



Award List of Global Youth Science and Technology Bowl (GYSTB) 2020

Biology and Chemistry

Awards	Team No.	Project Title	Country
Grand Prize: Gold Award	HBBC01	Study On The Anti-reflux Ability Of Chinese Yam Using Novel Gastro-oesophageal Model	Hong Kong
Grand Prize: Silver Award	IBBC42	Detection by Phenotypic and Genotypic Characterization, And Drug Resistance Profile of Putative Enteropathogenic Salmonella spp. Isolated from Pampanga River, Philippines	Philippines
Grand Prize: Bronze Award	IBBC27	Synthesis of Magnetic Carbonised Banana Peel as a Versatile and Reusable Adsorbent for Water Purification	Singapore
First Prize	IABC10	An R&D Study On Using A Nutrient Treatment Biofilter to Combat Oceanic and Freshwater Deadzones Which Harnesses The Intrinsic Potential Of Halophyte Species	Ireland
First Prize	IABC09	New Approach to Food Packaging: Antimicrobial and Edible Materials	Turkey
First Prize	IABC04	Puffer Jacket: An Alternative for Anxiety Relief	South Africa
First Prize	IBBC39	Extraction of Amylase Enzyme From Fruit Waste Used As A Catalyst To Enhance Carbohydrate-waste Based Bioethanol Production	Indonesia
Second Prize	IBBC21	Development of Artificial Epidermis Using Collagen Film and Keratinocyte Cell line for Personalized Allergy Tester	Korea
Second Prize	IBBC11	Characterization of (Solanum tuberosum) Potato – Red Cabbage (Brassica oleracea var. capitata f. rubra) Composite Film for Intelligent Packaging Applications	Philippines
Second Prize	HBBC03	Feasibility of Using Microbes to Grow "Textile Material"	Hong Kong
Second Prize	IBBC26	Development of Nanoparticle based Colorimetric Method for Lead Detection	Turkey
Second Prize	HBBC02	Super Glue for Tree Defect	Hong Kong
Second Prize	IBBC25	Production of Orodispersible Nanofiber Pharmaceuticals for Pediatric and Newborn Patients With Electrospinning Method	Turkey

Third Prize	IBBC16	A New Design for Increasing Effectiveness and Economy of Drugs by Using Original Smart Structures	Turkey
Third Prize	IBBC32	The Preparation of Medical Textile Products With Properties That Tree Barks Have By Using Micro-encapsulation Method	Turkey
Third Prize	IABC01	Healthy And Biodegradable Sanitary Pad Using Super Absorbent Polymer From Orange Peel, Patchouli Twig, And Coconut Husk For Sustainable Green Innovation	Indonesia
Third Prize	IABC16	Polymer Bioplastic	South Africa
Third Prize	IBBC35	Biodegradation of Bisphenol A (BPA) Using Chlorella Fusca	Singapore
Third Prize	IBBC10	Ecologically Safe and Feasible Particle Boards	Turkmenistan
Third Prize	IBBC31	An Investigation On The Effects Of Propolis And Curcuma Longa On Cancer, Observing Their Impacts on Vascular Formation and Chicken Embryos Growth	Turkey
Third Prize	IBBC09	The Study of Life Cycle, Some Behaviors and Ecological Role of Spotted Tortoise Beetle (<i>Aspidomorpha milliaris</i>)	Thailand
Third Prize	IBBC17	Innovation of an Alternative Natural Clothing Bleach From Extract of Lemon (<i>Citrus limon</i>) and Lime (<i>Citrus aurantifolia</i>) Peel Wastes	Indonesia
Third Prize	IBBC22	A Study On the Bionic Value of Japanese Sea Cucumber (<i>Apostichopus Japonicus</i>) By Biostructure Analysis	Korea
Honourable Mention	IABC17	Invention of PUFFI-KIT As A Survival Kit To Prevent Sustenance Scarcity And Urgent Health Problems During Hiking Of Mountaineering	Indonesia
Honourable Mention	IABC15	Development And Production Of Orthosis By Additive Technologies	Slovakia
Honourable Mention	IBBC41	Potential Scrubbing Mangrove Seeds <i>Xylocarpus Moluccensis</i> on Wooden Vessels That Lean as a Method of Reducing Population Density <i>Teredo</i> Shipworm	Indonesia
Honourable Mention	IBBC06	Quorum Quenching Activity Assessment on <i>Ganoderma</i> sp. Ethanolic Extract against <i>Escherichia coli</i> ATC25922 through Microtiter Biofilm Formation Assay	Philippines
Honourable Mention	IBBC03	Alternative Pharmaceutical Liquid Preservative from <i>Tamarindus indica</i> (Tamarind) Pulp Extracts	Philippines
Honourable Mention	IBBC05	Effectiveness of the Combination of Water Hyacinth Cellulose Acetate Membrane, Corncob-based Coagulant and Activated Carbon in Decreasing Hardness and Mercury Ion (Hg^{2+}) of Mandor River Water Compared to Alum	Indonesia
Honourable Mention	IABC08	Three Dimensional (3D) Printed Microfluidic Pump (MFP) for Medical Field	Turkey
Honourable Mention	HBBC04	Revolutionary Discovery of Hair	Hong Kong

Honourable Mention	IABC19	Utilization of Taro (<i>Colocasia esculenta</i>) Starch and D-Limonene from Extraction of Tangerine Orange (<i>Citrus reticulata</i>) for The Production of Biodegradable Plastic	Indonesia
Honourable Mention	IBBC07	Effects of Gibberellic Acid-3 and 6-Benzylaminopurine In Increasing The Sugar Content in Stevia Rebaudiana Through an In-vitro Tissue Culture Technique	Philippines
Honourable Mention	IBBC34	The Role of Zinc Ferrite And Iron Oxide Nanoparticles To Remove Contaminants From Contaminated Water	Iran
Honourable Mention	IABC07	Vastric (Vanname Shrimp for Electric) Control and Monitoring Shrimp Waste's Bioremediation as Bioelectricity based on MFCs	Indonesia
Honourable Mention	IBBC28	Biotechnological Potential of Anatolian Honey Bee (<i>Apis Mellifera Anatoliaca</i>) Venom in Cancer Research	Turkey