

50th Anniversary of the Faculty of Engineering, University of Rijeka

Through a Decree of 8th July 1960 and a Law¹ on the establishment of the Mechanical Engineering Faculty in Rijeka, Electrical Engineering Faculty in Split and Chemical-Technological Faculty in Split along with the Higher Education Agricultural School in Osijek, the Parliament of the People's Republic of Croatia founded the Mechanical Engineering Faculty in Rijeka. In the first article, the Law underscores the fact that the Faculties were established in cooperation with the constituencies of that time of Rijeka, Split and Osijek. The name of the faculty and the constituency centre where some faculties were founded, demonstrates that in establishing the faculty the development priorities of that region were taken into account: in Osijek agriculture, Split electrical engineering and polymers and in Rijeka mechanical engineering². Fifteen years later these faculties took over the greater part of the work in setting up three universities apart from Zagreb: University of Rijeka, University of Split and University of J. Juraj Strossmayer in Osijek.

Teaching at the Mechanical Engineering Faculty in Rijeka began on 9th November 1960³ so in line with the above, this year Faculty in Rijeka is celebrating the fiftieth anniversary of the establishment. In 1969 the Faculty organised a university course of shipbuilding and changed its name to Mechanical Engineering and Naval Architecture Faculty. In 1973 it organised a course of Civil Engineering and for the third time changed its name to the present-day Faculty of Engineering in Rijeka. Up until the founding of the University in Rijeka (1974), the Faculty of Engineering had been a member of the University in Zagreb. Today, the Faculty provides an organised undergraduate course in four fields: Mechanical Engineering, Naval Architecture, Electrical Engineering and Computer Science, a graduate course in Mechanical Engineering, Naval Architecture and Electrical Engineering and a post-graduate doctoral course in the field of Mechanical Engineering, Shipbuilding and Basic Technical Sciences. From 1965 the Faculty began teaching a professional course of Mechanical Engineering, from 1960 a course of Shipbuilding and from 1974 a course of Electrical Engineering. Up to the present day, 3500 students of Mechanical Engineering, Shipbuilding and Electrical Engineering have graduated from the Faculty of Engineering. Professional courses have been completed by 1500 students of Mechanical Engineering, Shipbuilding, Civil Engineering and Electrical Engineering. Master degrees in technical sciences have been gained by 98 students while doctoral dissertations have been defended by 85 doctoral candidates. The Faculty of Engineering in Rijeka leads the way in reform of courses under the Bologna process in comparison with other members of the University in Rijeka: in 2008 it had first-level degree engineers of Mechanical Engineering, Shipbuilding and Electrical Engineering, in 2010 the first Master's degree in Engineering of those fields, while in 2008. professional first-level degree engineers of these professions.

!The Technical Faculty in Rijeka⁴ can lay claim to a rich fifty-year history: its successes primarily result from the fact that the region has a longstanding tradition in higher technical education⁵, a world-renowned tradition in mechanical engineering and shipbuilding⁶. Over the area of Croatian the development of mechanical engineering industry began in the nineteenth century, the steel shipbuilding industry marks one hundred and fifty years, one hundred and fifty years of higher technical education in Croatia, a longstanding professional organisation of engineers (Engineers' Association founded in 1878.)⁷ and the recent 50th anniversary celebration of the scientific journal *Strojarstvo* - Journal for Theory and Application in Mechanical Engineering⁸ testify to the fact that we have a rich tradition of mechanical engineering, electrical engineering and shipbuilding professions in Croatia.

The journal *Strojarstvo* devotes this issue to the 50 year anniversary of the Faculty of Engineering in Rijeka and in the scientific part we publish 5 reviews of doctoral dissertations which were defended at the Faculty over the last one and a half years. The technical part of the journal supplement is also devoted to this anniversary. The first generation student enrolled, Branimir Strenja M.Sc., reminisce from a student perspective on the birth pangs of the then newly-constituted Mechanical Engineering Faculty. Anton Linić, also a first generation student, sets out a review of the state of Rijeka's industry at that time in mechanical engineering and shipbuilding. With painstaking attention to historical fact, he has described the Paper Mills where he worked as an engineer for several years, Torpedo Factory, Rikard Benčić Factory, INA Oil Refinery, Vulkan Factory, the shipbuilding industry 3 Maj (all in Rijeka) along with others. Anton Linić has given an account of the first five years of the Mechanical Engineering Faculty in Rijeka.

Over the last fifty years the teachers and staff of the Technical Faculty in Rijeka have been frequently engaged in scientific, professional and developmental projects. In some of these projects they broke new ground vis-à-vis other faculties and centres. For example, the Faculty of Engineering in Rijeka began researching solar energy along with other renewable sources of energy. The Departement for Thermodynamics and Energy of the Faculty of Engineering organised both the first conferences and society and association for harnessing solar and other renewable sources of energy.

The student population, which today numbers 1500 students, has always been engaged both in faculty activities as well as extra-curricular activities. In this issue, professor Vladimir Medica D.Sc., presents information on the student project Student Formula which has brought fame to our students over the past three years, both at home and abroad.

The scientific journal *Strojarstvo* celebrated its 50th anniversary of continuous publication last year. The publisher of the journal is the Croatian Union of Mechanical Engineers and Naval Architects. The first copy of the journal was printed in 1959; the first member of the board of editors was Prof. Miroslav Mikuličić who contributed greatly to the organisation and establishment of the Technical Faculty in Rijeka. He was appointed its first dean and here he discharged his duties in two successive electoral mandates.

From its establishment, the Faculty has maintained continuous links with the Editorial Board of the journal *Strojarstvo*. The professors and lecturers/associates of the Faculty are members of its Board of Editors and over the past fifty years 1,090 scientific articles, whose authors or co-authors were professors of the Faculty, have been published in the journal *Strojarstvo*. In the journal also 432 editorials have been published along with professional contributions from Faculty staff. We are sure that this fruitful collaboration will continue. We take this opportunity to congratulate the Faculty of Engineering of the University in Rijeka on this great anniversary!

**For Editorial Board
Prof. Bernard Franković, D.Sc.**

¹ Law on establishment of Mechanical Engineering Faculty in Rijeka, Electrical Engineering Faculty and Chemical-Technological Faculty in Split along with the Higher Education Agricultural School in Osijek, Official Gazette no. 31, yr.16(122) of 3rd August 1960.

² Franković, B.: *One hundred and fifty years of technical education in Rijeka*, Engineering Review, Vol. 21–22, 1, 2001–2002.

³ Frankovic, B.: *On the 40th Anniversary of the Faculty of Engineering*, University of Rijeka, *Strojarstvo* Vol. 42 No. 5/6. 2000.

⁴ Several authors, *Monograph of Technical Faculty, 1856.-1960.-2000.*, Faculty of Engineering in Rijeka, 2000.

⁵ Franković, B.: *150. years of higher technical education in Croatia*, *Strojarstvo*, Vol. 51. No. 6. 2009.

⁶ Brezinščak, M.: *Association of Croatian Engineers*, first vol., Celebratory copy of 115th anniversary 1878-1993., Croatian Standardisation Society, Zagreb, 1995.

⁷ Brezinščak, M.: *Croatian Engineering Society, Vol. 1.*, Celebratory copy of 115th anniversary 1878. - 1993., Croatian Standardisation Society, Zagreb, 1995.

⁸ Franković, B.: *50th Anniversary of the Journal Strojarstvo*, *Strojarstvo* Vol. 50.(6), 2009., 335-336