

AGH University of Science and Technology, KRAKOW, POLAND
UNESCO CHAIR FOR SCIENCE, TECHNOLOGY AND ENGINEERING
EDUCATION AT THE AGH UNIVERSITY OF SCIENCE AND TECHNOLOGY
KRAKOW, POLAND

A. Mickiewicza Ave 30, PL 30-059 Krakow, Poland
E-mail: unesco@agh.edu.pl

List of projects proposal
Polish National Commission for UNESCO Fellowship Programme
in Engineering edition 2014 B (AGH UST)
Call for submission – Annex 01

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 at the AGH University of Science and Technology in Krakow are inviting to submit the interest with the Fellowship Programme (Ph.D. type) in English language only starting from 1st October 2014 for the benefit of States listed in Annex 02. Beneficiaries of these fellowships will be given the opportunity to undertake an individual research programme under supervision of tutor in the field of the Science, Technology and Engineering. Reported applications will be subject to acceptance in accordance with the procedure.

ID-35-PL-AGH. Field of research: Environmental Protection Engineering. **Project title:** Laser biotechnology for sustainable development of regions and adaptation of environmental management to climatic change. **Name of institution:** AGH University of Science and Technology, A.Mickiewicza Av. 30, PL 30-059 Krakow, Poland (www.agh.edu.pl). **Academic requirements:** Candidates should have a M.Sc. degree, proper knowledge in ecology, environmental biology and biotechnology, skills for experimental studies connected with environmental biology and biotechnology and interest in interdisciplinary and innovative approach for solving environmental problems and promotion bio-based green economy. **Qualifications required:** be proficient in reading and writing in English; be not more than 40 years of age; and be in good health, both physically and mentally, be able to take part both in laboratory and field experimental studies as well as good practice in preparation and presentation scientific reports, papers; have written two authorized recommendations confirming the candidate's qualifications, as well as adequate knowledge and skills for this project.

ID-36-PL-AGH. Field of research: Electronics and Information Technology. **Project title:** Improvement of computational efficiency of multicores. **Name of institution:** AGH University of Science and Technology, A.Mickiewicza Av. 30, PL 30-059 Krakow, Poland (www.agh.edu.pl). **Academic requirements:** candidates should have a M.Sc. **Qualifications required:** be very good in reading and writing in English; be not more than 40 years of age; and be in good health, both physically and mentally; be able to solve problems using mathematical methods; have written two authorized recommendations confirming the candidate's qualifications.

ID-37-PL-AGH. Field of research: Transport Engineering. **Project title:** Transportation processes control and scheduling in container logistic centre. **Name of institution:** AGH University of Science and Technology, A.Mickiewicza Av. 30, PL 30-059 Krakow, Poland (www.agh.edu.pl). **Academic requirements:** candidates should have a M.Sc. **Qualifications**

Polish National Commission for UNESCO Fellowship Programme in Engineering edition 2014 B (AGH UST)

UNESCO CHAIR FOR SCIENCE, TECHNOLOGY AND ENGINEERING EDUCATION AT THE AGH UNIVERSITY OF SCIENCE
AND TECHNOLOGY KRAKOW, A. Mickiewicza Ave 30, PL 30-059 Krakow, Poland; E-mail: unesco@agh.edu.pl

List of projects proposal - call for submission

required: be proficient in reading and writing in English; be not more than 40 years of age; and be in good health, both physically and mentally; be able to write computer programs (for example in ProEngineer, or be familiar with MatlabSimulink, or CA-D/M, FEM), have a general knowledge related to telematics in transportation, construction testing and measurement, be able to solve problems using mathematical methods; have written two authorized recommendations confirming the candidate's qualifications.

ID-38-PL-AGH. Field of research: Mechanical Engineering. **Project title:** Methodology for the redesign of components of public transportation systems in order to improve its sustainability. **Name of institution:** AGH University of Science and Technology, A.Mickiewicza Av. 30, PL 30-059 Krakow, Poland (www.agh.edu.pl). **Academic requirements:** candidates should have a M.Sc. degree and have at least 1 scientific publication in an international journal (in English). **Qualifications required:** be proficient in reading and writing in English; be not more than 40 years of age; and be in good health, both physically and mentally; be able to write computer programs for example in C++, or be familiar with python, MatlabSimulink, be familiar with use of FEA and CAD/CAM software/ with the design of mechanical elements; have written two authorized recommendations confirming the candidate's qualifications.

ID-39-PL-AGH. Field of research: Mechatronics. **Project title:** Photonic based smart sensors design using SWCNT for structural health monitoring applications. **Name of institution:** AGH University of Science and Technology, A.Mickiewicza Av. 30, PL 30-059 Krakow, Poland (www.agh.edu.pl). **Academic requirements:** candidates should have a M.Sc. degree; should has a basic knowledge in optics and nanotechnology. **Qualifications required:** be proficient in reading and writing in English; be not more than 40 years of age; and be in good health, both physically and mentally; be able to make an experimental research in laboratory and should be familiar with computer modeling and simulation methods; have written two authorized recommendations confirming the candidate's qualifications.

ID-40-PL-AGH. Field of research: Mechatronics. **Project title:** Electromechanical impedance tomography for structural health monitoring of fiber reinforced composite structures. **Name of institution:** AGH University of Science and Technology, A.Mickiewicza Av. 30, PL 30-059 Krakow, Poland (www.agh.edu.pl). **Academic requirements:** candidates should have a M.Sc., should has a basic knowledge in optics and nanotechnology. **Qualifications required:** be proficient in reading and writing in English; be not more than 40 years of age; and be in good health, both physically and mentally; be able to make an experimental research in laboratory and should be familiar with computer modeling and simulation methods; have written two authorized recommendations confirming the candidate's qualifications.

ID-41-PL-AGH. Field of research: Environmental Protection. **Project title:** Radiological impacts of copper mining on the environment. **Name of institution:** AGH University of Science and Technology, A.Mickiewicza Av. 30, PL 30-059 Krakow, Poland (www.agh.edu.pl). **Academic requirements:** candidates should have a M.Sc., should has a basic knowledge in nuclear physics or geophysics, chemist. **Qualifications required:** be proficient in reading and writing in English; be not more than 40 years of age; and be in good health, both physically and mentally; be able to make an experimental research in laboratory and should be familiar with computer modeling and simulation methods; have written two authorized recommendations confirming the candidate's qualifications.