

FOREWORD

Student-Based European Cooperation in Scientific Research and Development

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The basic requirements of successful scientific research and development activity in higher education (HE) are the availability of highly skilled personnel, high quality laboratories and motivated student population. All the above three elements shall be existing at all universities as they are subject to governmental accreditation in conformity with European standards. In normal cases, about 30% of the total working hours of the staff is expected to deal with R/D activity. The remaining part is devoted to teaching and to the running of the school. The main function of higher education, that is to say high level teaching, may be provided only in cases when teaching staff is pioneering in R/D.

At universities it is a very usual practice to involve the best students in scientific research work. By this practice trainers may not only train sternly their topic but they may also transfer their methodology in research work. There is a high number of enrolled students who took a fancy to research; and if they are talented in knowledge transfer as well, they can be candidates for employment in HE. In Hungary, there is a traditional way of involving students in research work namely the so called Student Research Societies (SRS) (Hungarian abbreviation: TDK). Each year, all universities organize competitions for their students who take part in the SRS activity. The winners of the local competitions are entitled to compete on national level. Students

obtaining good results on national level are highly reputed; such a result may considerably increase the value of their professional CV. The SMS activity is governed by the National Legislation on Higher Education, however, at the very beginning of this movement (in the 1950s), it was completely voluntarily exerted.

Large universities have a wide resource of talented students expected to be involved in R/D activity. Even inter-university cooperation is frequent between them. Why not enter into an inter-university cooperation on international level? It may yield more efficient research and contribute to widening students' horizons. The ERASMUS+ student exchange program may serve as a basis for student exchange in R/D.

Dennis Gabor College had the honour of receiving the delegation of the Technological Educational Institute of Crete led by vice-rector professor Kopanakis in November 2014. The delegation members took part in our Science Day conference. During their visit, we identified the topics in which a student-based scientific cooperation is expected to be fruitful and we concluded a cooperation agreement in R/D. We agreed that both of the partners have to define some dissertation topics in English, and propose them to the students of the partner university.

We hope that we can publish the results of this cooperation on the Science Day 2015.