



The Croatian Academy of Engineering is a Member of the International Council of Academies of Engineering and Technological Sciences (CAETS), Inc., Washington D.C., U.S.A.

## Letter of the President

The Croatian Academy of Engineering (HATZ) was established shortly after the international recognition of the Republic of Croatia as an independent State and a full member of the U. N. In spite of the long Croatian tradition in higher education, which dates since 1669, and the activity of the Academy of Sciences and Arts since 1875, first as Yugoslav, and later, from 1992, as Croatian national institution, the organized approach to technical and biotechnical sciences was not initiated until the constitution of the HATZ.

In the year of celebrating the 10<sup>th</sup> Anniversary of the HATZ, 2003, the new Governing Board was elected, and I was elected President for the next two years. At this moment I have to say that I am grateful to all the members for investing me with their confidence to be a head of such an important scientific association, which gathers the membership elected on the same basis as members of the other scientific academies around the world. Having in mind that the HATZ has established its *numerus clausus* for Full and Associate Members, it means that the elected members are the scientists with the highest international recognition within their fields. They have also accomplished a large number of achievements in cooperation with industry, either in Croatia or abroad, including all continents.

Therefore, at this, for Croatia very important time, we would like to provide all companies and associations around the world (particularly the CAETS members), with the information of how to make, jointly with others, the bigger steps towards faster implementation of high technology discoveries in the production, and also how to participate in developing new technologies for our benefit. Several years ago, the "Engineering Power" was published as a Croatian window to the world. Since 1999, this activity had stopped and the new Editorial Board decided to continue this activity.

Firstly, I would like to invite all readers to visit our website (<http://www.hatz.hr>) and learn some important information about the HATZ. We are also very proud that, after being 10 years without our own location for our numerous activities, by kind support of the University of Zagreb and the Ministry of Science, Education and Sport, we have just finished a small but very pleasant place where we can host a lot of expert meetings in the future. At the same time, due to proximity of almost all technical and biotechnical faculties, as well as to the fact that our membership consists of top scientists and experts from various technical and biotechnical disciplines, we are capable of organizing highly sophisticated courses for engineers and technicians from the different fields. The activities of the HATZ are not located in Zagreb only, because our members come from all different parts of Croatia, like Rijeka, Split, Osijek, Slavonski Brod, Sisak, Varaždin. This is particularly important, because the Croatian industry is also dispersed throughout the country, and our particular interest is also set on maritime technologies as well as on communication, civil engineering, environmental protection, electronics, food engineering, chemical engineering and biotechnology.

The international experience and activity of our members has been recognized for a long time now, and at different levels. Our members also act as members or chairmen of international scientific associations, experts of the U. N. or the E. U., and participants at the different current scientific projects. Therefore, we can say that, after the first ten years of internal structuration, now we are approaching the active international cooperation, exchange and education of the new generation of scientists that will be capable to participate in the future technological developments, having in mind the necessity of sustainable development and environmental protection for the benefit of future generations.

I am particularly convinced that we all together can make this great step forward and help younger generation to develop the awareness that only by such a use of the natural resources, which includes also the obligation to protect these resources, the mankind can survive on the Earth.

Zlatko Kniewald

## INSIDE

Letter of the President.....1

Engineering in the Changing Environment..2

25<sup>th</sup> Annual Meeting of the International Council of Academies of Engineering and Technological Sciences (CAETS) .....3

Agriculture and its Environment.....4

84<sup>th</sup> Annual Meeting of the Royal Swedish Academy of Engineering Sciences (IVA).....7

Croatia at the 21<sup>st</sup> International Cartographic Conference and the 12<sup>th</sup> General Assembly of the International Cartographic Association.....8

14<sup>th</sup> International Symposium of the International Committee for Study of Bauxite, Alumina and Aluminium (ICSIBA) on the Occasion of its 40<sup>th</sup> Anniversary .....9

Awards of the Croatian Academy of Engineering.....10

The University of Zagreb Award "Fran Bošnjaković" .....10

Acknowledgements to our Supporting Members .....12