

EDITORIAL PREFACE

The Editorial Board of HJIC dedicates this Issue to the National Scientific Students' Associations (Tudományos Diákkör, in Hungarian, abbreviated as TDK) that is a real Hungaricum with a 62 years old tradition. This Association includes all the Universities and Colleges of Hungary, where scientific research of any kind is being conducted. The members of the Association are the faculty members, scientific advisors, and their B.Sc. or M.Sc. students.

Participation in the work of TDK is completely voluntary. Students spend some of their free time with a faculty mentor, choose a research topic, learn the basics of the field, do the measurements or the calculations under the supervision of the chosen teacher/researcher in addition to their regular academic duties. At the end, they write a dissertation based on their results. These dissertations are peer reviewed and then presented at yearly institutional TDK-Conferences, where the students receive suggestions from a panel of scientists and professors, receive a score for their written documents and oral presentations. Based on these scores, they may win legitimacy to present their results at the National TDK-Conference. TDK is a remarkable organization in Hungary that was kept alive by people who do their work from pure enthusiasm for the love of their profession. It is not an exaggeration to say that the TDK-students form the elite of all the University students. They are the ones who proceed to M.Sc. level, become PhD students, and, at the end, ideally become colleagues of their former faculty advisors.

During their work as part of TDK, students learn systematic problem-solving, formulating good questions, critical thinking, composing their thoughts into concise, well-formulated sentences, preparing meaningful figures, elaborating the literature of the field, and presenting their result in front of a scientific panel and an audience. Even those students who do not continue their life in the academia tend to remember their time spend on TDK activities as useful and memorable. Often, the skills acquired while being involved in a TDK project are not part of the regular education at a given University. TDK gives them something extra.

This issue contains selected articles from students and their supervisors about their results presented at the TDK conferences during 2013-2014. With this issue, the Editorial Board wishes to honour the effort of all TDK students and their advisors for keeping this unique tradition alive with their devoted work.

DEZSŐ BODA AND TIBOR DULAI

University of Pannonia, Veszprém, HUNGARY

Guest Editors