

FY2015 Re-Inventing Japan Project The University of Tokyo

Support for the Formation of Collaborative Programs with Latin America and the Caribbean, Turkey

【Name of project】 (Adopted year: FY2015, Country (Central and South America))

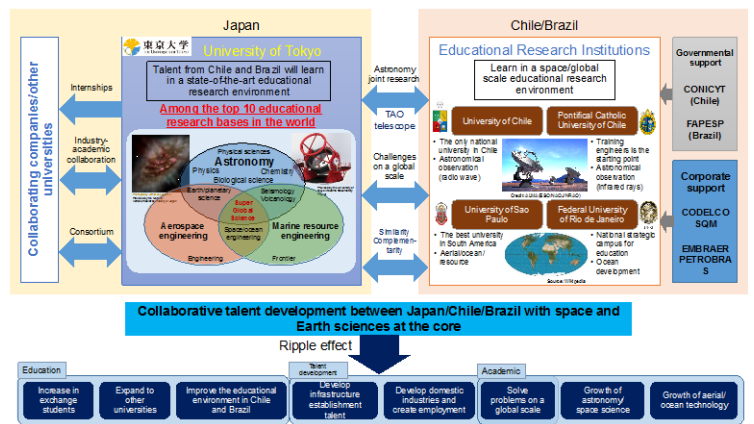
Fostering of students and researchers in science and engineering through Japan-Chile-Brazil collaboration

【Summary of project】

The South American continent is blessed with diversity in its natural environment with a variety of geographical environments and climates including high mountains, volcanoes, deserts, tropical rainforests, as well as characteristic ecosystems which they create. The world is paying attention to this region as a place where further international research activities can be promoted in natural sciences including astronomy, geology, and biology. There is also an ample amount of underground and marine resources which the world is looking forward to developing under international cooperation. Collaborating with this region, which has a high potential to develop talent who in the future will become leaders of the next generation in the fields of natural sciences and resource development from an international perspective, is extremely important.

The University of Tokyo has already been promoting research exchanges through joint research and academic forums between the School of Science and the University of Chile/Pontifical Catholic University of Chile (Republic of Chile), as well as between the School of Engineering/Graduate School of Frontier Sciences and the University of Sao Paulo/Federal University of Rio de Janeiro (Federative Republic of Brazil).

This project will expand the field of exchange even further, enrich the inter-university exchanges utilizing the rich natural environment and resources of the South American continent based on collaboration with Chile and Brazil, develop young talent, and establish a model for research and talent exchange between Japan and the South American countries.



【Summary of exchange program】

The undergraduate and graduate students from the universities in Chile and Brazil will be accepted into the University of Tokyo, and in exchange, the science and technology students from the University of Tokyo will be sent to the four exchange partner universities. Under a tight system of collaboration, internships with related companies will also be utilized in order to develop young talent. The specifics are as follows:

<Challenging program into the uncharted territories of natural sciences>

Mutual student exchange program in the field of astronomy/space science, as well as related earth and planetary science/biology/chemistry/physics, utilizing the world's largest and highest-performance telescope, the TAO infrared telescope, which is being built in the Atacama Desert of the Republic of Chile, a site perfectly suited for astronomical observation, as well as the ASTE submillimeter telescope, etc.

<Development program of aerial exploration techniques>

Student exchange and hands-on internship under the framework of international industry-academic collaboration based on aerial/satellite technology.

<Development program of rich ocean floor resources>

Education through remote lectures and internships with resource development companies through collaboration with Brazil, which has a high technological capacity for ocean floor resource development as demonstrated by the progress made in the development of untouched oil fields under the bedded-salt deep under the ocean floor.

【Global human resource on the project】

Develop talent with internationality, a comprehensive perspective, and deep knowledge of the natural sciences, who understand the importance of sustainability of the natural environment and Earth's resources, and who are able to realize, from an international perspective, technological development and resource exploration that are in balance with the environment.

【Feature on the project】

The program is designed to effectively instill in participants the ability to take an active role on the global stage by supporting the exchange of science and technology students within the state-of-the-art technology fields of the universities in Chile and Brazil, which have a record of academic exchanges, in the fields of research and development for which our university is at a top level, such as astronomical observations in Atacama desert, thermal hydraulic engineering research, micro satellite development, marine energy technology, and deep sea exploration technology.

	2015								2016								2017							
	A	Bo	Br	Ch	Co	M	Pa	Pe	A	Bo	Br	Ch	Co	M	Pa	Pe	A	Bo	Br	Ch	Co	M	Pa	Pe
Outbound			8	8							6	5							5	6				
Inbound											5	6							6	5				
	2018								2019															
	A	Bo	Br	Ch	Co	M	Pa	Pe	A	Bo	Br	Ch	Co	M	Pa	Pe								
Outbound			5	6							6	5												
Inbound			6	5							5	6												

A: Argentina Bo: Bolivia Br: Brazil Ch: Chile Co: Colombia M: Mexico Pa: Panama Pe: Peru