

Comprehensive MOU (as of April 1, 2023)

Area	Country	Organization	Intended Areas of Cooperation	First MOU	From	Until
Asia	Thailand	Thailand Institute of Scientific and Technological Research (TISTR)	Cooperation in a broad range of scientific areas including, but not limited to: ●Energy and Environment ●Life Science and Biotechnology ●Metrology	2004/11/25	2019/11/25	2024/11/24
	Thailand	National Science and Technology Development Agency (NSTDA)	Cooperation in a broad range of scientific areas including, but not limited to: ●Energy and environment. ●Life science and biotechnology. ●Information technology and human factors (incl. artificial intelligence). ●Materials and chemistry (incl. nanoscience and nanotechnology), and ●Electronics and manufacturing.	2004/11/25	2021/4/22	2026/4/21
	Taiwan	Industrial Technology Research Institute (ITRI)	Cooperation in the areas of mutual interest such as: ●Nanotechnology, ●Electronics, ●Materials and Chemistry, and ●Metrology.	2005/9/26	2021/7/14	2026/7/13
	Vietnam	Vietnam Academy of Science and Technology (VAST)	Cooperation in a broad area of scientific fields including, but not limited to: ●water treatment ●earth science ●marine science	2004/12/15	2020/4/22	2025/4/21
	Mongolia	Ministry of Mineral Resources and Energy in Mongolia (MMRE) Japan Oil, Gas and Metals National Corporation (JOGMEC)	Cooperation on geological investigation and implementation of the mineral resources projects in Mongolia	2010/7/30	2010/7/30	No date specified
Europe	Germany	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e. V. (FhG)	Cooperation in the areas of mutual interest including, but not limited to: ●photovoltaics ●hydrogen energy carrier ●hydrogen utilization ●solid oxide fuel cell ●biopolymers ●carbon nanotube actuators ●recycled carbon fiber ●photonic devices ●quantum computing ●biological transformation	2012/7/6	2022/7/6	2027/7/5
	Germany	Deutsches Zentrum für Luft- und Raumfahrt (DLR)	●thermoelectric conversion ●lithium-ion battery, ●solid oxide fuel cell (SOFC) / solid oxide electrolysis cell (SOEC) ●analysis and utilization for satellite imagery and satellite data ●other fields	2017/3/19	2022/3/19	2027/3/18
	Finland	Technical Research Centre of Finland (VTT)	Research cooperation in the fields including, but not limited to: ●Electronics and manufacturing ●Materials and chemistry ●Information technology and human factors	2006/2/15	2021/2/15	2026/2/14
	France	Commissariat à l'Energie Atomique et aux énergies alternatives (CEA)	Cooperation in the fields of: ●energy and environment, ●micro-electronics, ●nanotechnology and materials, ●biotechnology and life sciences, and ●information technology and human factors	2010/5/17	2020/10/22	2025/10/21
	France	Centre National de la Recherche Scientifique (CNRS)	●Areas of mutual interest	2001/11/22	2021/11/22	2026/11/21
	EU	Joint Research Centre of the European Commission (JRC)	Collaboration in the fields including, but not limited to: ●Energy ●Critical Raw Materials ●AI for Earth Observation ●Smart Cities, and ●Smart Mobility	2017/5/29	2022/5/29	2027/5/28
Oceania	Australia	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	Cooperation in the areas of mutual scientific interest including, but not limited to: ●energy and environment ●electronics and manufacturing ●geology	2007/3/6	2022/3/5	2027/3/4
	New Zealand	The University of Auckland	Cooperation in a broad field including, but not limited to: ●advanced materials ●energy ●robotics and artificial intelligence	2019/9/20	2019/9/20	2024/9/19

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North America	Canada	National Research Council of Canada (NRC)	Cooperation in areas of mutual interest such as: <ul style="list-style-type: none"> ●Advanced Manufacturing ●Clean Technologies ●Digital Technologies ●Human Factors ●Life Sciences ●Nanotechnology ●Metrology and Standards 	2019/10/9	2019/10/9	2024/10/8
	U. S. A.	National Renewable Energy Laboratory (NREL)	Cooperation to maximize the benefit to their respective institutional interests including: <ul style="list-style-type: none"> ●Solar Photovoltaics ●Renewable Energy Systems Integration ●Energy Storage 	2009/5/4	2019/12/18	2024/12/17
	U. S. A.	National Institute of Standards and Technology (NIST)	Cooperation in a broad range of scientific areas including, but not limited to: <ul style="list-style-type: none"> ●Metrology ●Information Technology and Artificial Intelligence ●Life science and Biotechnology ●Environment and Energy ●Nanotechnology, Materials, and Chemistry ●Electronics and Manufacturing 	2009/5/4	2019/7/1	2024/6/30
	U. S. A.	Brookhaven National Laboratory (BNL)	Cooperation in a broad range of scientific areas including, but not limited to: <ul style="list-style-type: none"> ●artificial photosynthesis ●CO2 utilization technologies 	2015/5/28	2021/4/12	2026/4/11