

## International Collaborative Research Program (Past Recipients)

**FY2020**

	Category	Project Leader	Facilitator	Title of Research Subject
1	New research project	Sergey Ponomarenko	Tatematsu	Development of 0.5THz CW Clinotron
2	Continuation research project	Pham Hong Minh	Tani	Development techniques for cost-effective THz-time-domain spectrometer
3	New research project	Garik Torosyan	Tani	Testing new samples of laser-structured spintronic terahertz emitter of different geometrical designs
4	New research project	René Beigang	Tani	Experimental investigation of laser-structured spintronic terahertz emitters of different geometrical designs and growth conditions
5	New research project	Anatoly Metelitsa	Tani	Development of synthetic approaches and single-crystal growth methods for organic and complex/coordination compounds with nonlinear optical properties for efficient generation and detection of terahertz radiation
6	New research project	I Nyoman Sudiana	Mitsudo	Effect of Electromagnetic Wave on Chemical Composition of Bio-oil Extracted from Agricultural Waste by Using Microwave Pyrolysis for Perfumes and Cosmetics
7	New research project	Aripin	Mitsudo	Porous Silica Xerogel based Ceramic for Active Electrode Material in Aluminium-Air Battery
8	New research project	Jarno Järvinen	Fujii	Microresonators in low temperature mm-wave electron paramagnetic resonance

**FY2019**

	Category	Project Leader	Facilitator	Title of Research Subject
1	New research project	Pham Hong Minh	Tani	Development techniques for cost-effective THz-time-domain spectrometer
2	New research project	I Nyoman Sudiana	Mitsudo	Extraction of Bio-Oil from Agricultural Waste by Using Microwave Pyrolysis for Perfumes and Cosmetics
3	New research project	ARIPIN	Mitsudo	28 GHz Gyrotron-assisted Synthesis of Calcite/Silica Xerogel Separator Membrane for Aluminium-Air Battery
4	New research project	Joselito Echavez Muldera	Tani	Investigation of Nonlinear Optical Ridge Waveguides for THz Applications
5	New research project	Tsun-Hsu Chang	Tatematsu	Frequency-Tunable Terahertz Gyrotrons

**FY2018**

	Category	Project Leader	Facilitator	Title of Research Subject
1	Continued research project	Ali Khumaeni	Tani	Nonlinear THz spectroscopy
2	New research project	Oleksiy Kuleshov	Tatematsu	R&D of Compact Sub-THz Diffraction Radiation Oscillator, R&D of Compact Low-Voltage Gyrotrons with Frequency Tuning in Wide Range
3	New research project	Elmer Surat Estacio	Tani	Study on emission and detection of terahertz radiation with semiconductors
4	New research project	Zhao Zhenyu	Tani	Study on metamaterial structures for terahertz wave emission and detection

5	New research project	Nikita Ryskin	Tatematsu	Development of THz-band traveling-wave tube with sheet electron beam
6	New research project	Olgierd Dumbrajs	Tani	Study on the 1.185 THz Third Harmonic Gyrotron

**FY2017**

	Category	Project Leader	Facilitator	Title of Research Subject
1	New research project	Ali Khumaeni	Tani	Nonlinear THz spectroscopy
2	New research project	Oleksiy Kuleshov	Ogawa	High stabilization of both Output Power and Frequency of Gyrotron by Use of PID control
3	New research project	Garik Torosyan	Tani	Investigation of Properties of THz Metallic Spintoronic THz Emitter
4	New research project	Mikhail Glyavin	Mitsudo	Joint research on study of a THz band double beam gyrotron