Dear Colleagues,

We invite you to participate in the GIREP EPEC 2015 International Conference.

The University of Wrocław is proud to organize the GIREP EPEC 2015, and we will do our best to make it both fruitful and enjoyable. The GIREP EPEC 2015 will be an opportunity not only to present the results of your work, but also to communicate and discuss common research topics with colleagues. The main theme of the conference is "Key Competences in Physics Teaching and Learning". There are eight Key Competences defined (EUR-Lex. (2006). Official Journal L 394/10 of 30.12.2006):

- Communication in the mother tongue.
- Communication in foreign languages.
- Mathematical competence and basic competencies in science and technology.
- Digital competence.
- Learning to learn.
- Social and civic competencies.
- Sense of initiative and entrepreneurship.
- Cultural awareness and expression.

Key Competences (KC) in the shape of knowledge, skills and attitudes appropriate to each context are fundamental for every individual in a society. The Key Competences are all interdependent and intertwine different aspects such as critical thinking, creativity, initiative, problem solving, risk assessment, decision taking and constructive management of feelings. All of them appear crucial in nowadays educational environment.

KC serve as a reference tool for European Union countries to ensure full integration into their strategies and infrastructures, particularly in the context of lifelong learning. As KC cover wide range of human activity they might guarantee more flexibility in the labour market, supporting adaption to constant changes in an increasingly interconnected world. They are also recognized as a major factor in innovation and motivation of workers as well as in improving a quality of work. The essence of KC is that they should be acquired by young people at the end of their compulsory education and training. This will equip them for adult life, particularly for working life by forming a basis for further learning. In parallel adults should achieve KC throughout their lives in a process of developing and updating skills. The acquisition of KC fits in with the principles of equality and access for all. This reference framework applies in particular to disadvantaged groups whose educational potential requires support. The perfect media to support the process of teaching and learning and to help in overcoming diversity of the target groups seems to be the Information and Communication Technology (ICT).

A great impact of ICT in educational processes is especially visible in physics teaching and learning. Physics is considered as a subject which main interest is directly and strongly connected not only to digital competence but also to several other Key Competences. During the meeting we will discuss the problem how these competences can be taught and how students can acquire them.

Main Theme: Key Competences in Physics Teaching and Learning

Domains:

- Researching formation of Key Competences in physics teaching and learning – new research approaches, new methods, innovative learning strategies, new models
- Key Competences changing pedagogy – formative assessment, teacher role, student role, KC oriented assessment, shared pedagogy, KC oriented pedagogy
- Developing of Key Competences – examples of good practices
- …

Highlighting these topics does not mean underestimating or neglecting other important aspects of physics education research and practice.

The scientific program committee invites proposals for oral presentations, symposia, workshops and posters from a broad range of topics concerning different aspects of the essential knowledge, skills and attitudes related to physics teaching and learning.

Further details on electronic submission, registration and accommodation will be provided on the Conference Web Site:

www.girep2015.ifd.uni.wroc.pl

or through
e-mail: girep@ifd.uni.wroc.pl

We are looking forward to meeting all of you in Wrocław.

On behalf of the Organizing Committee

Ewa Dębowska