

2025 Net Zero Tech International Contest @Taiwan International Contest-**The Finalist**

No.	Work Title	Position	Name	Country Region	School	Department
INTL01	Transforming Waste to Worth: Carbon Capture and Utilization to produce Eco-friendly Bio-lubricant	Advisor	Yeau-Ren Jeng	Taiwan	National Cheng Kung University	Biomedical Engineering
			Grace, I-Son Ng			Chemical Engineering
			Chi-Hua Yu			Engineering Science
		Leader	Sai Bhavani Sravan Metla			Biomedical Engineering
		Member	Priskila Adjani Diankristanti			Chemical Engineering
			Muhammad Firman Friyadi			Engineering Science
INTL02	Hybrid pathways for next generation of sustainable aviation fuels in Taiwan	Advisor	吳 煒	Taiwan	National Cheng Kung University	Department of Chemical Engineering
			王偉成			Department of Aeronautics and Astronautics
		Leader	Nugroho Rusdan Aditya Aji		National Sun Yat-sen University	Department of Mechanical and Electromechanical Engineering
		Member	Mazumdar Debayan		National Cheng Kung University	Department of Chemical Engineering
			劉諒宇			
			林柏龍			
			黃俊揚			Department of

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						Aeronautics and Astronautics
			Talitha Philofia Sopandi			International Degree Program on Energy Engineering
INTL03	Development of a smart mini-grid system for renewable energy storage and utilization	Advisor	AN LIANG	Hong Kong	The Hong Kong Polytechnic University	Department of Mechanical Engineering
		Leader	HUO XIAOYU			
		Member	BAI YURAN			
			FU ENKANG			
			LONG XIN			
INTL04	LiMn a Colorful commuNity	Advisor	Han-Yi Chen	Taiwan	National Tsing Hua University	Department of Materials Science and Engineering
		Leader	Hsin-Fang Chang			
		Member	Yu-Ming Pan			
			Quang Luan Le			Interdisciplinary Program of Engineering
			Min-Hua Chang			
			Jin-Luh Mou			International Intercollegiate Ph.D. Program
INTL05	The Flux	Advisor	Miktha Farid Alkadri	Indonesia	Universitas Indonesia	Architecture
			Ova Candra Dewi			Mechanical
			Ardiyansyah			

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			Arnas Lubis			Engineering
		Leader	Vine Novia Pakpahan			Architecture
		Member	Syahlaisa Afra Amani			
			Luqman Kamaludin			
			Tabita Essela Pebriana Simanjuntak			
			Juan Valensi Ridwan Ramadhan			Civil Engineering
INTL06	Using Trapa Natans Husks, coffee-Waste and bamboo chopsticks Derived Activated Carbon as Electrode Materials to Enhance the Power Output of Microbial and Plant Microbial Fuel Cells	Advisor	陳翰儀	Taiwan	National Tsing Hua University	Department of Materials Science and Engineering
		Leader	蘇姮佺			
		Member	林軒岑			
			胡琇婷			
			蔡佳霓			Interdisciplinary Program of Life Sciences and Medicine
INTL07	Toward Carbon Neutral Energy Storage: Green Modification of VRFB Electrodes via Atmospheric Pressure	Advisor	Yu-Lin Kuo	Taiwan	National Taiwan University of Science and Technology	Mechanical Engineering
			Ting-Yu Liu		Ming Chi University of Technology	Materials Engineering
			Song-Yu Chen		Yuan Ze University	Mechanical Engineering

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	Plasma Jet Deposited Bimetallic Oxides		Chen-Hao Wang		National Taiwan University of Science and Technology	Materials Engineering
		Leader	Ahmad Nur Riza		National Taiwan University of Science and Technology / Ming Chi University of Technology	Mechanical Engineering / Materials Engineering
		Member	Melky Natanael		National Taiwan University of Science and Technology	Mechanical Engineering
			Ni Putu Devi Kristina		Ming Chi University of Technology	Materials Engineering
INTL08	An omni-directional augmented cross-axis wind turbine	Advisor	Wen Tong Chong	Malaysia	University of Malaya	Department of Mechanical Engineering
			Keen Kuan Kong			
			Hanna Sofia SalehHudin			
		Leader	Christopher Clement Rusli			
		Member	Flora Shuh Ching Ngu			
			Izdiyar Zahirah Ibrahim			
INTL09	Elementrailer	Advisor	Jun Liu	United States	University of Washington	Materials Science & Engineering
		Leader	Hongjiang Lin			Foster School of Business
		Member	Julisa Cruz			

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			Lillian Mitchell			Environmental Science
			Bernardo Lin			Electrical Engineering
INTL10	Lithium, From Trash to Treasure: Integrated Flow System for Scrap Battery Upcycling and Carbon Dioxide to Lithium Carbonate Conversion.	Advisor	Fu-Ming Wang	Taiwan	National Taiwan University of Science and Technology	Graduate Institute of Applied Science and Technology
		Leader	Michelle Elaine			
		Member	Cai-Fang Wu			
			Jayaraman Divyavalli			
			Ulya Qonita			
INTL11	Multifunctional Porous Water Purification Device Based on Vapor Deposition Technology	Advisor	陳賢燁	Taiwan	National Taiwan University	Chemical Engineering
		Leader	Ramli Theresia Cecylia			
		Member	胡書嫻			
			李沁芸			
			張育銘			
			石滢瑄			
			陳眉妤			
INTL12	Smart Pressure Control for Desalination: Adaptive Modeling and Wave	Advisor	Sean Wu-Yang	Taiwan	National Chung Hsing University	Bio-Industrial Mechatronics Engineering
		Leader	Mukhammad Jamaludin			
		Member	Isnaeni Nurjanah			

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	Energy Boost for Net-Zero Water Systems		Yulian Fatkur Rohman			
			Akhmad Azhar Firdaus			
			Muhammad Bilhaq Ashlah			
			Anisa Fitri Santosa			
INTL13	Development of an Integrated System for Catalysts and Electrolysis Equipment	Advisor	洪緯璿	Taiwan	National Central University	Graduate Institute of Materials Science & Engineering
		Leader	邱奕嘉			
		Member	黃柏叡			Graduate College of Sustainability and Green Energy
			李昀霖			
			黃宇祐			
			陳佳謙			
INTL14	Green Butadiene: A Breakthrough in Bioethanol Conversion Technology	Advisor	黃朝偉	Taiwan	National Cheng Kung University	Department of Engineering Science
		Leader	林鐸軒			
		Member	劉羿群			
			黃煒倫		Feng Chia University	Department of Materials Science and Engineering
			黃鈺庭			
INTL15	Backwind Rider	Advisor	Andrei Holub	Russia	Lomonosov MSU	Institute of Mechanics
			Marat Dosaev			
			Yuri Seliutskiy			

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			Liubov Klimina			
		Leader	Mikhail Harbuz			Mechanic and Mathematics Faculty
		Member	Valerii Zudov			Faculty of Space Research
			Daniil Dosaev			Faculty of Economic
			Marta Kruchinkina			
			Lina Seliutskaia			MSU Faculty of Computational Mathematics and Cybernetics
			Ivan Alpatov			Mechanic and Mathematics Faculty
INTL16	Self-Powered Peptide Sensor for Ethinylestradiol (EE2) detection: A Sustainable Platform for Water Quality Monitoring	Advisor	Zong-Hong Lin	Taiwan	National Taiwan University	Department of Biomedical Engineering
		Leader	Salini Ramesh			
		Member	Uday Singh			
			Jaba Roy Chowdhury			
			Bishal Kumar Nahak			
			Abdullah Al-Kabbany			
INTL17	Development and Application of Inorganic Aqueous Radiative Cooling Coatings:	Advisor	黃朝偉	Taiwan	National Cheng Kung University	Department of Engineering Science
		Leader	王鐸諭			
		Member	陳明瑋			
			范心瑀			

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	A Sustainable Strategy Toward Net-Zero Carbon Emissions		姚秀美		National Ilan Univerty	Department of Chemical and Materials Engineering
INTL18	From Greenhouse Gases to Green Fuels: Plasma-Catalytic DRM for Closed-Carbon-Cycle Liquid Production	Advisor	Moo Been Chang	Taiwan	National Central University	Graduate Institute of Environmental Engineering
		Leader	Machmud Amir			
		Member	Jo Chen Hsu			
			Heng-Wei Huang			
INTL19	Upcycling coal fly ash waste into 3D-printed ceramic membranes for wastewater treatment and power generation.	Advisor	Shiao Shing Chen	Taiwan	National Taipei University of Technology	Institute of Environmental Engineering and Management
			Hong-Ming Ku		King Mongkut' s University of Technology Thonburi (KMUTT)	Department of Chemical Engineering
			Nonsee Nimitsiriwat			
			Bhanupriya Das		National Taipei University of Technology	Institute of Environmental Engineering and Management
		Leader	MITHILESH PASAWAN			Environmental Engineering & Management
		Member	YA-TING CHAN			
			Ya-Ling Chiang			
			Chanakan Sukmongkolwongs			
			Chinatip Suwantri		King Mongkut's	Department of

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			Nittiya Ornwarn		University of Technology Thonburi	Chemical Engineering
			Urasaya Sawatdiwong			
			Ekawang Arunvipada			
INTL20	Integration of Innovative Coastal Wave Energy and Carbon-Negative Cement Materials with a Supercapacitor Energy Storage System to Achieve Net-Zero Goals	Advisor	歐庭嘉	Taiwan	National Cheng Kung University	Program on Smart and Sustainable Manufacturing
		Leader	黃景政			Department Electrical Engineering
		Member	戴安荻			Environmental Engineering
			劉迎逸			Department of Aeronautics and Astronautics
			蘇暉哲			



國立臺灣大學
National Taiwan University



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