The Institute began operations in 1952. Since its appointment by the Department of Metals, it was a part of the Institute of Fundamental Technological Research of the Polish Academy of Sciences in Warsaw, located in Krakow. In 1969, the Department of Metals was transformed into the Department of Fundamentals of Metallurgy, in 1977 it became the Institute of Fundamentals of Metallurgy and finally, in 1994, it was converted into the Aleksander Krupkowski Institute of Metallurgy and Materials Science of Polish Academy of Sciences (IMMS PAS).

For many years, the basic research activity of Institute focused on the study of metallic materials including processes of pyro-, electro- and hydrometallurgy, heat treatment and plastic deformation. Ongoing research, primarily of a fundamental nature, that was conducive to the development of their own research staff, and close cooperation with industry and research institutes (Institute of Non-Ferrous Metals, Institute of Ferrous Metallurgy) was one of the priorities of the institution. An important role in the activities of the Institute was the development of international cooperation.

The Institute gradually developed the research that was conducted over the years and which is now focused on four basic priorities: environment friendly technologies and materials, amorphous, nano- and microcrystalline materials, knowledge based functional materials anddevelopment of research tools and diagnostic techniques.

Since its inception, the Institute has studied research equipment of the highest international standards. However, a great change of the infrastructure of the Institute began after the Polish accession to the European Union. As a result, the Structural Funds and other EU programs was able to largely replace research equipment which allowed the Institute to raise their research to a much higher level.

For years, researchers of the Institute of Metallurgy and Materials Science have participated in many national and international research programs with other science and research institutions from Poland and other countries. This year it is participating in the IMMS PAS 65 project that is being financed by National Science Centre, National Centre of Research and Development, Ministry of Science and High Education, United Europe (Structural Funds) (7) and Norwegian Financial Mechanism (1).

The education of young scientists has been carried out in the institute through doctoral study (DS). The following have the most popular areas of study in recent years:

1.

Doctoral studies in materials engineering with English as the lecturer language financed from the Structural Funds - conducted by IMMS PAS.

2.

Environmental doctoral studies in materials engineering- conducted by the Institute and Jagiellonian University.

This type of education has been continued in materials engineering and also metallurgy. Studies are carried out by the Institute with the help of the Institute's researchers and scientists. Additionally, the education of university students is performed in the form of month practices. Last year (2015), 16 students had the practices, and six conducted experiments for his/her master's thesis.

IMMS PAS employs 89 researchers and members of staff including 10 professors (1 professor is a member of PAS), 10 associate professors of PAS, 21 assistant professors and 48 administration and technical persons. Last year (2015) the Institute hosted 15 foreign researchers. In 2012, IMMS PAS celebrated its 60th anniversary, under the honorary patronage of the President of the Polish Academy of Sciences. On this occasion, twenty six of our scientific and technical staff were decorated with various state medals.

Three Institute employees have received gold medals for their inventions at international fairs. In 2005, during the Fair of Inventions and New Technologies, Concour Leppin was recognized for the Model of the Polish system of long-term cardiac support, in Paris. In 2008, for the Composite Diamond and its production process, on 57 Exhibition of Innovation, Research and New Technologies "BRUSSELS INNOVA in Brussels and in 2009, for the pneumatic chamber cardiac support during the 53rd International Fair of Inventions" Eureka " also in Brussels.