## SUST Research Centre, Shahjalal University of Science and Technology, SUST List of Approved Projects (Special) 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	Coments
1	PS/2023/2/12	СНЕ	Design and development of electrochemical sensor based on conducting polymer for on-site measurement of pathogenic bacteria in food products.	PI: Professor Dr. Shishir Kanti Pramanik, Dept of CHE, SUST	2 year			
2	PS/2023/2/20	MAT	Algebras and Its Some Subclasses Associated to Ternary Operations.	PI:Dr. Chandrani Nag, Professor Department of Mathematics, SUST	2 year			
3	PS/2023/2/31	STA	Missing Data: A Critical Investigation in the Context of Cross-sectional Studies	PI: Professor Dr. Md. Jamal Uddin, Dept of STA, SUST	2 year			
4	LS/2023/2/16	GEB		PI: Dr. Md. Jahangir Alam, Professor, Dept. of Genetic Engineering and Biotechnology & CI: Dr. Md. Kamrul Islam, Professor, Dept. of Genetic Engineering and Biotechnology, SUST	2 year			
5	LS/2023/2/17	GEB	Elucidation of Mutations in the TP53 Gene of the Lung Cancer Patients in Bangladesh: Targeting Hotspot Exon 4-8	PI: Dr. Mohammad Jakir Hosen Professor, Dept. of Genetic Engineering and Biotechnology, SUST	2 year			
6	FES/2023/2/01	FES	Ecosystem health assessment through developing a comprehensive quality index for the Sundarbans Mangrove Forest	PI: Dr. Mohammed Abu Sayed Arfin Khan, Professor, Department of FES, SUST	2 year			
7	FES/2023/2/02	FES	Identifying the climatic and environmental influences on tree growth and hydraulic functioning in major trees species in coastal mangrove plantations, Bangladesh	PI: Dr. Md. Qumruzzaman Chowdhury, Professor, Department of Forestry and Environmental Science, SUST	2 year			
8	FES/2023/2/08	FES	Understanding Forest Structural and Functional Complexity in the Sundarbans Mangrove Forest	PI: Dr. Swapan Kumar Sarker, Professor, FES & CI: Dr. AZM Manzoor Rashid, Professor, FES, SUST	2 year			
9	AS/2023/2/20	CSE	Bangla-English Direct Speech-to-Speech Translation without using Text Data	PI: Professor Dr. Mohammad Shahidur Rahman, Dept. of CSE, SUST	2 year			

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10	AS/2023/2/30	FET	Co-existence of mcr and $\beta$ -lactamase resistance genes in colistin-resistant and extended-spectrum $\beta$ -lactamase (ESBL)-producing E. coli and Klebsiella spp. in street foods in Bangladesh	PI: Dr. G.M. Rabiul Islam, Professor, Department of Food Engineering and Tea Technology, SUST	2 year			
11	AS/2023/2/39	IPE	Developing Circular Business Model for End-of- Life Electric Vehicles in Bangladesh	PI: Dr. Md. Rezaul Hasan Shumon, Associate Professor, Dept of IPE & CI: Professor Dr. M. Muhshin Aziz Khan, Dept of IPE, SUST	2 year			
12	SS/2023/2/01	ANP	'Disabled' Lives, 'Disability' Rights: A Multisite Qualitative Study of the Experiences of Students with Disabilities in Public Universities in Bangladesh	PI: Professor Dr. AFM Zakaria, Dept of ANP, SUST	2 year			
13	SS/2023/2/02	ANP	Bangladesh: Cases of Sylhet and Rajshahi	PI: Professor Dr. AKM Mazharul Islam, Dept of ANP, SUST	2 year			
14	SS/2023/2/09	ANP	Health Challenges and Coping Strategies of Rural-to-Urban Migrant Garment Factory Workers in Bangladesh: A Qualitative Study of Lived Experiences	PI: Dr. Md. Shahgahan Meah, Associate Professor, Dept. of ANP, SUST	2 year			
15	SS/2023/2/16	BNG	সেলিম আল দীনের নাটক লোকজীবন	পিআই: ড. মো. জাহাঙ্গীর আলম, সহযোগী অধ্যাপক, বাংলা বিভাগ, শাবিপ্রবি, সিলেট।	2 year			
16	SS/2023/2/28	PSS	Climate Change Challenges in Bangladesh: A case study of flash flood 2022 in Sylhet Division	PI: Dr. Syed Ashrafur Rahman, Professor, Department of Political Studies, SUST	2 year			
17	SS/2023/2/41	SCW	Barriers and facilitators to the formal education for students with disabilities in Bangladesh: A Study	PI: Dr. Md Abdul Jalil, Professor, Department of Social Work & CI: Muhammed Muazzam Hussain Professor, Department of Social Work, SUST	2 year			
18	SS/2023/2/56	BUS	Impact of industry 4.0 on education 4.0 at the university level for overcoming the challenges to achieving SDGs in Bangladesh: An empirical investigation	PI: Dr. Mohammad Mizenur Rahaman, Professor, Department of Business Administration, SUST	2 year			

Project ID	Dept	Title of the Project	Name of the Researcher (PI & CI)	Duration	Approved Budget	Allocated Amount for 2023- 24	Coments
SS/2023/2/64	BUS	Capability Assessment of Small and Medium Enterprises in Bangladesh in the Interface of Fourth Industrial Revolution	PI: Professor Dr. Md. Nazrul Islam, Department of Business Administration, SUST	2 year			
SS/2023/2/70	BUS	Impact of COVID-19 on Small and Medium- Sized Enterprises in Bangladesh	PI: Professor Dr. Md. Khairul Islam, Department of Business Administration, SUST	2 year			
PS/2023/1/06	СНЕ	Simple fabrication of poly(Ani-co- Py)/Bi2O3/AgI nanocomposites for photocatalytic and supercapacitor applications: Towards enhanced antimicrobial properties and morphological topography	PI: Professor Dr. Mohammad Mizanur Rahman Khan, Dept of CHE & CI: Md. Shahadat Hossain Chowdhury, Associate Professor, Dept. of CHE, SUST	1 year			
PS/2023/1/07	СНЕ	Study of the biochemical behavior of non- steroidal anti-inflammatory drugs (NSAIDs) and their modified derivatives using the quantum mechanical approach.	PI: Dr. S M Nizam Uddin, Assistant Professor, Dept of CHE, SUST	1 year			
PS/2023/1/15	GEE	Impact of climate change and anthropogenic forcings on increasing flood hazards in north-eastern Bangladesh	PI: Dr. Md. Anowarul Islam, Associate Professor, Dept. of GEE & CI: Shahnaj Shemul, Assistant Professor, Dept. of GEE, SUST	1 year			
SS/2023/1/67	IICT	Improving Student Learning and Attention in Classrooms through Gaze-Based Attention- Aware Technology to Mitigate Mind Wandering	PI: Mohammed Raihan Ullah, Lecturer, Institue of Information and Communication Technology & CI: Partha Protim Paul, Lecturer, Institue of Information and Communication Technology, SUST	1 year			
	SS/2023/2/64 SS/2023/2/70 PS/2023/1/06 PS/2023/1/07 PS/2023/1/15	SS/2023/2/64 BUS SS/2023/2/70 BUS  PS/2023/1/06 CHE  PS/2023/1/07 CHE  PS/2023/1/15 GEE	SS/2023/2/64 BUS Capability Assessment of Small and Medium Enterprises in Bangladesh in the Interface of Fourth Industrial Revolution  BUS Impact of COVID-19 on Small and Medium- Sized Enterprises in Bangladesh  Simple fabrication of poly(Ani-co- Py)/Bi2O3/AgI nanocomposites for photocatalytic and supercapacitor applications: Towards enhanced antimicrobial properties and morphological topography  Study of the biochemical behavior of non- steroidal anti-inflammatory drugs (NSAIDs) and their modified derivatives using the quantum mechanical approach.  PS/2023/1/15 GEE Impact of climate change and anthropogenic forcings on increasing flood hazards in north- eastern Bangladesh  Improving Student Learning and Attention in Classrooms through Gaze-Based Attention- Aware Technology to Mitigate Mind	SS/2023/2/64 BUS Capability Assessment of Small and Medium Enterprises in Bangladesh in the Interface of Fourth Industrial Revolution  SS/2023/2/70 BUS Impact of COVID-19 on Small and Medium Sized Enterprises in Bangladesh  EN Sp/2023/1/06 CHE Simple fabrication of poly(Ani-co-Py)/Bi2O3/AgI nanocomposites for photocatalytic and supercapacitor applications: Towards enhanced antimicrobial properties and morphological topography  EN Sudy of the biochemical behavior of non-steroidal anti-inflammatory drugs (NSAIDs) and their modified derivatives using the quantum mechanical approach.  EN S/2023/1/15 GEE Impact of climate change and anthropogenic forcings on increasing flood hazards in northeastern Bangladesh  EN S/2023/1/67 IICT Improving Student Learning and Attention in Classrooms through Gaze-Based Attention-Aware Technology to Mitigate Mind Wandering Manual Enterprises in Bangladesh in the Interface of Department of Business Administration, SUST  PI: Professor Dr. Md. Khairul Islam, Department of Business Administration, SUST  PI: Professor Dr. Mohammad Mizanur Rahman Khan, Dept of CHE & CI: Md. Shahadat Hossain Chowdhury, Associate Professor, Dept. of CHE, SUST  PI: Dr. S M Nizam Uddin, Assistant Professor, Dept of CHE, SUST  PI: Dr. Md. Anowarul Islam, Associate Professor, Dept. of GEE & CI: Shahnaj Shemul, Assistant Professor, Dept. of GEE, SUST  PI: Dr. Md. Anowarul Islam, Associate Professor, Dept. of GEE, SUST  PI: Mohammed Raihan Ullah, Lecturer, Institue of Information and Communication Technology & CI: Partha Protim Paul, Lecturer, Institue of Information and	SS/2023/2/64 BUS Capability Assessment of Small and Medium Enterprises in Bangladesh in the Interface of Fourth Industrial Revolution  SS/2023/2/70 BUS Impact of COVID-19 on Small and Medium Sized Enterprises in Bangladesh Simple fabrication of poly(Ani-co- Py)/Bi2O3/AgI nanocomposites for photocatalytic and supercapacitor applications: Towards enhanced antimicrobial properties and morphological topography  CHE  Study of the biochemical behavior of non- steroidal anti-inflammatory drugs (NSAIDs) and their modified derivatives using the quantum mechanical approach.  PS/2023/1/15 GEE  Impact of climate change and anthropogenic forcings on increasing flood hazards in north- eastern Bangladesh  Improving Student Learning and Attention in Classrooms through Gaze-Based Attention- Aware Technology to Mitigate Mind Wandering  PI: Professor Dr. Md. Khairul Islam, Department of Business Administration, SUST  PI: Professor Dr. Mohammad Mizanur Rahman Khan, Dept of CHE & CI: Md. Shahadat Hossain Chowdhury, Associate Professor, Dept. of CHE, SUST  PI: Dr. S M Nizam Uddin, Assistant Professor, Dept of CHE, SUST  PI: Dr. Md. Anowarul Islam, Associate Professor, Dept. of GEE & CI: Shahnaj Shemul, Assistant Professor, Dept. of GEE, SUST  Improving Student Learning and Attention Aware Technology to Mitigate Mind Wandering  PI: Mohammed Raihan Ullah, Lecturer, Institue of Information and Communication Technology & CI: Partha Protim Paul, Lecturer, Institue of Information and	SS/2023/2/64   BUS   Capability Assessment of Small and Medium Enterprises in Bangladesh in the Interface of Fourth Industrial Revolution   SUST	Project ID   Dept   Title of the Project   Name of the Researcher (PI & CI)   Duration   Approved Budget   Amount for 2023-24