

UNESCO/POLAND CO-SPONSORED FELLOWSHIPS PROGRAMME 2016

List of Invited Member States per region and field of research as determined by the Polish authorities

Project No.	FIELD OF RESEARCH/PROJECT TITLE (Number of Fellowships)	INVITED MEMBER STATES PER REGION	LIMIT OF AGE	ACADEMIC REQUIREMENT
01	Drilling Engineering (2) Drilling and hydraulic fracturing	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 40 years of age	B.Sc or M.Sc degree in engineering preferably in petroleum, earth engineering, physics, mathematics or computer sciences.
02	Geophysics or Physics (1) Study of radionuclides and rare elements deposits	Africa, Asia and the Pacific	no more than 35 years of age	B.Sc degree Principle knowledge about rare and radioactive deposits and preferable for candidates with solid and water samples collected from deposits in his country.
03	Decision Engineering. (2) Problem base engineering	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 40 years of age	B.Sc or M.Sc degree Be able to use MS Office and drawing programs; a general knowledge related to engineering problems.
04	Automation in Mining Devices (4) Mining devices automation	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 40 years of age	B.Sc or M.Sc degree in automation, mining devices
05	Mining devices (4) Selected problems in operation of mining devices	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 40 years of age	B.Sc or M.Sc degree in engineering, mining devices.
06	Transport Engineering (4) Availability problems in transportation systems and devices (2)	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 40 years of age	B.Sc or M.Sc degree (06) Be able to write computer programs, for example, be familiar with CAD/CAM/CAE; A general knowledge related to transportation programmes, including safety and reliability problems.
07	Transport System Telematics (2)			(07) Candidates should have degree in mechanical/ transport engineering/ automation; be familiar transport telematics; be able to analyse reliability, maintain ability and availability of machine maintenance as well as modelling.
08	Manufacturing Transport Engineering (2) Transportation technology system and devices.	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 40 years of age	B.Sc or M.Sc degree Be able to write computer programs (be familiar with CAD/CAM/CAE), have a general knowledge related to transportation programmes, including safety and reliability problems.
09	Sensor Engineering (1) Inter-digital Piezoelectric transducers in Structural Health monitoring.	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 30 years of age	B.Sc or M.Sc degree Experienced in the field of Piezoelectric transducers and general knowledge in ultrasound, sensor engineering, signal processing.
10	Economic Sociology and Economics (1) Interrelations between new technologies and social, economic life in globalizing world.	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 35 years of age	B.Sc or M.Sc degree in humanities or Social sciences or economy General knowledge in world economics
11	Foundry Engineering (1) Ecological assessment of the polymer binder in the form: copolymer of maleinic acid/modified polysaccharide.	Europe, Latin America and the Caribbean	no more than 25 years of age	B.Sc degree General knowledge in chemistry of polymers engineering, environmental harmful substances.

Project No.	FIELD OF RESEARCH/PROJECT TITLE (number of fellowships)	INVITED MEMBER STATES PER REGION	LIMIT OF AGE	ACADEMIC REQUIREMENT
12	Foundry Engineering (3) Influence of cerium on the morphology of non-metallic inclusion in microralloyed steel (1)	Asia and the Pacific and Europe	no more than 40 years of age	B.Sc or M.Sc degree General knowledge in steel metallurgy materials engineering, physics and mathematics.
13	Evolution of chemical composition of non-metallic precipitates generated in the process of the de-oxidization and modification of lanthanum steel (1).			
14	Influence of the neodymium on the morphology of non-metallic inclusion in steel (1).			
15	Geology (6) Geological characteristic of tin deposit in Africa. (4)	Africa, Asia and the Pacific	no more than 30 years of age	B.Sc or M.Sc degree Basic knowledge on mineral deposits and general knowledge in geology and optical mineralogy.
29	Geological characteristic of chromite deposit in Balkan. (1)	Africa, Asia and the Pacific and Europe	same as above	Basic knowledge on mineral deposits. General knowledge in geology is required; and optical mineralogy is welcome.
30	Geological characteristic of metallic deposit in Balkan. (1)	Africa, Asia and the Pacific and Europe	no more than 35 years of age	Basic knowledge on mineral deposits; general knowledge in geology is required; knowledge in optical mineralogy is welcome.
16	Computer Vision (2) Research in computer vision and cognitive robotics.	Asia and the Pacific	no more than 25 years of age	B.Sc or M.Sc degree Very good background in mathematics, interest in computer science, particularly in computer vision and robotics. General knowledge of programming C/C++, Matlab or Python; basic knowledge of image processing and analysis technics. Strong background in mathematics particularly in linear algebra.
17	Materials Science (6) Advanced ceramic materials-synthesis, properties and possible application (2).	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 30 years of age	B.Sc or M.Sc degree in materials science or chemistry. General knowledge in materials science, (especially in ceramic technology of porous materials). Be able to work in a group, good communication skills, be highly motivated, innovative with some experimental and process development skills and an open-minded approach to new ideas and concepts.
18	Granular metals-fabrication characterization and modelling. (2)			B.Sc or M.Sc degree in Chemistry, Physics or material engineering. General knowledge in Chemistry and Physics. Be able to work in group and have good communication skills
19	Electrochemically Engineered Materials– synthesis, properties and possible application. (2)			B.Sc or M.Sc degree in Chemistry or material engineering. General knowledge in chemistry, especially in electrochemical method of obtaining nanostructured materials.
20	Nanotechnology (1) MOS2 based thin films for solar energy conversion.	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 30 years of age	B.Sc or M.Sc degree in Physics, chemistry or material engineering. General knowledge in thin films, solid states physics and chemistry, methods of thin films elaboration; scientific approach to the problem; be able to work in group and good communications skills.

Project No.	FIELD OF RESEARCH/PROJECT TITLE (number of fellowships)	INVITED MEMBER STATES PER REGION	LIMIT OF AGE	ACADEMIC REQUIREMENT
21	Composite Materials (1) Local in situ composite reinforcements in ferrous casting for abrasive wear resistance enhancement	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 40 years of age	B.Sc or M.Sc degree in Materials Science/Materials Engineering/Metallurgy or similar subjects. General knowledge in materials investigation techniques (e.g. x-ray diffraction, electron microscopy)
22	Computer Vision (2) Embedded implementation of selected vision algorithms using heterogeneous Zynq SoC (System on Chip) devices	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 30 years of age	B.Sc or M.Sc degree Candidates should have background in : computer science (mainly programming in C/C++/Python/Matlab/Open CV and general algorithms); basic skills in computer vision, embedded systems 5ARM processor programming and Linux OS) and FPGA devices (e.g. VHDL or Verilog, Xilinx FPGA devices, Xilinx Zynq devices, Xilinx tools like ISE, Vivado, SDK). Only the Computer Science is mandatory, however others will greatly help finishing the project (no additional time for studying this subjects will be required).
23	Geology and Mining (1) Analysis of use geothermal waters for energetical purposes	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 40 years of age	B.Sc or M.Sc degree Engineering background in one of the following fields: mining and geology, heat transfer, civil engineering.
24 25 27 28	Gas Engineering (8) Design of compressed air energy storages in salt caverns (2) Reservoir fluid recombination in conventional and unconventional gas-condensate wells (2) Optimization of the gas-condensate reservoir exploitation in the recovery of ethane and LPG (2) Nodal analysis for unconventional tight gas reservoirs. (2)	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 35 years of age	B.Sc or M.Sc degree in petroleum engineering, geoscience, gas engineering or mechanical engineering.
26	Geotourism (2) Selected geological objects and their geotouristic values.	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than 40 years of age	B.Sc or M.Sc degree in geology geophysics and environmental protection.
	Total positions: 53			

Please refer to the list of invited Member States entitled to submit applications hereunder:

List of Invited Member States (121)

AFRICA

(46 Member States)

- Angola
- Benin
- Botswana
- Burkina Faso
- Burundi
- Cameroon
- Cape Verde
- Central African Republic
- Chad
- Comoros
- Congo
- Côte d'Ivoire
- Democratic Republic of the Congo
- Djibouti
- Equatorial Guinea
- Eritrea
- Ethiopia
- Gabon
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Kenya
- Lesotho
- Liberia
- Madagascar
- Malawi
- Mali
- Mauritius
- Mozambique
- Namibia
- Niger
- Nigeria
- Rwanda
- Sao Tome and Principe
- Senegal
- Seychelles
- Sierra Leone
- Somalia
- South Africa
- Swaziland
- Togo
- Uganda
- United Republic of Tanzania
- Zambia
- Zimbabwe

ASIA AND THE PACIFIC

(35 Member States)

- Afghanistan
- Bangladesh
- Bhutan
- Brunei Darussalam
- Cambodia
- China
- Fiji
- India
- Indonesia
- Kazakhstan
- Kiribati
- Kyrgyzstan
- Lao People's Democratic Republic
- Malaysia
- Maldives
- Mongolia
- Myanmar
- Nauru
- Nepal
- Niue
- Pakistan
- Palau
- Papua New Guinea
- Philippines
- Samoa
- Sri Lanka
- Tajikistan
- Thailand
- Timor-Leste
- Tonga
- Turkmenistan
- Tuvalu
- Uzbekistan
- Vanuatu
- Viet Nam

EUROPE

(9 Member States)

- Armenia,
- Azerbaijan,
- Bosnia and Herzegovina
- Croatia
- Georgia,
- Republic of Moldova
- The former Yugoslav Republic of Macedonia
- Turkey
- Ukraine

LATIN AMERICA AND THE CARIBBEAN

(31 Member States)

- Argentina
- Barbados
- Belize
- Bolivia (Plurinational State of)
- Brazil
- Chile
- Colombia
- Costa Rica
- Cuba
- Dominica
- Dominican Republic
- Ecuador
- El Salvador
- Grenada
- Guatemala
- Guyana
- Haiti
- Honduras
- Jamaica
- Mexico
- Nicaragua
- Panama
- Paraguay
- Peru
- Saint Kitts and Nevis
- Saint Lucia
- Saint Vincent and the Grenadines
- Suriname
- Trinidad and Tobago
- Uruguay
- Venezuela (Bolivarian Republic of)