



SUCCESSFUL APPLICATIONS
Special Program for Research against COVID19 (SPRAC), JFY2020-2021

Member University	Research Title	Principal Investigator	Japanese Co-investigator	Other Co-investigator Organization(s)
Chulalongkorn University (CU)	COVID-19 Data Analysis Using Mobile Services Data and Satellite Geospatial Data Towards Sustainable Tourism Business	Asst. Prof. Natt Leelawat	Prof. Naohiko Kohtake Keio University	-
Hanoi University of Science and Technology (HUST)	Concept development for an affordable air disinfection device for inactivating pathogenic viral aerosols used in highly occupied areas such as meeting room, classroom, hospitals, theatres etc.	Assoc. Prof. Tan Minh Nguyen	Prof. Takashi Yamaguchi Nagaoka University of Technology	Hanoi Medical University
	Research and development a ventilator that uses indirect air pump technology for COVID patient health care	Assoc. Prof. Phan Anh Tuan	Prof. Koji Nagata Nagoya University	-
Ho Chi Minh City University of Technology (HCMUT)	Design the 3D-printing model face mask using control release nano silver particle and activated carbon materials toward antibacterial function for end user	Dr. Pham Trung Kien	Prof. Yasuhiko Tabata Kyoto University	Chulalongkorn University
	Enhancing the Respiratory Performance of Mechanical Noninvasive Ventilator for COVID-19 patients	Dr. Son Anh Tran	Prof. Jiwang Yan Keio University	-
	Genetic engineering of microorganisms as vaccine delivery vectors against COVID-19	Dr. Hoang Anh Hoang	Assoc. Prof. Kouichi Kuroda Kyoto University	Biotechnology Center of Ho Chi Minh City Ho Chi Minh City University of Science Waseda University
	Reaching to a COVID Patient: Human-aware Autonomous Navigation of a Medical Service Robot in Isolated Area	Dr. Thinh Ha Quang Ngo	Prof. Jiwang Yan Keio University	-



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Institut Teknologi Sepuluh Nopember (ITS)	CuInS ₂ /TiO ₂ Quantum Dots Photosensitized Polymer for Visible Light Driven Virus Deactivation by Superoxide Ion	Dr. Azzah Dyah Pramata	Prof. Tetusuya Kida Kumamoto University	-
	Rapid Detection of COVID-19 through Sweat Analysis by using an Electronic Nose	Prof. Riyanarto Sarno	Prof. Sozo Inoue Kyushu Institute of Technology	Dr. Soetomo General Academic Hospital Telkom University Universitas Airlangga Universitas Gadjah Mada
Kasetsart University (KU)	Innovation of Upgraded Negative Pressure Cabinets for Efficient COVID-19 Screening Processes	Asst. Prof. Weerachai Chaiworapuek	Prof. Koji Fukagata Keio University Assoc. Prof. Shumpei Funatani University of Yamanashi	Camfil (Thailand) Company Mahidol University
	Smart Textile with Antimicrobial and Water Repellent Properties for Coronavirus Protection	Assoc. Prof. Oratai Jongprateep	Prof. Jun Ohta Nara Institute of Science and Technology Prof. Hiroharu Ajiro Nara Institute of Science and Technology	School of Life Sciences, Universiti Kebangsaan Malaysia
King Mongkut's Institute of Technology Ladkrabang (KMITL)	Detection of COVID-19 in Chest X-rays using Artificial Intelligence and Computer Vision	Asst. Prof. Noppadol Maneerat	Prof. Kazuhiko Hamamoto Tokai University	-
National University of Laos (NUOL)	Covid-19 prevention and data collection by using the indoor MAC address tracking system	Dr. Phonepadith Phoummavong	Assoc. Prof. Keisuke Utsu Tokai University	-
Thammasat University (TU)	Assessment of Transport Policies to Tackle Global Pandemics for Sustainable Mobility in ASEAN Countries: Lessons Learned from the COVID-19	Assoc. Prof. Mongkut Piantanakulchai	Prof. Shinya Hanaoka Tokyo Institute of Technology	De La Salle University Institute of Technology of Cambodia
	Towards pandemic-resilient construction industry: Development of strategies for managing the impacts of COVID-19 and futureproofing construction supply chain	Assoc. Prof. Kriengsak Panuwatwanich	Prof. Ryoju Hamada Asahikawa KOSEN College Assoc. Prof. Michael Henry Shibaura Institute of Technology	University of Ruhuna



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Universitas Gadjah Mada (UGM)	Applications of natural zeolite-based materials of the inactivation of coronavirus Covid19	Assoc. Prof. Wawan Budianta	Prof. Chihiro Yoshimura Tokyo Institute of Technology	Institut Teknologi Sepuluh Nopember University of The Philippines Diliman
	Nanocopper from Indonesia's stranded copper ore for anti-biohazard chemicals	Asst. Prof. Yuni - Kusumastuti	Prof. Masaru Tanaka Kyushu University	-
Universiti Malaya (UM)	Design and Development of Aerosol Collector during Dental Treatment for Covid-19 Prevention	Dr. Mohd Ridha Muhamad	Prof. Hiroshi Umakoshi Osaka University	-
	Development of Curcumin/Cellulose Nanoparticle Complexes to Enhance Therapeutic Efficacy of COVID-19 Medications	Assoc. Prof. Chee Yern Ching	Prof. Hiroshi Uyama Osaka University	-
	Novel Nitrogen Heterocycle compounds: Design, Synthesis, and evaluation of the antiviral activities against COVID-19 and Drug Delivery Using Liposome	Prof. Mohd Rafie Johan	Prof. Hidenori Otsuka Tokyo University of Science	-
Universiti Sains Malaysia (USM)	A Robust Green-Based Superhydrophobic Antiviral Coating for Combating Covid-19 Disease	Assoc. Prof. Zuratul Ain Abdul Hamid	Prof. Naozumi Teramoto Chiba Institute of Technology	-
	AlGaN/GaN High-Electron-Mobility Transistor (HEMT) for SARS-CoV-2 (COVID-19) Rapid Detection	Dr. Mohd Syamsul Nasyriq Samsol Baharin	Dr. Masafumi Inaba Kyushu University Prof. Junya Suehiro Kyushu University Assoc. Prof. Michihiko Nakano Kyushu University	-
	COVID-19 Impact: Face mask waste management and the development of biodegradable face mask	Prof. Mariatti Jaafar	Assoc. Prof. Mitsugu Todo Kyushu University	National University of Laos
	Development of bone defect models using 3D reconstruction algorithms: Post COVID-19	Dr. Khairul Anuar Shariff	Prof. Kunio Ishikawa Kyushu University, Japan	-
	Lab-on Polyimide: Flexible inkjet-printed graphene-based field-effect transistor (GFET) for self-screening COVID-19	Assoc. Prof. Asrulnizam Abd Manaf	Prof. Hiroshi Kawarada Waseda University	-



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Universiti Sains Malaysia (USM)	Rapid Detection of SARS-CoV-2 RNA Virus Using Optical Spectroscopy Method to Prevent COVID-19 Outbreak	Dr. Fatin Hamimi Hamimi Mustafa	Prof. Hironaga Uchida Toyohashi University of Technology	Universiti Sains Islam Malaysia Universiti Teknologi Malaysia
	Sanitization-Autonomous Mobile Robot with Image-Based Navigation to Pinpoint Contaminated Surfaces	Dr. Wan Mohd Yusof Rahiman Wan Abdul Aziz	Assoc. Prof. Masaki Yamakita Tokyo Institute of Technology	Universiti Teknologi Mara
	SELF-DISINFECTION ANTIVIRAL COATING TO COMBAT COVID-19 TRANSMISSION	Prof. Zuhailawati Hussain	Assoc. Prof. Shoichi Nambu The University of Tokyo	-
	Turning COVID-19 PPE waste into Smart PPE using Halochromic dye for Bacterial Sensor	Dr. Ku Marsilla Ku Ishak	Prof. Hitoshi Takagi Tokushima University	-
	Ultra-Sensitive Compact Immunoassay System “Express Biochecker” Using Fluorescent Janus Particles for rapid SARS-CoV-2 detection	Dr. Rohimah Binti Mohamud	Assoc. Prof. Hiroshi Yabu Tohoku University	National Heart Institute Kuala Lumpur, Malaysia
Universiti Teknologi Malaysia (UTM)	Development of durable photocatalytic Cu ₂ O-based antimicrobial coatings	Dr. Farhana Aziz	Prof. Bunsho Ohtani Hokkaido University	-
	Fabrication of impregnated metal oxides on activated soot nanofiber via electrospinning system for respiratory protection in Pandemic COVID-19 outbreak	Dr. Khairunnisa Binti Mohd Paad	Prof. Okuda Tomoaki Keio University Assoc. Prof. Yamanaka Shinya Muroran Institute of Technology Prof. Ohira Yuichi Muroran Institute of Technology	Tokyo University of Agriculture And Technology
	Rapid detection of COVID-19 virus in human nasopharyngeal swab specimen using Raman scattering based sensor	Assoc. Prof. Muhamad Ali Bin Muhammad Yuzir	Prof. Akihiko Terada Tokyo University of Agriculture & Technology (TUAT)	Bangladesh University of Engineering And Technology (Buet)



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Universiti Teknologi Malaysia (UTM)	Smart Air Quality and Infection Control due to Airborne Transmission of Covid-19 in Office Building	Dr. Mohd Fitri Mohd Yakub	Prof. Shiro Masuda Tokyo Metropolitan University	Telkom University, Bandung Indonesia
	Surveillance System on Epidemic and Pandemic Respiratory Viruses: Repurposing Internet of Things with Gaussian Noise Channel Algorithmic Model	Dr. Zool Hilmi Ismail	Assoc. Prof. Kazuma Sekiguchi Tokyo City University	Universiti Malaysia Perlis University of Madras

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