



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
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UNESCO AGH Fellowships ed. 2012-B in Engineering
Project Proposal for 6 months

Naukowa oferta stypendialna UNESCO - AGH 2012 B
dla młodych naukowców z krajów rozwijających

UNESCO - AGH 2012 Project B: promoting human resource capacities in the developing countries through intensive training and to enhancing international understanding and friendship among peoples of the world and the people of Poland

(In English only)

1. Project title: Analysis of Hydraulic Fracturing Process

Field of research: Drilling

Number of fellowships with free tuition sponsored by UNESCO: 1

2. Name of institution: AGH University of Science and Technology,
Faculty of Drilling, Oil and Gas

Full address: A.Mickiewicza Av. 30, PL 30-059 Krakow, Poland

3. Name and Surname, title and full contact data of project supervisor:

Dariusz Knez Ph.D

Tel.: +48 12 6173784.....

Fax: +48 12 6173784.....

E-mail: knez@agh.edu.pl.....

WWW: www.agh.edu.pl/en.....

4. Project duration: 6 months

Proposed starting date: 1.10. 2012 (exact date to be agreed upon by the selected fellows and host institution)

Language: English

Scientific contents: individual research programme under supervision of tutor (see page p.8)

5. Developing countries (specification): UNESCO Member States - please specify countries or region (Asia, Africa, Latin America, Caribbean and Pacific)
All regions

6. Academic requirements: Candidates should have a B.Sc. or M.Sc. degree,
please specify in more details
Preferably in earth engineering or computer sciences.

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7. Qualifications required: *for example*

*be proficient in reading and writing in English;
be not more than ...45.... years of age; and be in good health, both physically
and mentally;.....*

8. Project description (in English):

R&D results: project description optional:

Fellow will take part in research carried out in Drilling and Geoengineering Department. Hydraulic fracturing method is one of the most important stimulation techniques. In low permeability reservoirs conventional completion methods are not cost effective. Because of significant increase in oil and gas prices such difficult to completion reservoirs become more interesting. In past years hydraulic fracturing was applied as most efficient method to increase oil and gas production from formations like tight sandstone and shale. Successful candidate will work with professional software from leading drilling companies. He will also take part in developing new software. The goal of research is to find best range of technological factors influencing hydraulic fracturing performance. Computer skills will be an advantage.

other outputs:

laboratory research results

scientific paper

9. Others information:

Stamp of the AGH UST Faculty

Project Supervisor
(signature)

[Signature]

Dean of the Faculty
(signature and stamp) | GZU

Dr hab. inż. Stanisław MAGA, prof. AGH

Place and date: Krakow, January ...7-th, 2012