[KRISS] Study Proposal of International Admission for 2020 Fall Semester

No.	Major	Sub-Major	Research Group (Team)	Study and Research Proposal
1	Science of Measurement	-	Physical metrology	· Development of measurement standards for SI unit - Development of measurement standards for SI base units such as optical clock, Kible balance, etc. - Development of measurement standards for SI derived units such as acoustics, vacuum, etc. · Development of measurement technique - Measurement technique for climate change - Measurement technique for national strategy in IT, defence, etc.
			Chemical and medical metrology	· Development of measurement standards for Air Quality - Development of measurement standards for Gas Metrology - Development of analytical technique for fine dust · Ionizing radiation metrology - Development of measurement standards and precision measurement technology for radioactive gas - Development of CRM for radioactive materials - Development of measurement standards and precision measurement technology for radiation cancer therapy and x-ray diagnostics - Development of image standards (CRM) for diagnostic modalities such as PET-CT - Development of radioanalytical technique for the measurement of ultra low-level radionuclides in the environment

No.	Major	Sub-Major	Research Group (Team)	Study and Research Proposal
			Advanced instrumentation	· State-of-the-art instrumentation based on the measurement technology to respond science and industry demands - Combined instruments with charged particle & laser beam. - Biomagnetism, Ultra-low field NMR/MRI - Smart sensors and MI(measurement and inspection) equipments for the semiconductor industry - High-resolution optical imaging instrument for industrial, defence & space applications
2	Nano Science	-	Physics	· Solid-state physics - Quantum phenomena of nano-device - Material phase transition under extreme condition
			Materials & Chemistry	· Convergence characteristics of materials - Nanostructure analysis - Characterization of energy/environmental materials - Charged particle optics
			Nano bio Measurement	· Nanobio measurements and related science - Mass spectrometry for nanobio measurements - Nanobio sensors and measurement science
3	Bio-Analytical Science	-	Bio Analysis	· Cell activity and genotoxicity measurement technolgoy - Precise analysis for cell proliferation and cell death - Highly sensitive analysis of cellular DNA damage