



Global Youth Science and Technology Bowl (GYSTB) 2022
Award List
Biology and Chemistry (BC) Category

Award	Team No.	Project Title	Country / Region
Grand Prize - Gold Award	IBBC057	Minimally Invasive Annuloplasty Using Shape-Memory Materials	Singapore
	IBBC093	Effect of different NPK ratios on the mass and chlorophyll content of the kangkong plant.	Singapore
Grand Prize - Silver Award	IBBC090	Calcium Phosphate/Collagen Ratio in Bone Grafts Influences Bone Repair in a Rabbit Tibial Defect Model	Singapore
	IBBC055	The Spike Protein of SARS-CoV-2 Targets the Human PRL Oncogene	Singapore
Grand Prize - Bronze Award	IBBC007	The use of brine shrimp to test for water pollutants	Hong Kong
First Prize	IBBC122	The efficiency of TLS-01 lunar regolith simulant on sunflower seed germination for future astroculture	Thailand
	IABC042	Deep learning Line Bot to screen COVID-19 from sound wave analysis	Thailand
	IBBC112	Nature takes on nature: investigating the effects of juglone on japanese knotweed	Ireland
Second Prize	IABC008	Forma-Rid Chitosan Gel	Hong Kong
	IBBC111	Prevent fresh food spoilage by use of phytochemical plant extracts	South Africa
	IBBC010	ACE fertilizer	Hong Kong
	IABC073	Detection of Diabetes and Blood Glucose Level From Gas Analysis of Human Breath	Qatar
Third Prize	IABC043	Improvement of Fe ₃ O ₄ Ferrofluids-Based Antimicrobial Activity through Particle Size Control Assisted by Biocompatible Surfactants	Indonesia
	IBBC099	Amplifying the Atmospheric Water Harvesting Capabilities of Calcium Chloride Via a Cellulose Sponge Medium	Indonesia

Award	Team No.	Project Title	Country / Region
Third Prize	IABC086	Edible Film With Fish Freshness Sensor Technology Based on Parijoto Fruit Anthocyanin Indicator (EDI BERSERI)	Indonesia
	IBBC102	The study of efficiencies of 'Pistia Stratiotes' for absorbing heavy metals and treatment of soft acidity wastewater.	Thailand
	IABC081	Development of cotinine test kit for detection of secondhand smoke exposer	Thailand
	IBBC018	Bone and plant fibre composite bioplastic	Macau
Honourable Mention	IBBC039	Evaluating the Inhibitory Effects of 5 Types of Beans on Trypsin/Chymotrypsin	Sweden
	IBBC066	Study of Shiga-Toxin-Producing E.Coli Specific Gene Expression	Georgia
	IABC088	Innovation of Biocellulose Sheet Mask Based on SCOBY with Antioxidant Serum from Rice Bran Oil to Reduce Microplastic Waste	Indonesia
	IABC064	In silico research of the potential role of a number of compound class N- acylethanolamines as inhibitors of E-protein of the coronavirus SARS-CoV-2	Ukraine
	IBBC074	Antimicrobial Effects of Rice Extract on Acne Causing Bacteria Cutibacterium Acnes	Thailand
	IBBC130	Study the quantitative of microplastics accumulation in the gastrointestinal tract of aquatic animals and the efficacy of gut microbiota on microplastics elimination	Thailand
	IBBC075	Biomass Waste Utilization for Synthesis of Zeolite A As A Low Cost and Potential Absorbent for Removing Dye and Heavy Metal Applications	Thailand
Sustainable Development Award	IBBC150	Fabrication and study of optical properties of TbPO ₄ for cancer cell recognition	Vietnam
	IABC008	Forma-Rid Chitosan Gel	Hong Kong
	IBBC010	ACE fertilizer	Hong Kong