"(…) Only as we admit to and, of even greater importance, come to understand the problems that confront us – be they current or impending, obvious or obscure, real or imagined – by identifying and expalciqng the mechanisms that are responsible for these problems, can we expect to make informed decisions. Since, moreover, things that we do not understand at the outset sometimes have redeeming purposes, such efforts to get at the essence will often uncover real or latent benefits. Altogether, our capacity to work in the service of mankind increases as complex contract and economic and political organization become more susceptible to analysis. (…)"

From the speech at the Nobel Banquet in Stockholm, Sweden on 10th December 2009.
Since ancient times till nowadays materials have been the basis of the civilizational progress of humanity and in such a distant horizon of many thousands years of history of human civilization one can talk about the development of materials engineering, as a component of the development of the material culture of humanity. Though the name and the paradigm of a scientific discipline were found only around half a century ago. The answer to the same question, when materials science has begun, as an independent scientific discipline, however, faces big problems. Most probably because the name of this discipline came into being only in the late 1950s and 1960s in the USA and within the next two decades, has spread in many other countries, among others in Europe, including Poland.

In Poland, the studies for a degree in materials engineering were started for the first time in 1971 at the Faculty of Metallurgy of the Silesian University of Technology in Katowice and the Faculty of Ceramics of the AGH University of Science and Technology in Cracow, and two years later in the present Faculty of Materials Engineering of the Warsaw University of Technology, however, the development of materials engineering as a scientific discipline dates back much earlier and has a close relationship with the development of higher education both in Poland and in Europe. In each of the newly founded technical University material issues have been not omitted, which is obvious, since the production of any product satisfying human expectations which requires, and always has required the use of relevant material and since the beginning among others students of technical universities have been taught and trained. That is why also the development of technical higher education, one must bear in mind that it became a part also of the development of materials science in the modern sense of this discipline, though, for obvious reasons this definition has not been used previously. In the artillery scatology found in the year 1682 in La Feraille, France a term "technier" was created in after the French Revolution in 1794 in Paris the Central School of Public Works, later renamed in 1795 to a Polytechnic School and which gave its graduates the opportunity to specialize at civil or military technical universities, was created. The system of connections with universities specialised in one field has survived in Paris Polytechnic School till today, but excluding the name, it has not taught on in Europe. Successively founded European polytechnics adopted a concept of studies in many fields and in times shifted to educating in separate faculties. After the one in Paris, polytechnics were successively founded, finally in 1844 in Lvov. The 20th century brought that this great University was in its heyday till 1918 within the framework of Austro-Hungarian Empire, but also within the Polish autonomy, from 1918 to 1939 as the greatest and best Polish University of Technology known as the Lvov Polytechnic University. At the end of the 19th century metal science researches were intensified in the USA and Japan. In 1903 H. M. Howe published the dissertation on Iron Steel and Other Alloys in Boston considered as the first textbook of metallurgy in the world. In Poland in the inter-war period the three centres of research and knowledge of metallurgy and metal science were founded in the technical universities in Warsaw, Cracow and Lvov. The first lectures in metallurgy in the territory of Poland were given in 1914 at the Lvov Polytechnic University by Professor Witold Broniewski (1860–1939), a PhD student of Professor Henri Louis Le Chatelier at the Sorbonne. Issues of metallurgy and metal science in the practical application were taken up at the Lvov Polytechnic University by Professor Stanislaw Anczyc (1868–1927), a head of the Division of Mechanical Technology of Metals. In 1917-1928 Professor Stanislaw Anczyc’s books entitled: "Metallurgical Researches in Practical Application" (1917), "Iron" (1923), "Steel Hardening" (1926), "Technological Metal Alloys" (1928) were published.

The time of World War II was very tragic times, and many students and professors of the Lvov Polytechnic University lost their freedom, and very often even lives. In 1945, after the official end of the World War II, as a result of Taliban and Yalta Agreements the majority of Polish professors and students left Lvov and the Lvov Polytechnic University was taken by the Soviet Union. Professors from the Lvov Polytechnic University emigrated to the post-war Polish territory, stopping to concentrate in four areas, namely in Cracow, Giwice, Wroclaw and Gdansk, where they became the core of the new Polish technical universities established there and moving there the traditions of the Lvov Polytechnic University. This impact is probably the strongest one at the Silesian University of Technology in Gliwice.

In 1945, after the war, the effort of the reconstruction of metal science education at Polish universities was taken by the alumni and associates of the outstanding Polish material scientists of the interwar period. Of course it applies also to the Silesian University of Technology, research activity in the field of universities of technology and the AGH University of Science and Technology in Cracow was significantly broadened and enriched together with the foundation of the Institute of Metallurgy in Giwice (1945) transformed after a few years into the Institute of Ferrous Metallurgy. In the field of research activities in that field the Institute of Foundry (1951), the Institute of Non-Ferrous Metals in Gliwice (1952), the Institute of Fundamental of Metallurgy of the Polish Academy of Sciences in Cracow (1977) which were successively founded and subsequently many of the next units acting in the field of materials science participated.

The Silesian University of Technology in Katowice, initially with a temporary seat in Cracow, and after a few weeks in Giwice, which was considered as a permanent seat of the University only in 1947, as it remained to this day, was created by this law the National Council’s decree 65 years ago, on 24th May 1945; a few weeks after the end of the World War II. Since the foundation of the Silesian University of Technology in 1945 the Department of Physical Metallurgy, as one of dozens or so of four faculties of the University existing at that time, directed for nearly 25 consecutive years by Professor Fryderyk Staub (1899–1982), who came from Lvov and later became the Dean of the Faculty of Mechanical Engineering, and Doctor Honoris Causa of the Silesian University of Technology, began its activity. It was the beginning of development of materials engineering in Silesia, although in a very limited range. Since the beginning of the Faculty specialists in the field of physical metallurgy, in turn in foundry, welding, polymers processing and materials engineering were educated in turn in the following branches of studies: Mechanics and Machine Building, Automation and Robotics, Computer Science and Technical Education and Management and Production Engineering. For over 30 years the Faculty of Mechanical Engineering of the Silesian University of Technology has had full academic rights to confer PhD and DSc titles in the discipline of "Materials Engineering". Subsequently education in Materials Engineering was organised at other Silesian Universities, including the Częstochowa University of Technology in Częstochowa, the University of Silesia in Katowice and the University of Bieleko-Biala. Currently, the branch of studies: Materials Engineering is carried out in Poland at 27 faculties in 21 universities, including 13 at the universities of technology, four at universities, and one in a school of higher education and two private schools.

On 1st October 2009 the group of those units was also joined by the Faculty of Mechanical Engineering of the Silesian University of Technology when the studies at 2 macro-branches of studies based on the education standards of "Materials Engineering" were started. On 1st October 2010, in the year of 65th anniversary of the foundation of the University, students at the branch of Materials Engineering will be enrolled for the first time.

Among the graduates of the Department of Physical Metallurgy, and then of the Institute of Physical Metallurgy and Welding, and then of the Institute of Physical Metallurgy, and finally of the Institute of Engineering Materials and Biomaterials of the Faculties of Mechanical Engineering of the Silesian University of Technology, from its foundation in 1997, there are many distinguished representatives of science, including many professors. One of the most outstanding of them and who to the last days of his life worked at the Faculty of Mechanical Engineering in 1958–2007, is the late Professor Jan Adamczyk, a Honorary Professor of the Silesian University of Technology, a leader of the Scientific School of Physical Metallurgy and Electron Microscopy at that Faculty, associated with the thematic scope by thousands of graduates of the Faculty and many representatives of science in the country and abroad, not less than the late Professor Fryderyk Staub, Doctor Honoris Causa of the Silesian University of Technology, an initiator and a leader of researches in the mentioned field in Silesia. Undoubtedly both of them represented since the beginning, "Materials Engineering" in the modern sense of this scientific discipline, although the name of this discipline, and even the discipline itself, especially in Poland, appeared much later. In the year of the 65th anniversary of the activity of the Silesian University of Technology in the field of Materials Engineering and in the year of the 75th anniversary of Professor Jan Adamczyk’s birthday the 6th International Scientific Conference on Contemporary Achievements in Mechanics, Manufacturing and Materials Science CAMS®2010 in the name of "65 Years of the Tradition in Materials Science and Engineering in Silesia, Poland" will be organised in November 2010.

I wish P.T. Readers a nice reading of the papers and thank P.T. authors sincerely for the efforts in their working and preparation these papers for print.