

Young Scientist Research Project - Topic 1

Title	Analysis of food nutritional and functional composition
--------------	--

① Background Information

- **Personnel:** 1 person, A researcher from one of KAFACI member countries
- **Period of Training:** June 2020 ~ November 2020 (6 months)
- **Implementing Department:** Food and Nutrition Division, Department of Agro-food Resources in the National Institute of Agricultural Science
- **Research Studies Currently Being Implemented:**
 - Analysis of food nutritional composition (energy, proximate composition, vitamins, minerals) and establishment of database for publication of Korean Food Composition Table
 - Development of analysis method for functional composition (flavonoids, phenolic acids, saponins) of agricultural products and establishment of database

② Course Description

- **(Training purpose)** Acquisition of food nutritional and functional composition analysis technology (pre-conditioning, extraction, equipment operation, etc.)
 - * Qualitative goal: Acquisition of sample preconditioning and extraction technology (3), Acquisition of operational technology of precision analytical instruments (3)
 - * Quantitative goal: Academic presentation (1), paper submission (1)
- **(Professional capacity building)** Capacity building in basic technology of food composition analysis
- **(Enhancement of self-learning)** Individual capacity enhancement by assisting in carrying out the research projects
- **(Capacity building for future readiness)** Understanding and utilization of food composition analysis technology → Understanding of simultaneous multicomponent analysis and capacity building in data analysis

③ Qualifications of the Trainee

- **(General Requirements)**
 - A government official working in one of KAFACI member countries, and recommended by the head of his/her organization
 - Advanced degree at MSc. (or PhD) level; and at least 5 years of research experience
 - Proficiency in English, and computer applications and operations
- **(Specific Requirements)**
 - A person who has master's (or doctor's) expertise and has research experience
 - *Related Majors: Food Chemistry, Food Engineering, Food and Nutrition, Analytical Chemistry, Natural Products Chemistry
 - A researcher in one of KAFACI member countries who is working on the establishment of National Food Composition Table
 - A researcher who is interested in the field of food nutrition and functional composition analysis
 - A person who is able to use MS-Office and statistical analysis software (R, SAS, SPSS, SIMCA)