

List of research institutes for Under 90 days Training Program

Code	Field	Name of Institute	Research Group	Subfield	Research Activities	No. of Positions	Location
P-1-1	Physics	Korea Institute of Science and Technology (KIST)	Center for Quantum Technology	Quantum Photonic Device Control	- Implementation of FPGA control circuits and optimization of photonic device performance	1	Seoul
P-1-2				Quantum Optics, Quantum Information	- DV-CV hybrid quantum optics experiments and data analysis	1	Seoul
P-1-3				Nano-Optics, Quantum Optics	- Light extraction and HOM/HBT characterization of single-photon sources	1	Seoul
P-2-1		Korea Research Institute of Standards and Science (KRISS)	Material Property Metrology Group	Low-Dimensional Quantum Materials	- Characterization of graphene and two-dimensional nanomaterials and fabrication of quantum devices	1	Daejeon
P-3-1		Kyung Hee University (KHU)	Hybrid Quantum Systems Lab	Quantum Computing, Semiconductor Physics	- Fabrication of graphene and two-dimensional material-based electronic devices and development of single-photon sources for quantum communication	1	Seoul
P-4-1		Chung-Ang University (CAU)	Rare Reaction Particle Detection Laboratory	Particle Astrophysics, AI-Based Data Analysis	- Cosmic-ray muon data acquisition and AI-based reconstruction of muon directionality	1	Seoul
P-5-1		Soongsil University (SSU)	SoNiQ Lab	Quantum Optics	- Development and application of solid-state point-defect-based quantum technologies	1	Seoul
P-5-2		Soongsil University (SSU)	Semiconductor Device Physics Laboratory	Semiconductor Physics, TCAD Simulation	- TCAD simulation of thin-film transistors and analysis of device characteristics	1	Seoul

C-1-1	Chemistry	Korea Institute of Energy Research (KIER)	Hydrogen Fuel Cell Laboratory	Hydrogen Fuel Cells, Electrocatalysts	- Synthesis and characterization of fuel-cell electrocatalysts and evaluation of their performance and durability	1	Daejeon
C-1-2			Energy AI & Computational Science Laboratory	Integrated Hydrogen Fuel Cell Applications, Energy Process and Computational Engineering	- Hydrogen fuel cell and energy process modeling and TEA, LCA, and AI-based analysis	1	Daejeon
C-1-3			Ulsan Advanced Energy Technology R&D Center	Hydrogen Energy, Fuel Cell Systems	- Hydrogen fuel cell system design and LCA-based environmental assessment	1	Ulsan
C-2-1		Korea Institute of Science and Technology (KIST)	Extreme Materials Research Center	Electrochemistry, Environmental Catalysis	- Degradation of aqueous organic pollutants using Fenton and electro-Fenton processes and characterization of electrodes and catalysts	1	Seoul
C-2-2				Chemistry, Environmental Materials	- Eco-friendly water treatment technologies	2	Seoul
C-3-1		Korea Research Institute of Chemical Technology (KRICT)	Center for Bio-based Chemistry	Polymers and Biomaterials	- Production technologies for biomass-derived monomers	1	Ulsan
C-3-2					- Electrochemical production of high-value chemicals from biomass	1	Ulsan
C-4-1		Konkuk University	Laboratory of Organic Synthetic Methodology and Catalyst Development	Photoredox Catalysis, Organic Synthetic Methodology	- Development of organic synthetic methodologies using photoredox catalysts and study of reaction mechanisms	1	Seoul
C-5-1		Ajou University	Sustainable Energy and Electrochemistry Lab	Electrochemistry, Energy Storage Materials	- Development of hybrid organic materials for secondary batteries and evaluation of electrochemical performance	1	Suwon
C-6-1		Sogang University	AI-Quantum Fusion Chemistry Lab	Physical Chemistry, Computational Simulation and Spectroscopy	- AI- and quantum-computing-based prediction of chemical properties and hyperpolarized NMR studies	1	Seoul
C-6-2			Mass Spectrometry Laboratory	Mass Spectrometry, Molecular Dynamics	- LC-MS/MS-based sample analysis and mass spectral interpretation of peptides and small-molecule compounds	1	Seoul
C-6-3			Laboratory for Electrochemical Energy System	Electrochemistry, Secondary Batteries	- Synthesis of next-generation battery materials and evaluation of cell-level electrochemical performance	2	Seoul

C-6-4			Organic Synthesis and Catalysis Laboratory	Organic Chemistry, Homogeneous Catalysis	- Development of nickel-catalyzed cross-coupling reactions and their application to pharmaceutical and functional materials synthesis	1	Seoul
C-6-5			Intelligent Devices & Interface Lab	Physical Chemistry, Interfacial Electrokinetics	- Measurement and analysis of electrokinetic phenomena at solid-liquid interfaces and their applications	1	Seoul
E-1-1	Earth Science	Korea Institute of Geoscience and Mineral Resources (KIGAM)	Mineral Exploration and Mining Research Center	Geophysical Exploration, Electrical Resistivity Exploration	- Inversion and AI-based analysis of MT and DC resistivity data	1	Daejeon
-		Ewha Womans University	Center for Climate/Environment Change Prediction Research	Meteorological/Environmental Satellite Remote Sensing, Disaster Early Warning	- Development of real-time detection and early warning technology for multiple disasters (typhoons, heavy rain, wildfires, etc.) based on meteorological/environmental satellite remote sensing	1	Seoul
L-1-1	Life Sciences	Institute for Basic Science (IBS)	Center for Genomic Integrity	Genome Integrity, DNA Damage Repair	- Analysis of DNA repair mechanisms under replication stress and their correlation with anticancer drug sensitivity	1	Ulsan
L-1-2			Center for Genome Engineering	Organoid Biology, Stem Cell Genetics	- Establishment of cross-species organoids and comparative analysis of biodiversity	3	Daejeon
L-2-1		Korea Basic Science Institute (KBSI)	Research Unit for Molecular Structure and AI	Proteomics, Glycoproteomics, Bioinformatics	- Mass spectrometry and AI-based data analysis of proteomes and glycoproteomes	1	Ochang
L-3-1		Korea Research Institute of Bioscience & BioTechnology (KRIBB)	Biological Resource Center	Microbial Taxonomy, Microbial Genomics	- Polyphasic taxonomic identification and whole-genome analysis for securing valuable microbial resources	1	Jeongeup
L-3-2			Genome Editing Research Center	AI-Based Protein Design, Protein Therapeutics	- Design and production of engineered Wnt proteins and cell-based efficacy evaluation	1	Daejeon
L-4-1		Kookmin University (KMU)	Bio-Nanomaterials Laboratory	Advanced Biotechnology, Nanomedicine and Gene Therapeutics	- Development of biocompatible functional materials for drug delivery applications	2	Seoul
L-5-1		Chung-Ang University (CAU)	Laboratory of Biopharmaceutical Protein Engineering	Plant Biotechnology, Antibody/Vaccine Protein Production	- Development of plant-based bispecific antibody expression and cancer immunotherapy platforms combining dual immunocytokines and antibody therapeutics	1	Seoul