



The economic development of the mid-20th century created the need for rapid education of experts and specialists in the Republic of Croatia in technical areas, including metallurgy. The first activities were started in the summer of 1958 with efforts regarding the foundation of the Technical higher education school, which had metallurgy and technical areas of expertise. However, this solution was abandoned, and instead of that the Faculty of Technology in Sisak was founded, containing the Department of Metallurgy and the Department of Oil Technology and Industry. Instruction at both mentioned departments of the Faculty of Technology started in Sisak with the academic year 1969/1961, when 89 students enrolled (49 students of metallurgy and 40 at the oil industry and technology). The mother Faculty of Technology in Zagreb provided a great deal of support during the foundation and development of the said institution by participating in instruction directly, organizing and building laboratories, as well as further education of the teaching staff. In 1963, the Faculty of Technology in Zagreb went through a restructuring, after which the higher education instruction in Sisak was separated into two departments: the Department of Metallurgy and Chemical-technological oil department. In the late 1960s, there arose a problem with facilities, i.e. lack thereof, due to an increased number of students as a result of instruction in all three levels, which was resolved by awarding new facilities (around 620m²) of The Institute of Metallurgy within the company Željezara Sisak. The Faculty of Technology in Zagreb experienced another restructuring in 1974, when the existing departments in Sisak were abolished and the Faculty of Metallurgy transformed into a Basic organization of joint labour Metallurgy Engineering, as one of six such organizations with the Faculty of Technology. The primary activities of the Basic organization of joint labour Metallurgy Engineering consisted of scientific and educational activities from the field of metallurgic engineering and similar disciplines. Another restructuring, which occurred as a result of social changes with the goal of finding an organizational structure of connecting higher education in the field of metallurgy and scientific and research programs, followed in 1979, when the Basic organization of joint labour Metallurgy Engineering and the Institute of Metallurgy were joined into a Labour organization Institute of Metallurgy Sisak within a Complex organization of joint labour of the Metallurgy Combine of Željezara Sisak. This meant that the Labour organization Institute of Metallurgy Sisak consisted of two basic organizations of joint labour (Faculty of Metallurgy and Technical and Administrative Services), as well as a Labour community for general affairs. Due to this integration, the institution received an increased support in organizing and financing education, scientific and specialist projects. Thus, the Faculty of Metallurgy gained more qualified teaching and scientific staff, more laboratories at its disposal, procurement of new equipment was simplified, etc. The result of integrating the Institute of Metallurgy and the Basic organization of joint labour Metallurgy Engineering into the Labour organization Institute of Metallurgy Sisak was an increase in the number of specialist in staff who did not participate in instruction. Of the total number of 107 employees during the academic year 1979/1980, only 57 of them worked as teachers. The Scientific and Educational Committee of the Faculty

of Metallurgy was founded on the 3rd of November 1978. Pursuant to the Act on Higher Education, on the 1st of February 1979, the Faculty of Metallurgy became one of 56 independent members of the University of Zagreb. In 1979, the Faculty of Metallurgy had 14 PhDs, six of them in the field of metallurgy. Because the Scientific and Educational Committee of the Faculty of Metallurgy at that time still did not fulfill legal requirements which would enable selection to academic ranks and procedures for acquisition of the titles of MSc and PhD, in 1981 the University of Zagreb reached a decision on the foundation of a joint Scientific and Educational Committee of the Faculty of Metallurgy and the Mininggeological-petroleum engineering Faculty in Zagreb in view of conducting the said procedures. On the 14th of September 1987, a new Scientific and Educational Committee of the Faculty of Metallurgy was founded. Since then, the Faculty of Metallurgy fulfils all the prescribed requirements and conditions for the procedure of acquiring a PhD title and has the permission to implement the said procedure for the scientific field of metallurgy within the expertise of technical sciences, as well as the procedure of selection to scientific and research ranks in the same area of expertise and provides opinions on the procedures of selection to scientific and educational ranks in the same scientific area of expertise. In 1989, the Act on businesses started being implemented, after which the Complex organization of joint labour of the Metallurgy Combine of Željezara Sisak was transformed in a way that the Labour organization Institute of Metallurgy became Institute for Research and Development (IRI d.o.o.), and the Faculty of Metallurgy a sector of that business (1989-1991), at the same time remaining within the University of Zagreb. From late 1978 to 1991, the organization and management of the Faculty of Metallurgy took place at three structural levels: scientific, research-developmental and business. During the academic year 1990/1991, the Faculty of Metallurgy separated itself from the Complex organization of joint labour of the Metallurgy Combine of Željezara Sisak and on the 1st of June 1991 became an independent scientific and educational institution of the University of Zagreb for the following activities: Scientific and educational activities in the field of technical sciences (metallurgy); Scientific and research activities in the field of metallurgy, chemical engineering and other technical and technological areas relevant to the field of metallurgy; Auxiliary scientific and research activities. By becoming independent, after almost 31 years of conducting higher education instruction in the field of metallurgy in Sisak, and following numerous organizational changes, The Faculty of Metallurgy (hereinafter: Faculty, FM) remained an independent constituent of the University of Zagreb in its own right. At that time, the Faculty of Metallurgy had 119 students, of which 61 in the first year of studies. In 1991, the internal organization of the Faculty of Metallurgy was changed in a way that operations were organized into Department of Materials and Department of Metallurgy. The main managing body was an expert committee consisting of the Dean, Vice-Dean, Secretary and Chiefs of Departments. Furthermore, the Scientific and Educational Committee of the Faculty of Metallurgy was established, in which the Dean had the presiding role. During the development of the Department of Metallurgy, Metallurgy engineering, i.e. Faculty of Metallurgy, the number of departments and chairs changed a number of times (consequently, their names changed as well) in line with the number of courses, teachers and associates. Based on the Regulations on determining scientific fields and areas of the Ministry of Science and Technology of the Republic of Croatia (Official Gazette, 29/97) and the Statute of the Faculty of Metallurgy dating from the 28th of February 1997, from the 1st of October the Faculty of Metallurgy consists of three departments: Department of Process Metallurgy, Department of Mechanical Metallurgy and Department of Physical Metallurgy.

Today teaching and research of the Faculty is conducted at the same place (in two buildings at the same location), which contributes to significantly lower utilities expenses, as well as faster and better communication between members of the faculty, but also teachers and students. While the Faculty of Metallurgy functioned within the Institute of Metallurgy (1979-1989), i.e. Institute for Research and Development of Željezara Sisak (1989-1991), the Faculty conducted its activities at the same location and in the same facilities. In the last decade the instructional practice at the Faculty of Metallurgy has experienced significant transformations with the goal of further improvements. Together with the Faculty of Graphic Arts in Zagreb, the Faculty of Metallurgy has introduced ECTS system (as second, i.e. third of all the faculties within the jurisdiction of the University of Zagreb). The renewed curriculum of the undergraduate four-year study in the field of metallurgy started being implemented in the academic year 2000/2001. It was approved by the University of Zagreb Senate Decision dating from the 13th of February 2001, after previously having acquired positive review of the National Council for Higher Education of the Republic of Croatia. The studies were conducted through common program foundations during seven semesters, with the possibility of choosing one of three optional groups of subjects (process metallurgy, casting, metal processing) in the eighth semester. Upon the completion of undergraduate studies students are awarded the academic title of Bachelor of Science in Metallurgy, irrespective of the optional group of subjects. A year later, starting from the academic year 2001/2002, the renewed curriculum of the graduate study in the field of metallurgy started being implemented, which was approved by the University of Zagreb Senate Decision dating from the 10th of July 2001, after previously having acquired positive review of the National Council for Higher Education of the Republic of Croatia. The duration of the graduate studies is four semesters. Upon the completion of graduate studies students are awarded the academic title of Master in Metallurgy. The Scientific Activity and Higher Education Act from 2003 rests upon the principles of Bologna. In accordance with the said Act, in the academic year 2005/2006 new curricula of three-year undergraduate and two-year graduate studies were introduced for the university study in metallurgy. The conduction of the said studies is founded on the permits issued by the Ministry of Science, Education and Sports of the Republic of Croatia dating from the 16th of June 2005. Upon the completion of undergraduate studies students are awarded the academic title of Bachelor of Science in Metallurgy (univ.bacc.ing.met.). Upon the completion of graduate studies students are awarded the academic title of Master in Metallurgy (mag.ing.met.). The new curricula of undergraduate and graduate studies, in accordance with the Bologna Process, indicated the need for introducing a new postgraduate doctoral study in metallurgy, constituted in a way that it can also represent a continuation of the study of metallurgy and/or a similar graduate study in a related field. The program of the said studies was approved by the University of Zagreb Senate Decision dating from the 15th of December 2007, and started being implemented from the academic year 2007/2008 with the permit issued by the Ministry of Science, Education and Sports. The duration of the doctoral studies is six semesters, and it is completed upon a public viva to an expert committee, after the procedure proscribed by the Regulations on postgraduate doctoral studies in metallurgy. The acquired academic title is PhD in technical sciences, field of metallurgy. Pursuant to the University of Zagreb Senate Decision dating from the 14th of July 2009, the undergraduate and graduate studies of metallurgy are conducted according to the revised curricula for 2009/2010. Pursuant to the University of Zagreb Senate Decision dating from the 15th of March 2011, a new undergraduate specialized study-as-you-work course of Casting is introduced and

implemented. Courses started in the academic year 2011/2012 in the duration of five semesters, and upon completion candidates are awarded the academic title Bachelor of Casting. Pursuant to the University of Zagreb Senate Decision dating from the 17th of January 2012, revised undergraduate study with two specialties (Metallurgy Engineering and Industrial Ecology) is introduced. Also, by the same Decision, the revised graduate study with three study modules (Process Metallurgy and Founding, Mechanical Metallurgy and Engineering Metal Materials) is introduced.