

## What is it about?

Deadline for submission of applications should be on or before **14 April 2017** at the latest with advance copy by email.

With a view to promoting human resource capacities in the developing countries and to enhancing international understanding and friendship among nations and the people of Poland, the Polish National Commission for UNESCO and the **UNESCO Chair for Science, Technology and Engineering Education at the AGH University of Science and Technology in Krakow** have placed at the disposal of certain Member States (see Annex I) **forty (40)** fellowships of **six (6)** months duration each, in Poland, starting on 2 October 2017. The beneficiaries of these fellowships will be given the opportunity to undertake an individual research programme in the field of **Science, Technology and Engineering**. For more information please visit also <http://www.unesco.agh.edu.pl/en/> .

**Field of Research (Please refer to the list of invited Member States entitled to submit applications hereunder)**

## ANNEX I

## UNESCO/POLAND CO-SPONSORED FELLOWSHIPS PROGRAMME 2017

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	<b>Decision Engineering (2)</b> Problem base engineering	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>40</b> 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.
02	<b>Automation in Mining Devices (4)</b> Mining devices automation	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>40</b> years of age	B.Sc. or M.Sc. degree in Eng. Principle knowledge about automation in mining devices.
03	<b>Mining devices (4)</b> Selected problems in operation of mining devices	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>40</b> years of age	B.Sc. or M.Sc. degree in Eng. Principle knowledge about mining devices.
04	<b>Transport Engineering (4)</b> Availability problems in transportation systems and devices (2)	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>40</b> years of age	B.Sc. or M.Sc. degree (04) 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 mechatronics.  (05) 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 modeling.
05	Transport System Telematics (2)			
06	<b>Manufacturing Transport Engineering (2)</b> Transportation technology system and devices.	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>40</b> 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.
07	<b>Drilling Engineering (2)</b> Drilling and hydraulic fracturing	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>40</b> years of age	B.Sc. or M.Sc. degree in Eng. Principle knowledge in engineering preferably in petroleum, earth engineering, physics, mathematics or computer sciences. Be able to solve problems using mathematical methods.
08	<b>Sociology/ Economic Sociology and Economics (1)</b> Interrelations between new technologies and social, economic life in globalizing world.	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>35</b> years of age	B.Sc. or M.Sc. degree in humanities or social sciences or economy General knowledge in world economics
09	<b>Sociology/ Humanities, Political Sciences; Sociology (1)</b> Social and Political Dimensions of the Cyberspace.	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>40</b> years of age	B.Sc. or M.Sc. degree in humanities or social sciences or economy General knowledge in internet: Social Media.
10	<b>Foundry Engineering/ Polymers in foundry engineering Aluminosilicate in green sands system, moulding and green sands (1)</b> Analysis of selected properties of the polysaccharide - aluminosilicate binder in sand grains	Asia and the Pacific, Latin America and the Caribbean	no more than <b>25</b> years of age	B.Sc. or M.Sc. degree in foundry or metallurgical engineering, materials engineering. General knowledge in chemistry of polymers and aluminosilicate, materials engineering, foundry engineering
11	<b>Foundry Engineering/ Continous casting of steel, solidification, modelling of generation process of non-metallic inclusion (2)</b> Modelling of the generation process of non-metallic inclusion in CCS	Asia and the Pacific, Latin America and the Caribbean	no more than <b>30</b> years of age	B.Sc. or M.Sc. degree studies in computer science, specialty programming. General knowledge in programming for and automated systems: Programming languages: Delphi, HTML; Programming tools: Microsoft Visual C++.

Project No.	FIELD OF RESEARCH/PROJECT TITLE (number of fellowships)	INVITED MEMBER STATES PER REGION	LIMIT OF AGE	ACADEMIC REQUIREMENT
12	<b>Programming Languages/ Delphi, HTML; Programming tools: Microsoft Visual C++, metallurgy, steelmaking process (2)</b> <i>Modeling of the removal of non-metallic inclusions to slag</i>	Asia and the Pacific, Latin America and the Caribbean	no more than <b>32</b> years of age	B.Sc. or M.Sc. degree studies in computer science, specialty programming. General knowledge in programming for and automated systems. Programming languages: Delphi, HTML; Programming tools: Microsoft Visual C++.
13	<b>Ceramics Composites/ Ceramics matrix Composites (1)</b> <i>Refractory Metal Silicides for Ceramic-Ceramic Joining</i>	Asia and the Pacific	no more than <b>35</b> years of age	B.Sc. or M.Sc. degree General knowledge in material science and/or physics.
14	<b>Geology/ Mineralogy, Geochemistry (6)</b> <i>Tungsten deposit in Rwanda (1)</i>	Africa	no more than <b>40</b> years of age	B.Sc. or M.Sc. degree in materials science or chemistry. General knowledge in geology, mineralogy, geochemistry, mineral deposit
15	<i>Stratiform copper deposit in Iran (1)</i>	Asia and the Pacific	no more than <b>35</b> years of age	B.Sc. or M.Sc. degree in materials science or chemistry. General knowledge in geology, mineralogy, geochemistry, mineral deposit
19	<i>REE deposit in Viet Nam (1)</i>	Asia and the Pacific	no more than <b>35</b> years of age	(same as above)
20	<i>Tin deposit in Central Africa (1)</i>	Africa	no more than <b>35</b> years of age	(same as above)
21	<i>Chromite deposit in Viet Nam (1)</i>	Asia and the Pacific	no more than <b>35</b> years of age	(same as above)
22	<i>Pb-Zn deposit in Viet Nam (1)</i>	Asia and the Pacific	no more than <b>40</b> years of age	(same as above)
16	<b>Geology (3)</b> <i>Epithermal base to precious metal mineralization in the Iranian Orogenic Belts (1)</i>	Asia and the Pacific	no more than <b>35</b> years of age	B.Sc. or M.Sc. degree. General knowledge in Iranian Geology and ore deposits; be familiar with EMPA and EDX analyses; student of economic geology; general knowledge on volcanic connected ore deposits; available to read and speak Farsi; Own samples for studying are REQUIRED.
17	<i>PB-Zn deposit in Iran: Geological, Mineralogy and Geochemical characteristics (1)</i>	Asia and the Pacific	no more than <b>35</b> years of age	(same as above)
18	<i>Genetic type of nickel deposits in Iran. Mineralogy and Geochemical characteristics (1)</i>	Asia and the Pacific and Arab States	no more than <b>35</b> years of age	(same as above)

Project No.	FIELD OF RESEARCH/PROJECT TITLE (number of fellowships)	INVITED MEMBER STATES PER REGION	LIMIT OF AGE	ACADEMIC REQUIREMENT
23	<b>Computer Vision (2)</b> Online Footstep Planning and navigation on Uneven Terrain for Humanoid Robot (1)	Asia and the Pacific	no more than <b>26</b> years of age	B.Sc. or M.Sc. Very good background in Mathematics General knowledge in digital signal processing, robotics, and/or computer vision, and/or machine learning Preference will be for students with good knowledge in both: in computer science and mechatronics. Good programming skills in Matlab, Python and C++ are required. Good knowledge of V-REP robot simulator is required.
24	3D Hand Pose Estimation. (1)	Latin America and the Caribbean	no more than <b>26</b> years of age	General knowledge in digital signal processing, and/or computer vision, and/or machine learning. Preference will be for students with good knowledge in electronics. Good programming skills in C++, Python, Matlab are required
25	<b>Geotourism (2)</b>	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>30</b> years of age	B.Sc. or M.Sc. degree in geology, geography and/ or tourism.
26	<b>Gas and Oil Engineering (7)</b> Nodal analysis for unconventional tight gas reservoirs (2)	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>35</b> years of age	B.Sc. or M.Sc. degree in petroleum engineering, geoscience, gas engineering or mechanical engineering.
27	Optimization of the gas-condensate reservoir exploitation in the recovery of ethane and LPG (2)			
28	Reservoir fluid recombination in conventional and unconventional gas-condensate wells (2)			
29	Design of compressed air energy storages in salt caverns (1)			
30	<b>Gas Engineering (2)</b> Selected geological objects and their geotouristic values.	Africa, Asia and the Pacific, Latin America and the Caribbean	no more than <b>35</b> years of age	B.Sc. or M.Sc. degree in petroleum engineering, geoscience, gas engineering or mechanical engineering.
31	<b>Ceramic and Material Engineering/material engineering education (2)</b> Advanced Ceramic Materials.	Africa, Asia and the Pacific	no more than <b>40</b> years of age	B.Sc. or M.Sc. General knowledge in ceramic engineering.
	<b>Total positions: 50</b>			

Please refer to the list of invited Member States entitled to submit applications hereunder. Candidates from Europe (8 Member States) can apply for all project proposals.

List of invited Member States entitled to submit applications

## List of Invited Member States (122)

### 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

### ARAB STATES

(2 Member States)

- Iraq
- Syrian Arab Republic(the)

### ASIA AND THE PACIFIC

(36 Member States)

- Afghanistan
- Bangladesh
- Bhutan
- Brunei Darussalam
- Cambodia
- China
- Fiji
- India
- Indonesia
- Iran (the Islamic Republic of)
- 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

(8 Member States)

- Armenia,
- Azerbaijan,
- Bosnia and Herzegovina
- Croatia
- Georgia,
- Republic of Moldova
- Turkey
- Ukraine



### Qualifications Required

The required qualifications for each field of research (project) are as per the attached annexes to this letter of announcement. (see [Annex I](#) )

### Facilities offered by Polish Authorities

(i) Free tuition and access to the university facilities based on the local regulations.

Accommodation at the AGH UST Student Campus organised for fellows by the UNESCO AGH Chair.

(ii) Monthly allowance of **1600 PLN** (1 USD = approximately 4,0 PLN) corresponding to the salary of a local junior research fellow. Thus, all living expenses and accommodation in Poland are to be borne by the fellow with this allowance; and; (iii) A one-time special allowance of **1600 PLN** to be paid upon arrival in Poland, this sum will cover different activities related to your stay in Krakow, such as an obligatory medical check-up upon arrival (in accordance with the internal regulations for all students); cultural, historical and/or touristic visits, conferences, workshops, and seminars related to your studies.

**No provision to finance or lodge family members is made.**

At the end of the research studies, the beneficiaries will receive a certificate attesting to their attendance at the host institution, this certificate will be given after receipt of the requested reports and financial clearance from the Institution.

### Facilities offered by UNESCO

(i) International travel expenses: (by the most direct, economical route) from the beneficiary's country to and from Poland will be covered by UNESCO under its Regular Programme Budget.

(ii) Health insurance for fellowship beneficiaries who are declared medically fit: UNESCO fellowship holders may be covered by a health insurance policy, taken-out by the Organization for the duration of fellowship. The costs of this health insurance is subscribed to and covered by UNESCO on behalf of awarded fellows.

**\*ONLY THE SELECTED CANDIDATES WILL BE REQUIRED TO SEND TO THE PARTICIPATION PROGRAMME AND FELLOWSHIPS SECTION A COMPLETE MEDICAL DOSSIER, THE PRESCRIBED FORM OF WHICH WILL BE SENT ALONG WITH THE LETTER OF AWARD.**

### Submission of applications

**Candidatures** should be submitted by the invited Member State. **Original applications in duplicate** must be channelled through the National Commission for UNESCO of the candidate's country and communicated to Mr Stoyan Bantchev, Chief, Participation programme and Fellowships Section, **by 14 April 2017 at the latest (GMT +01:00)** to UNESCO mailing address. An advance copy of the application should be sent by fax (33.1) 45.68.55.03 or by e-mail [unesco3@agh.edu.pl](mailto:unesco3@agh.edu.pl); [s.bantchev@unesco.org](mailto:s.bantchev@unesco.org);

b.qin@unesco.org and l.zas-friz@unesco.org. Applications should have **imperatively** the following attachments in **DUPLICATE**:

(i) UNESCO fellowships application forms, including medical certificate, **ALL four (4) pages** duly completed **in English using capital letter** (illegible documents will be eliminated from the procedure, hand writing form must include capital letter only);

(ii) Two photographs attached to the applications (4x6 cm);

(iii) Certified copies (**in English**) of Bachelor's or Master's Degree/ PhD obtained; and,

(iv) UNESCO certificate of language knowledge, duly completed by a relevant authority, if the mother tongue of the candidate is not English.

(v) Two letters of recommendation from someone related to the candidate's work, as well confirming the candidate's qualifications.

(vi) The endorsed candidates should register themselves to the Fellowship e-registration system available on the page: <http://www.unesco.agh.edu.pl/en/> .

**Deadline 14 April 2017 at the latest**

**IMPORTANT**

It is the National authority's responsibility to ensure that all candidates are duly informed of the above-mentioned conditions prior to the submission of applications.

Files which are incomplete or which are received after the deadline as well as candidatures that do not fulfil the requirements will not be taken into consideration.

**Only the selected candidates will receive a letter through their respective National Commissions for UNESCO.**

All application should be endorsed by the National Commission from the country of the candidate.

All correspondence should be in English.

### **Visas**

Fellows, from countries where Polish Embassies or Consulates exist, will have to obtain their entry visa to the country of study prior to their departure. Fellows, from countries where no such Embassy or Consulate exists, must secure their visa through the nearest Embassy of the Republic of Poland.

UNESCO and the Government of the Republic of Poland **provide no allowance** to defray passport and visa expenses. Selected beneficiaries will have **to secure their own visas themselves**.