of different comorbidities with diabetes patients of Bangladesh	PI: Asif Mahmud, Assistant Professor Department of Genetic Engineering and Biotechnology & CI: Ziaul Faruque Joy, Assistant Professor, Department of Genetic Engineering and Biotechnology, SUST	1 year			

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37	LS/2023/1/08	GEB	An innovative, incredibly cheap, and materially practical fabrication process for microfluidic devices	PI: Professor Dr. Gokul Chandra Biswas, Department of GEB, SUST	1 year			
38	LS/2023/1/09	GEB	Study on Natural Compounds from <i>Tridax procumbens</i> for Prevention of Cancer Stem Cells	PI: Dr. Md. Abdullah Al Mamun, Professor, Department of Genetic Engineering and Biotechnology, SUST	1 year			
39	LS/2023/1/10	GEB	Fruit assorted yogurt production from pure culture and seasonal fruits; panel test and shelf life assessment	PI: Professor Dr. Mohammad Zahangir Alam, Department of Genetic Engineering and Biotechnology, SUST	1 year			
40	LS/2023/1/11	GEB	Comparative analysis of <i>Clostridioides difficile</i> phage genomes: aiding in the engineering of phages for phage therapy against antibiotic-resistant bacteria	PI: Professor Dr. Md. Shakhinur Rahman Mondal, Dept. of GEB, SUST	1 year			
41	LS/2023/1/13	GEB	Molecular Identification and Exploring the Plant Growth Promoting Attributes of Isolated Endophytic Bacteria Associated with <i>Pongamia pinnata</i>	PI: Md. Hammadul Hoque, Assistant Professor, Dept. of Genetic Engineering and Biotechnology & CI: Rabeya Sultana, Assistant Professor, Dept. of Forestry & Environmental Science, SUST	1 year			
42	LS/2023/1/14	GEB	Molecular detection and analysis of virulence genes in <i>Aeromonas</i> spp. from diseased carp fishes across the Sylhet region	PI: Md. Hazrat Ali, Assistant Professor, Dept. of Genetic Engineering and Biotechnology & CI: Nusrat Islam, Assistant Professor, Dept. of Forestry and Environmental Science, SUST	1 year			
43	LS/2023/1/15	GEB	RT-qPCR detection of KRAS, COX2 and CK20 in Peripheral blood of Lung and Oral cancer patients	PI: Dr. Md. Jahangir Alam, Professor, Department of Genetic Engineering and Biotechnology, SUST	1 year			
44	LS/2023/1/18	GEB	Identification, characterization and expression of important chaperone genes of hilsa shad, <i>Tenualosa ilisha</i> in diverse habitats of Bangladesh	PI: Zobada Kanak Khan, Associate Professor, Dept. of GEB & CI: Md. Toasn Hossain Aunkor, Assistant Professor, Dept of GEB, SUST	1 year			

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45	LS/2023/1/19	GEB	Submergence Tolerant Rice Varieties Development Through Genetic Transformation of SNORKEL-LIKE PROTEIN I (SKI) gene	Professor Dr. Md. Shamsul Haque Pradhan, Department of GEB, SUST	1 year			
46	FES/2023/1/03	FES	Ectomycorrhizal (ECM) fungi associated with Dipterocarpaceae tree species and their effects on the growth of seedlings and soil nutrients	PI: Dr. Mohammed Masum Ul Haque, Assistant Professor, Department of Forestry and Environmental Science & CI: Rahela Khatun, Assistant Professor, Department of Forestry and Environmental Science, SUST	1 year			
47	FES/2023/1/04	FES	Drivers behind the forest dependency: experience from local communities of the Rema - Kalenga Wildlife	PI: Professor Dr. Narayan Saha, Department of Forestry and Environmental Science, SUST	1 year			
48	FES/2023/1/05	FES	Conversion effect of Jhum to Teak and Rubber Plantations on Selected Soil Properties in Chittagong Hill Tracts, Bangladesh	PI: Professor Dr. Kazi Mohammad Masum, Dept. of FES, SUST	1 year			
49	FES/2023/1/07	FES	Biodiversity, Disturbances and Management Regimes- An Assessment for Conservation in North-Eastern Forest Areas of Bangladesh	PI: Professor Dr. Mohammad Belal Uddin, Dept. of FES, SUST	1 year			
50	FES/2023/1/09	FES	Disentangling the impact of soil ecosystem functions and anthropogenic disturbances on tree biomass production in Khadimnagar National Park (KNP)	PI: Md. Saifuzzaman Bhuiyan, Assistant Professor, Dept of FES & CI: Abdur Rakib Bhuiyan, Assistant Professor, Dept of FES, SUST	1 year			
51	AS/2023/1/01	ARC	Delineation of different domestic domains of hill farming Khasia houses in Sylhet: An ethnical application of space syntax	PI: Ar. Abhijit Mazumdar, Assistant Professor, Dept of ARC & CI: Ar. Shahidul Islam, Assistant Professor, Dept. of ARC, SUST	1 year			
52	AS/2023/1/02	ARC	An Integrative Streetscape with modular Design Guidelines of the Spinal Streets of Sylhet City Corporation Area, Bangladesh	PI: Dr. Mohammad Shamsul Arefin, Associate Professor, Dept of ARC & CI: Shubhajit Chowdhury, Assistant Professor, Dept of ARC, SUST	1 year			

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53	AS/2023/1/03	ARC	Evaluating the extent of variance in the urban heat island effect depending on different local climate zones (LCZ) within Sylhet city, Bangladesh.	PI: Sazdik Ahmed, Assistant Professor, Department of Architecture & CI: Shahla Safwat Ravhee, Assistant Professor, Department of Architecture, SUST	1 year			
54	AS/2023/1/04	ARC	THE SACRED LIVING HERITAGE OF SYLHET: A COMPARATIVE STUDY OF 'MAZAR (মাজার)' AND 'AKHARA (আখড়া)' ARCHITECTURE	PI: Kawshik Saha, Associate Professor, Department of Architecture & CI: Gourpada Dey, Assistant Professor Department of Architecture, SUST	1 year			
55	AS/2023/1/05	ARC	Evaluating urban bluescape: a symbiotic relationship between cognitive behavior and well-being in the definition of urban ponds (Dighi)	PI: Md. Tanvir Hasan, Associate Professor, Department of Architecture & CI: Dr. Mustafizur Rahman, Professor, Dept. of ARC, SUST	1 year			
56	AS/2023/1/06	CEP	Investigation of creep and recovery of polymer and polymer composites using in-house built low cost creep tester	PI: Md Fakar Uddin, Associate Professor, Dept. of CEP, SUST	1 year			
57	AS/2023/1/07	CEP	Microfiltration membranes from locally available polymer materials: preparation and characterization	PI: Dr. Md. Akhtarul Islam, Professor, Department of Chemical Engineering and Polymer Science, SUST	1 year			
58	AS/2023/1/08	CEP	Facile synthesis of visible light driven g-C <sub>3</sub> N <sub>4</sub> /CdS heterojunction photocatalysts for effective degradation of organic dyes	PI: Dr. Md. Tamez Uddin, Professor, Department of Chemical Engineering and polymer Science, SUST	1 year			
59	AS/2023/1/09	CEP	Production of biodiesel from waste cooking oil by heterogeneous catalysis in a sustainable way	PI: Dr. Mohammad Rakib Uddin, Associate Professor, Dept. of CEP, SUST	1 year			
60	AS/2023/1/10	CEP	Preparation of tetragonal zircon BiVO <sub>4</sub> /monoclinic scheelite BiVO <sub>4</sub> composite nanoparticles for photocatalytic degradation of organic pollutant	PI: Professor Dr. Zobayer Bin Mukhlish, Dept. of CEP, SUST	1 year			



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61	AS/2023/1/11	CEP	Photocatalyst-impregnated membrane for the treatment of textile wastewater	PI: Dr Mohammad Shaiful Alam Amin Professor, Department of Chemical Engineering and Polymer Science, SUST	1 year			
62	AS/2023/1/12	CEP	Advanced catalytic materials for the valorization of biomass residues to sustainable chemicals and fuels	PI: Dr. Muhammad Abdus Salam, Department of Chemical Engineering & Polymer Science, SUST	1 year			
63	AS/2023/1/13	CEE	Windstorm and Earthquake Vulnerability Assessment of Buildings in Sylhet City	PI: Professor Dr. Mushtaq Ahmed Department of Civil and Environmental Engineering, SUST	1 year			
64	AS/2023/1/14	CEE	Modeling of urban drainage system using SWMM and GIS mapping tools: A case study on SUST Campus	PI: Dr. Muhammad Azizul Hoque Professor, Department of Civil and Environmental Engineering & CI: Dr. Bijit Kumar Banik, Professor, Department of Civil and Environmental Engineering, SUST	1 year			
65	AS/2023/1/15	CEE	Exploring sustainable and economic solutions for cool roofs based on experimental setup in a controlled environment	PI: Md. Aminul Islam, Assistant Professor, Dept of CEE & CI: Professor Dr. H M A Mahzuz, Dept. of CEE, SUST	1 year			
66	AS/2023/1/16	CEE	Assessing the Impact of a New Commercial Establishment on Consumers' Destination Choice Behavior.	PI: Professor Dr. Md. Bashirul Haque, Dept. of CEE, SUST	1 year			
67	AS/2023/1/17	CEE	Assessing fiber-reinforcement and chemical additive for reduction of desiccation-induced cracking of embankment soil	PI: Dr. Shariful Islam, Associate Professor, Dept. of CEE & CI: Professor Dr. Md. Jahir Bin Alam, Dept of CEE, SUST	1 year			
68	AS/2023/1/18	CEE	Artificial Neural Network Modeling for Predicting the Performance of a Water Treatment Plant : A Case Study	PI: Professor Dr. Misbah Uddin, Dept. of CEE, SUST	1 year			
69	AS/2023/1/19	CEE	Performance analysis of bio-stabilized soil treated with cyanobacteria (Spirulina) in the local laboratory environment	PI: Professor Dr. Mohammad Shahidur Rahman, Dept. of CEE, SUST	1 year			

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70	AS/2023/1/21	CSE	Developing a Lip Reading dataset and a System in Bangla	PI: Dr. Sadia Sultana, Associate Professor, Department of Computer Science and Engineering & CI: Husne Ara Chowdhury, Associate Professor, Department of Computer Science and Engineering, SUST	1 year			
71	AS/2023/1/22	EEE	IoT-based energy management system for an institution based on renewable energy.	PI: Arif Ahammad, Assistant Professor Dept. of Electrical and Electronic Engineering & CI: Md. Mahmud-Or-Rashid, Assistant Professor Dept. of Mechanical Engineering, SUST	1 year			
72	AS/2023/1/23	EEE	On-site Smart Energy Generation and Storage Utilizing Pavement-Trampoline Duo	PI: Dr. Ifte Khairul Amin, Associate Professor, Dept. of Electrical and Electronic Engineering & CI: Nafis Imtiaz Rahman, Lecturer, Dept. of Electrical and Electronic Engineering, SUST	1 year			
73	AS/2023/1/24	EEE	Solar PV-based microgrid with battery energy storage with DC-link voltage stabilization.	PI: Mohammad Kamruzzaman Khan Prince, Assistant Professor, Dept. of Electrical and Electronic Engineering & CI: Md Shariful Islam, Lecturer, Dept. of Electrical and Electronic Engineering, SUST	1 year			
74	AS/2023/1/25	EEE	Design and development of an IoT based portable, paperless attendance system	PI: Md Rasedujjaman, Associate Professor, Dept. of Electrical and Electronic Engineering & CI: Tuhin Dey, Assistant Professor, Dept. of Electrical and Electronic Engineering, SUST	1 year			
75	AS/2023/1/26	FET	Effect of hydrocolloid addition on frozen cooked noodles	PI: A.S.M Sayem, Assistant Professor, Dept. of Food Engineering & Tea Technology & CI: Dr. Kamrunnaheer Monalisa, Associate Professor, Dept. of Food Engineering & Tea Tecnology, SUST	1 year			

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76	AS/2023/1/27	FET	Kinetics of anthocyanin degradation and probiotic viability of microwave-assisted foam mat dried probiotic black plum juice powder and prediction of storage stability	PI: Dr Md Zohurul Islam, Professor Department of Food Engineering and Tea Technology, SUST	1 year			
77	AS/2023/1/28	FET	Thermo-Sonication as a Novel Preservation Technique for Beetroot Juice: Analysis on Physicochemical Properties, Antioxidant Activity, Enzyme and Microbial Inactivation	PI: Dr. Animesh Sarkar, Professor, Dept. of Food Engineering and Tea Technology, SUST	1 year			
78	AS/2023/1/29	FET	Physicochemical, Antioxidative and Microbiological Quality evaluation of Common Spices available in Bangladesh	PI: Dr. Wahiduzzaman, Professor, Dept. of Food Engineering and Tea Technology, SUST	1 year			
79	AS/2023/1/31	FET	Development of edible food packaging film using pectin and nanocellulose extracted from watermelon and pineapple peel	PI: Jahid Hasan Shourove, Lecturer, Department of Food Engineering and Tea Technology & CI: Mitu Samadder Assistant Professor, Department of Food Engineering and Tea Technology, SUST	1 year			
80	AS/2023/1/32	FET	Microalgae as a Sustainable Food Source: A Study of Nutrient and Contaminant Levels in Bangladesh	PI: Mahabub Alam, Assistant Professor, Dept. of Food Engineering & Tea Technology & CI: Mukta Roy, Assistant Professor, Dept. of FET, SUST	1 year			
81	AS/2023/1/33	FET	Ultrasound and Microwave assisted Extraction of Essential Oil and Caffeine: An Approach Towards the Valorization of Tea Waste	PI: Professor Dr. Iftekhar Ahmed, Dept. of Food Engineering & Tea Technology, SUST	1 year			
82	AS/2023/1/34	FET	Nanocellulose Production and Characterization from Infused waste Tea Leaf Fibers	PI: Professor Md. Belal Hossain Sikder, Dept. of FET, SUST	1 year			

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83	AS/2023/1/35	FET	The physical and chemical properties of essential oils of citrus fruit Shatkora (citrus macroptera) peel and its anti-microbial effect on bread	PI: Professor Dr. Razia Sultana Chowdhury, Dept. of Food Engineering and Tea Technology, SUST	1 year			
84	AS/2023/1/36	IPE	Bio-heat Transfer Analysis through the Human Body in an Air-conditioned Space and Thereafter in Outdoor Conditions.	PI: Professor Dr. Abul Mukid Mohammad Mukaddes, Dept. of IPE, SUST	1 year			
85	AS/2023/1/37	IPE	Exploring and managing key success factors for strategic consideration of sustainability in supply chain management.	PI: Professor Dr Ahmed Sayem, Dept. of IPE, SUST	1 year			
86	AS/2023/1/38	IPE	Effects of Interconnectivity and Information Sharing on Cyber-Physical System Implementation	PI: Professor Dr. Chowdhury Abul Anam Rashed, Dept. of IPE, SUST	1 year			
87	AS/2023/1/40	IPE	Micromachining of temperature-sensitive and transparent materials	PI: Professor, Dr. Nasima Begum, Dept of IPE, SUST	1 year			
88	AS/2023/1/42	IPE	Performance Evaluation and Future Prospects of Agro-Processing Industry in Sylhet	PI: Syeda Kumrun Nahar, Assistant Professor, Dept. of IPE & Md. Mehedi Hasan Kibria, Assistant Professor, Dept. of IPE, SUST	1 year			
89	AS/2023/1/43	IPE	Analysis of springback effects for forming force, loading time and heat treatment in the V-bending operations on commonly used sheet metals	PI: Mohammed Abdul Karim, Assistant Professor, Dept. of Industrial & Production Engineering & CI: Dr. Md. Abu Hayat Mithu, Professor, Dept. of Industrial & Production Engineering, SUST	1 year			
90	AS/2023/1/44	IPE	An ergonomic study of the workplace and analyzing the musculoskeletal disorders based on RULA-REBA, Owas, and NORDIC body map method of workers od selected brickfields in Sylhet, Bangladesh	PI: Professor Dr. Mohammad Iqbal, Department of Industrial and Production Engineering, SUST	1 year			

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91	AS/2023/1/45	PME	Examine the Dupi Tila Formation's geotechnical characteristics for engineering purposes.	PI: Dr. Md. Shofiquil Islam, Professor Department of PME & CI: Mr. Md. Ashraf Hussain, Assistant Professor Department of PME, SUST	1 year			
92	AS/2023/1/46	PME	Experimental Study of Nano-Nickel Oxide as Potential Lost Circulation Additive for the Drilling Fluids: An approach for Cost effective Drilling Operation	PI: Dr. M. Farhad Howladar Professor, Dept. of PME, SUST	1 year			
93	AS/2023/1/47	PME	Improved prediction of shear wave velocity for hydrocarbon reservoir rocks using data driven computational approaches”	PI: Labiba Nusrat Jahan, Associate Professor, Department of Petroleum & Mining Engineering & CI: Mahamudul Hashan, Assistant Professor, Department of Petroleum & Mining Engineering, SUST	1 year			
94	AS/2023/1/48	PME	Experimental Investigation of Naturally Occurring Eco-Friendly Fibrous Materials as Rheology Improvement and Lost Circulation Additive for Water Based Mud	PI: Majedul Islam Khan, Assistant Professor, Department of Petroleum & Mining Engineering, SUST	1 year			
95	AS/2023/1/49	PME	Exploring the Effectiveness of Cerium (IV) Oxide Nanoparticles in Enhancing the Rheological Characteristics of Water-Based Drilling Fluids- A Potential Solution to Drilling Challenges.	PI: Md. Abdullah Al Numanbakh, Assistant Professor, Dept. of PME, SUST	1 year			
96	AS/2023/1/50	PME	Drilling fluid characterization and performance evaluation in High Pressure High Temperature environment	PI: Md. Jakaria, Assistant Professor, Dept. of PME & CI: Mohammad Shahedul Hossain, Assistant Professor, Dept. of PME, SUST	1 year			
97	AS/2023/1/51	PME	Use of Aluminium Doped Bismuth Ferrite Tri-metal Composite Nanoparticles in Drilling Fluids to Reduce the Filtrate Loss	PI: Dr. Md. Saiful Alam, Professor, Dept. of PME, SUST	1 year			

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98	AS/2023/1/52	MEE	Integrating Machine Learning with IoT for Smart Indoor Farming Management.	PI: Md. Syamul Bashar, Lecturer, MEE & CI: HM Toufik Ahmed Zisan, Lecturer, MEE, SUST	1 year			
99	SS/2023/1/03	ANP	Access to and Use of Digital Health Technologies by Indigenous Older Adults of Monipuri community: Opportunities and Challenges for Culturally Sensitive Care	PI: Dr. Amina Khatun, Assistant Professor, Department of Anthropology & CI: Zafrin Ahmed Liza, Associate professor, Department of Anthropology, SUST	1 year			
100	SS/2023/1/05	ANP	Dietary diversity and Food intake behaviors among the tea worker's children of Sylhet, Bangladesh	PI: Mohammad Monjur-Ul-Haider, Associate Professor, Department of Anthropology & CI: Choudhry Farhana Jhuma, PhD, Professor, Department of Anthropology, SUST	1 year			
101	SS/2023/1/07	ANP	Indigenous Knowledge of Highland Fruit-bearing Tree Management: A Study of the Khasi of Northeast Bangladesh	PI: Professor Dr. Nur Mohammad Majumder, Department of Anthropology, SUST	1 year			
102	SS/2023/1/08	ANP	The Human Cost of Development: An Investigation into the Socioeconomic and Psychological Effects of Displacement on Communities Affected by the Rooppur Nuclear power plant Project in Ishwardi, Bangladesh	PI: Professor Md. Moklesur Rahman, Dept of ANP, SUST	1 year			
103	SS/2023/1/10	ANP	Livehood Challenges and Political Economy of Fishing Industry in Coastal Area of Bangladesh	PI: Sanjay Krishno Biswas, Assistant Professor, Dept of ANP & CI: Navila Kawser, Assistant Professor, Dept of ANP, SUST	1 year			
104	SS/2023/1/11	BNG	'আবু মহামেদ হবিবুল্লাহর প্রবন্ধে বাঙালি মুসলমানের আত্মপরিচয়ের স্বরূপ'	PI: Md. Abu Baker Siddique, Assistant Professor, Dept. Bangla & CI: Md. Monirul Islam, Assistant Professor, Dept. of Bangla, SUST	1 year			
105	SS/2023/1/12	BNG	'বাংলা লোকভাষাবিজ্ঞান চর্চা ও পরিভাষা'	PI: Professor Dr. Zafir Uddin, Dept. of Bangla, SUST	1 year			

SL	Project ID	Dept	Title of the Project	Name of the Researcher (PI & CI)	Duration	Approved Budget	Allocated Amount for 2023-24	Coments
106	SS/2023/1/13	BNG	নজরুল কবিতায় স্বদেশ ও সমকাল	পিআই: ড. মো. রিজাউল ইসলাম, অধ্যাপক, বাংলা বিভাগ, শাবিপ্রবি, সিলেট।	1 year			
107	SS/2023/1/14	BNG	সাদরি ভাষা : ভাষাতাত্ত্বিক ও ভাষা-পরিষ্কৃতির স্বরূপ ও পরিধি পর্যবেক্ষণ	পিআই: ড. মো. আশ্রাফুল করিম, অধ্যাপক, বাংলা বিভাগ, শাবিপ্রবি, সিলেট।	1 year			
108	SS/2023/1/18	ECO	A Cross-Sectional Study of Maternal Education and its Impact on Infant Health Outcomes in Bangladesh	PI: Professor Dr Mohammad Rafiqul Islam, Dept of ECO, SUST	1 year			
109	SS/2023/1/19	ECO	Impact of Rising Temperatures on Energy Poverty: Evidence from Bangladesh	PI: Dr Mahmuda Sultana, Associate Professor, Dept of ECO, SUST	1 year			
110	SS/2023/1/20	ECO	Sectoral Effects and Asymmetric Transmission of Structural Oil Supply and Demand Shocks: A Data-Driven Modeling with Machine Learning and Production Network Analysis.	PI: Dr. Masud Alam, Professor, Department of Economics, SUST	1 year			
111	SS/2023/1/21	ECO	Financial Literacy among University Students: Exploring the Role of Cognitive Ability	PI: Md. Gias Uddin Khan, Assistant Professor, Dept of ECO, SUST	1 year			
112	SS/2023/1/24	PSS	Effects of Inflation on Livelihoods of Tea Garden Workers in Bangladesh: A Study of Sylhet Region	PI: Dr Md. Masud Sarker, Associate Professor, Department of Political Studies, SUST	1 year			
113	SS/2023/1/25	PSS	Exploring the causes and implications of delayed repatriation of Rohingya refugees from Bangladesh to Myanmar	PI: Dr Md Shahabul Haque, Professor, Department of Political Studies, SUST	1 year			
114	SS/2023/1/27	PSS	Religious Freedom and Muslim-Christian Relations: A Study on Sylhet Division, Bangladesh	PI: Professor Dr. Md. Nazrul Islam, Dept. of PSS, SUST	1 year			
115	SS/2023/1/29	PSS	Investigating the Tottho APA second phase project to empower rural women through ICT in pursuit of a digital Bangladesh	PI: Zayeda Sharmin Ph.D, Professor, Department of Political Studies, SUST	1 year			

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116	SS/2023/1/30	PSS	Climate Change, Flash Flood and Capability Deprivation of the Vulnerable People in Bangladesh.	PI: Hajera Aktar, Assistant Professor, Department of Political Studies & CI: Sumena Sultana, Assistant Professor, Department of Sociology, SUST	1 year			
117	SS/2023/1/31	PSS	Children's Education in the Haor Area of Bangladesh: Prospects, Challenges, and Remedies	PI: Md Amdadul Haque, Assistant Professor, Department of Political Studies & CI: Mohammad Fakhru Salam, Assistant Professor, Dept of Political Studies, SUST	1 year			
118	SS/2023/1/32	PSS	Semi-formal Justice System: Exploring the Relationship between AFFECT and perception of FAIRNESS	PI: Md. Mahbub Alam, Assistant Professor, Dept of PSS & CI: Syeda Ismot Ara Jahan, Assistant Professor, Dept. of PSS, SUST	1 year			
119	SS/2023/1/33	PAD	Health Seeking Behavior among Indigenous Women in Bangladesh: a Study on Manipuri Community of Sylhet Division	PI: Dr. Md. Assraf Seddiky, Professor, Department of Public Administration & CI: Dr. Esmat Ara, Professor, Dept of Public Administration, SUST	1 year			
120	SS/2023/1/34	PAD	Nature, causes and consequences of ragging at universities in Bangladesh: An exploratory study	PI: Md. Mahmud Hasan, Assistant Professor, Dept of Public Administration & CI: Professor Dr. Fatema Khatun, Dept of Public Administration, SUST	1 year			
121	SS/2023/1/35	PAD	A Study Examining the Students Satisfaction in Higher Education: The Case of Shahjalal University of Science and Technology	PI: Professor Dr. Mohammad Shafiqul Islam, Dept of Public Administration, SUST	1 year			
122	SS/2023/1/36	PAD	Inclusive and resilience planning to build sustainable child-friendly cities: Exploring the voices of Children and parents from Bangladesh	PI: Mohammad Shahjahan Chowdhury Associate Professor, Department of Public Administration & CI: Professor Dr. Faisal Ahmmed, Dept of Social Work, SUST	1 year			



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123	SS/2023/1/37	PAD	Assessing the effectiveness of local governance in flood adaptation measures and resilience in Bangladesh: A study on union parishads	PI: Professor Anwara Begum Department of Public Administration & CI: Muhammad Mustofa Kamal Assistant Professor, Department of Public Administration, SUST	1 year			
124	SS/2023/1/38	PAD	“Citizens’ Satisfaction and Healthcare Service Quality in Bangladesh: Evidence from Upazila Level Health Complexes”	PI: Sabina Yasmin, Assistant Professor Department of Public Administration & CI: Dr Mohammad Nashir Uddin Assistant Professor, Department of Public Administration, SUST	1 year			
125	SS/2023/1/39	PAD	Factors influenceing Citizens Satisfaction and Trust in Public Severce Delivery: Evidence from Local Government Institutions	PI: Chowdhury Abdullah Al-Hossienie, Associate Professor, Dept of PAD & CI: Kanij Fatema, Assistant Professor, Dept of PAD, SUST	1 year			
126	SS/2023/1/40	SCW	Raising a Girl Child with Autism Spectrum Disorder (ASD): Understand Parenting Problems	PI: Dr. Neaz Ahmed, Dept of SCW & CI: Dr. Md. Abul Kashem, Dept of SCW, SUST	1 year			
127	SS/2023/1/42	SCW	Challenges and Prospects of Field Education in Social Work: A Qualitative Study in Sylhet.	PI: Md. Fakhurul Alam, Associate Professor, Department of Social Work, SUST	1 year			
128	SS/2023/1/43	SCW	Livelihood and Survival Struggle of Khasis Communities in Bangladesh	PI: Professor Dr. Md. Ismail Hossain, Department of Social Work, SUST	1 year			
129	SS/2023/1/44	SCW	Reproductive Health Behaviors of Rural Adolescent Girls Studying at Secondary School: A Study	PI: Md. Mizanur Rahman, Professor, Department of Social Work, SUST	1 year			
130	SS/2023/1/45	SCW	Interventions Addressing Vulnerabilities of Flood-Affected People in Bangladesh: An Exploratory Study	PI: Prof. Dr. Tulshi Kumar Das Department of Social Work & CI: Krittebas Paul, Assistant Professor, Department of Social Work, SUST	1 year			
131	SS/2023/1/46	SCW	Prevalence and risk factors associated with Postnatal Depression among Mothers living in Urban Area of Sylhet : A Study	PI: Priyanka Bhattacharjee, Assistant Professor, Department of Social Work & CI: Professor Amina Pervin, Department of Social Work, SUST	1 year			

SL	Project ID	Dept	Title of the Project	Name of the Researcher (PI & CI)	Duration	Approved Budget	Allocated Amount for 2023-24	Coments
132	SS/2023/1/47	SOC	Gender Based Violence, Mental Health, and Surviving Strategies of the Survivors of GBV in Humanitarian Settings: A study on the Rohingya Refugee Girls and Women in Cox's Bazar, Bangladesh	PI: Avijit Chakrabarty Ayon, Assistant Professor & CI: Sanjida Sultana Zerin, Lecturer, Department of Sociology, SUST	1 year			
133	SS/2023/1/48	SOC	Prevalence and Determinants of Depression among People Living in Sylhet, Bangladesh.	PI: Iqbal Ahmed Chowdhury, Associate Professor, Department of Sociology & CI: Nazia Zabin, Assistant Professor, Department of Sociology, SUST	1 year			
134	SS/2023/1/49	SOC	Moving Onward or Return Home? Transnational Ways of Belonging and Diasporic Networks of Rohingya Refugees in Bangladesh	PI: Professor Dr. Mohammad Morad, Department of Sociology, SUST	1 year			
135	SS/2023/1/50	SOC	How do expected parental qualities among married men and women vary across types of extreme weather events? A study of vulnerable populations in Bangladesh	PI: Dr. Shah Md. Atiqul Haq, Professor, Dept. of Sociology, SUST	1 year			
136	SS/2023/1/51	SOC	“What We Know and What We Do”: A Qualitative Exploration of the Perceptions of Mental Health Among People Living in the Sylhet Division.	PI: Mohammad Mostufa Kamal, Professor, Department of Sociology, SUST	1 year			
137	SS/2023/1/52	SOC	SMART BANGLADESH 2041: IDENTIFYING POTENTIAL CHALLENGES	PI: Mohammed Faruque Uddin, Professor, Department of Sociology, SUST	1 year			
138	SS/2023/1/53	SOC	Neoliberalism, precarious work and experiences of employment of tea workers' children in Bangladesh	PI: Professor Dr. Al-Amin, Department of Sociology, SUST	1 year			
139	SS/2023/1/54	SOC	The Struggle for Survival: A Study on Street Children in Sylhet.	PI: Tania Jannatul Kubra, Lecturer, Department of Sociology & CI: Mohammad Moniruzzaman Khan, Assistant Professor, Department of Sociology, SUST	1 year			

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140	SS/2023/1/55	BUS	Role of Tourism in Achieving Sustainable Development Goals in Bangladesh: A Study on Sylhet.	PI: Dr. Md. Abdul Hamid, Professor, Department of Business Administration, SUST	1 year			
141	SS/2023/1/57	BUS	Profitability of the modern retailing and surviving of non-brand SMEs: Critical role of informal sector supply chain	PI: Dr. Mohammad Shahidul Hoque Professor, Department of Business Administration, SUST	1 year			
142	SS/2023/1/58	BUS	Determinants of Corporate Social Responsibility and Its Firm-Level Implications: A Study on Financial Service Providers of Bangladesh	PI: Dr. Syed Mohammad Khaled Rahman, Professor, Department of Business Administration & CI: Dr. Tasmina Chowdhury Tania, Associate Professor, Department of Business Administration. SUST	1 year			
143	SS/2023/1/59	BUS	Users' Use Intention toward Cloud Storage: A Technology Acceptance Model.	PI: Dr. Md. Monirul Islam, Professor, Department of Business Administration, SUST	1 year			
144	SS/2023/1/60	BUS	Measuring Quality Assurance through Quality Culture: Evidence from SUST	PI: Mazharul Hasan Mazumder, PhD Professor, Department of Business Administration, SUST	1 year			
145	SS/2023/1/62	BUS	Social sustainability of the social entrepreneur: Does entrepreneurial education matter?	PI: Sobhana Tanzima Atiq, Associate Professor, Department of Business Administration & CI: Syed Towfiq Mahmood Hasan, Associate Professor Department of Business Administration, SUST	1 year			
146	SS/2023/1/63	BUS	Exploring the Relationship Between Mobile Money Services and Local Economic Activities: Evidence from Bangladesh	PI: Professor Dr. Fazle Elahi Md Faisal, Department of Business Administration, SUST	1 year			
147	SS/2023/1/65	BUS	The essence of biometric application to protect marginal farmers right in food grains selling and storing to ensure food security by the government for SDGs in Bangladesh	PI: Dr. Md. Zillur Rahman, Associate Professor, Dept of BUS & CI: Professor Dr. Fazle Elahi Mohammad Faisal, Dept of BUS, SUST	1 year			

SL	Project ID	Dept	Title of the Project	Name of the Researcher (PI & CI)	Duration	Approved Budget	Allocated Amount for 2023-24	Coments
148	SS/2023/1/66	IICT	Quaternary Code Perform Better Than Binary Code in Terms of Decoding Speed	PI: Dr. Ahsan Habib, Assistant Professor, Institute of Information and Communication Technology & CI: A. K. M Fakhru Hossain, Lecturer, Department of Computer Science & Engineering, SUST	1 year			
149	SS/2023/1/68	IICT	Bornil: An open-sourced sign language data crowdsourcing platform and dataset for AI enabled dialect-agnostic communication	PI: Dr. M. Jahirul Islam, Professor, Director, Institute of Information and Communication Technology & CI: Sayma Sultana Chowdhury, Assistant Professor, Institute of Information and and Communication Technology	1 year			
1	<b>Special Allocation</b>	<b>Publication Incentives</b>						
2	BSMRRC	Bangabandhu Sheikh Mujibur Rahman Research Cell		Seminar/Research	1 year			