

Announcement
 Successful Research Projects for
 VISTEC-NSTDA Collaborative Research and Education Scholarships
 Academic Year 2021

Vidyasirimedhi Institute of Science and Technology (VISTEC) in partnership with National Science and Technology Development Agency (NSTDA) is pleased to announce successful research projects for VISTEC-NSTDA collaborative research and education scholarships for the Academic Year 2021. The following 10 (ten) research projects have been accepted into the program:

1. Advanced Materials Area

No.	Project Title	VISTEC Faculty Member	NSTDA Researcher
1.	Development of new metal-organic framework (MOF) with high charge transporting ability and capable of long-wavelength absorption as light-absorbing materials for high-efficiency photocatalytic water splitting system and organic photovoltaics (OPV)	Prof. Dr. Vinich Promarak	Dr. Pisist Kumnorkaew
2.	Development of +2 and +3 metal catalysts supported by novel constrained β -diimine ligands for biodegradable polymers in functional nanocomposite fiber applications	Assoc. Prof. Dr. Khamphee Phomphrai	Dr. Autchara Pangon Dr. Somprasong Thongkham
3.	Multifunctional nanocarriers for a sustainable society	Assoc. Prof. Dr. Daniel Crespy	Dr. Doungporn Yiamsawas
4.	Metal-organic frameworks as surface enhanced Raman scattering substrate for target molecules detection	Dr. Kanokwan Kongpatpanich	Dr. Suwussa Bamrungsap
5.	Development of Metal-organic frameworks for ultrasensitive detection of volatile organic compounds	Dr. Kanokwan Kongpatpanich	Dr. Suwussa Bamrungsap

2. Energy and Environment Area

No.	Project Title	VISTEC Faculty Member	NSTDA Researcher
1.	Electrooxidation of glucose derived compounds to 2,5-Furandicarboxylic acid (FDCA) and its derivatives	Assist. Prof. Dr. Chularat Wattanakit	Dr. Supawadee Namuangruk
2.	Conversion of alkanes to fine-chemicals in the presence of CO ₂ using single sites of monometals and bimetals supported on hierarchical zeolites	Assist. Prof. Dr. Chularat Wattanakit	Dr. Pussana Hirunsit

3. Biotechnologies Area

No.	Project Title	VISTEC Faculty Member	NSTDA Researcher
1.	Enzyme engineering, structure determination, and biocatalysis of bacteriophage lysins	Prof. Dr. Pimchai Chaiyen	Dr. Penchit Chitnumsub

4. Digital Area

No.	Project Title	VISTEC Faculty Member	NSTDA Researcher
1.	A data-driven framework for the discovery of high performance catalysts for CO ₂ conversion to valuable products	Assoc. Prof. Dr. Sarana Nutanong	Dr. Supawadee Namuangruk
2.	Embodied Adaptive Autonomous NeuRal CONTROL for Robot Motion Intelligence (ERON)	Prof. Dr. Poramate Manoonpong	Dr. Winai Chonnaramutt

Note: Student scholarships will be offered to VISTEC Ph.D. students who are interested to work on these research projects as his/her dissertation. The scholarship application process and timeline for VISTEC students will be announced on the VISTEC website at <https://www.vistec.ac.th/news/?mid=W039> by June 1st, 2021.

Announced on June 1st, 2021.



(Professor Dr. Jumras Limtrakul)

Chairman of the Scholar Selection Committee