

# FOREWORD

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One of the evidences of the scientific research work in our age that the only effective way of research is the cooperation among individuals and groups. Even at the end of the 19<sup>th</sup> century the lonely researchers begun to leave their places in favor of well organized groups and institutes. One of the early professional research institutes was that of run by Thomas Alva Edison (1847-1931), who leaded and coordinated the research work of multiple research teams with very wide range of different research activities. The common denominator of the research teams was the outstanding role of industrial application and profitability of researches. Those were the massive penetration of electric lighting, voice recording, fluoroscopy, electric power distribution etc. The efficiency of team work in research was proven accordingly. In respect of industrial development the Gustave Eiffel Engineering Company was a predecessor of modern engineering companies, dealing with the whole range of design, commerce and construction. In the first half of the 20<sup>th</sup> century specialized designer institutes appeared in some very high-tech fields of industry such as aeronautics and telecommunication. Within those institutes a more detailed specialization characterized the development activity. But with the ultra-specialization it was always suggested a good cooperation among sub-teams. Forced by the approaching WW2 famous aeronautical design companies such as Tupolev, Yakovlev and Il-yushin produced excellent airplanes in the USSR, representing the top of the technology level of that time. In the telecommunication field the Bell Laboratory is such an example in the USA.

The most important technology related challenge of the after-Second World War period was the lunar landing in 1969 (USA). This technology development was achieved by means of intensive participation of German scientists and re-

searchers; however the cooperation of them was far from voluntaries. The fact is that Willy Messerschmidt, Werner von Braun and his chief collaborators were involved in this project. The perfect cooperation between German born and American born scientists was the condition "sine qua non" of the success of this challenge.

In the French language the word "concorde" means more than good cooperation and understanding; it is closer to the meaning "cooperation in harmony". This was the project name of the British-French joint venture supersonic airliner: Concorde. The commercial exploitation run jointly by British Airways and Air France over three decades perhaps was not a success story in close commercial meaning but a worldwide known technology achievement which symbolizes the good "entente" between two nations. Even the Gonesse-crash in 25 July, 2000 could not erase the good memory of this fantastic technical challenge.

Dennis Gabor College is a small college with high quality standards. Staff members are dealing with research work both within the frame of various doctoral schools and in their institute. Research work is highly appreciated by the management of our college. The research activity is based on research ateliers (generally 3 in an institute) but institutes and researchers are encouraged to cooperate among them as well as with other high schools and universities. We are convinced in efficiency of international cooperation, that's why we run local centers in the neighboring countries. We are especially pleased to publish a paper written by a researcher of Institute of Computer Science of Academy of Sciences of the Czech Republic. We hope that the international team work and the "concorde" between researchers will be continued.