

Call for contributions

INTERNATIONAL CONFERENCE GIREP EPEC 2015

July 6-10, Wrocław, Poland

The Conference of International Research Group on Physics Teaching (GIREP)

European Physical Society - Physics Education Division (EPS PED)

University of Wrocław (UWr)

Organizers

University of Wrocław, Institute of Experimental Physics, Division of Physics Teaching
The Foundation for the University of Wrocław

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Dean Zollmann, AAPT representative, Kansas State University, USA



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Piotr Skurski, University of Lodz, Poland

Dagmara Sokołowska, Jagiellonian University, Cracow, Poland

Bartosz Strzelczyk, University of Wrocław, Poland

Invited speakers:

Mojca Čepič, Ljubljana University, Slovenia

Gareth Jones, Imperial College, London, UK

Knut Neumann, Kiel University, Germany

Edward F. Redish, University of Maryland, USA

Roman Rosiek, Pedagogical University, Cracow, Poland

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 competences in science and technology.
- Digital competence.
- Learning to learn.
- Social and civic competences.
- 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 Advisory 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.

Oral presentations are of 15 minutes duration, plus 5 minutes discussion time. Symposia provide an opportunity to examine one topic in depth preferably from different perspectives. Workshops give the opportunity for sharing a skill or approach with active engagement of the participants.



Deadline for submission of proposals:

1st round – 10th February 2015

2nd round – 30th March 2015

PROPOSALS MUST BE SUBMITTED ELECTRONICALLY THROUGH THE
CONFERENCE WEB FORM AFTER REGISTRATION

Abstract submission

When submitting an oral presentation, a poster, a workshop or a symposium proposal, you will be required to submit an abstract ranging from 400 to 600 words **via the registration site on Conference Web Page**. The official language of the conference is English, so proposals should be sent and presented in this language. The preferred type of contribution is a poster.

The web address for the registration is:

<http://girep2015.ifd.uni.wroc.pl/registration-form/>

After the registration submit the abstract file using the address:

<http://girep2015.ifd.uni.wroc.pl/login/>

Guidelines for abstracts' authors are available on the conference page in the section Downloads.

A pdf file, containing your complete paper, will be requested AFTER the Conference. We will keep you informed about the details.

During the registration process you will be asked to characterize **the category** of your contribution:

1. Oral presentation
2. Poster
3. Workshop
4. Symposium

Secondly you will be asked to classify your contribution in one of the following groups:

- A. Research (physics education research, empirical as well as theoretical)
- B. Research and development (including classroom ideas, practical issues, development etc. being more substantial than research)
- C. Classroom ideas, teaching and learning practice (no or minimal research part)

We are aware that these groups are not strictly defined. However we believe that indicating the character of contributions can be useful both in reviewing abstracts and in dividing them into sessions.

Proposals reviewed/confirmed:

1st round – 10 March 2015

2nd round – 30th April 2015



Review criteria

Depending on the format and type of proposal, it will be reviewed by at least two reviewers, from countries that are different to those of the authors. Reviewers will work according to the criteria described below. The decision about the acceptance will be sent via e-mail in due time.

- For abstracts submitted during Period 1, the decisions about the acceptance of the contributions for the conference will be announced till 10th March 2015.
- For abstracts submitted during Period 2, the decisions about the acceptance will be announced till 30th April 2015.

The scientific committee will evaluate all submitted abstracts and provide feedback to the authors. The decision for accepting/rejecting a proposal will be based on evaluation results. Criteria for evaluation will take into account the following abstract characteristics:

- Title fully represents the proposal.
- Abstract focuses on what is new in the proposal.
- Abstract briefly explains the theoretical/conceptual framework.
- Abstract explains the aim and the research question or the main question.
- Abstract presents findings and results or notable ideas.
- Abstract gives a conclusion and implications.

Deadline for registration:

Early: 12th January – 14th February 2015

Regular: 15th March – 6th May 2015

Late: 7th May – 15th June 2015

Conference fee:

- Early registration (to 14th February)
GIREP & EPS members and AAPT members – **175 €**
Regular fee – **200 €**
Students fee – **120 €**
Accompanying person – **80 €**
- Regular registration (from 11th February to 6th May)
GIREP & EPS members and AAPT members – **200 €**
Regular fee – **225 €**
Students fee – **120 €**
Accompanying person – **80 €**
- Late registration (from 7th May to 15th June)
GIREP & EPS members and AAPT members – **225 €**
Regular fee – **250 €**
Students fee – **120 €**
Accompanying person – **80 €**

The conference fee covers materials, welcome reception, lunches and coffee breaks. Accommodation, conference dinner and excursions are paid separately.



**All conference activities, including registration, will take place at Haston City Hotel,
ul. Irysowa 1-3, 51-117 Wrocław, Poland**

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