

HSci2010 – 7th International Conference Hands-on Science: Bridging the Science and Society Gap

Knowledge, especially advanced modern knowledge which is not widespread, can be a very effective tool for the welfare and, also, for the power of the groups possessing it – you can easily observe this strong relation between knowledge and power in today's existing states.

Science and Technology is an important constituent of today's knowledge. Consequently in most of the European and other countries there is an ever increasing importance to Science and Technology education. Also, in technology dependent modern societies, an ever increasing number of decisions are based on Science and Technology developments. As a result, the citizens' active conscious participation (which is the foundation of Democracy) to these decisions, requires a sound Science and Technology Literacy. In this sense, practice work in Science teaching acquires new importance for an effective Science and Technology education. Within the above context, globalization as an important aspect of our contemporary times, coupled with the knowledge gap, may easily lead to inequalities in many, even all, aspects of life conditions between different groups. These inequalities are a major actor in promoting the conflicts between different societies.

The Hands-on Science (HSci) network, which was supported initially by the European Commission, organizes, as one of its activities, an annual International Conference focused on Hands-on Science activities - details may be found in <http://www.hsci.info>. The main objective of these conferences is, in general, the exploration of innovative teaching approaches connecting Science with every day life towards an effective Science and Technology education. The HSci2010, the 7th International Conference is organized July 25 - 31, 2010 in The University of Crete campus at Rethymno - Greece (<http://www.clab.edc.uoc.gr/HSci2010>) with a focus in **Bridging the Science and Society gap**. Research papers and other scientific works may be presented, sometimes in a better way, through specialized journals. However, conferences like the Hands-on Conference present the real advantage of meeting people from other places, possibly from different cultures, and, in the informal discussions during the breaks and the social events of the Conference, the participants come to know their colleagues in other countries, establish links, understand better their social and cultural values and appreciate the diversity of human behaviours. This is also a way to bridge the gaps between different societies. The conference program includes oral presentations in plenary and in parallel sessions, poster presentations, and other activities useful to Science education. Within the context of this Conference, research is a priority but we also value the school operation and practice. Therefore, the works accepted as Conference activities were selected either because they exhibit a high research calibre or because they exhibit innovative ways for school Science teaching. The mixture resulted is represented in the Conference Program and also in these printed Conference Proceedings while in the web site of the Conference snapshots from the Conference activities may be found.

More than twenty are the countries from which the participants to the Conference and the persons who expressed an interest to participate come from. Although most participants come from the European Union more than ten other countries all over the world are represented to this Conference, an indication of international high calibre.

As president of the Local Organizing Committee, I have the privilege to present the HSci 2010 International Conference proceedings. I have also the pleasure to welcome all the participants to the Conference wishing a fruitful stay.

I want to thank Professor Manuel Filipe Pereira da Cunha Martins Costa of Universidade do Minho for president of the Hands-on Science network for his decision to have the Hands-on Science Conference in Rethymno for a second time.

I sincerely thank also all the members of the Local Organizing Committee for their efforts to have a well organized Conference. Special thanks deserve the vice-chairs, prof. D. Stavrou and M. Kalogiannakis the efforts of whom made this Conference possible.

Rethymno, July 2010, **P. G. Michaelides**, B.Sc., Ph.D., LL.B. Professor at The University of Crete