

# Institute of National Remembrance

<https://eng.ipn.gov.pl/en/news/8372,Jaroslaw-Szarek-giants-of-Polish-science.html>

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## Jarosław Szarek: giants of Polish science

Our aim is not only to recall the pioneer achievements of the Second Polish Republic in aviation, railway industry, medicine and many other domains, as well as the profiles of their creators. We will also present the contribution of Polish technical thought to the Allied victory during World War II.

The recent two-and-a-half centuries of our history have been marked by constant struggles for a free and independent state – partitions, German and Soviet occupation and communist regime. The participants of these events, naturally, have been etched in our memory and in public awareness. Nobody can question the contribution of the Polish spirit in the strive for freedom at the end of the 20th century, in a universal aspect, whose integral parts are the experiences of the Solidarity movement and the figure of Saint John Paul II.

This picture, however, needs to be supplemented with Polish

participation in technological development and scientific research. Our compatriots laid theoretical and practical foundations for many domains of contemporary technology. They initiated the development of petroleum industry, electronics, wireless communication and modern chemical industry. They are not included in the national pantheon, in spite of the fact that many of them deserve it. Unawareness of their achievements can be blamed on the Polish People's Republic.

Independent Poland, reborn in 1918, left an abundant technological legacy. In no other period did our nation give birth to so many scientists worthy of inclusion among the world elite. It is enough to mention three people who left a significant mark on technology worldwide: Ignacy Mościcki – inventor of an industrial method to produce nitric acid from air, Jan Czochoński – originator of a method to develop single crystals, presently commonly used in electronics, and Tadeusz Sędzimir, nicknamed the Edison of metallurgy, who came up with metal sheet galvanization method and cold-rolling technology, applied all over the world.

After the outbreak of World War II, many Polish scientists and inventors continued their work abroad. United Kingdom alone became the destination for approx. 5 thousand Polish engineers. After the war, many of them were unable to return from emigration to communist Poland and were condemned by the communist government for decades of oblivion.

A great endeavor to commemorate those people was undertaken by

Professor Bolesław Orłowski, whose efforts yielded, among others, a magnum opus, published by the Institute of National Remembrance (IPN) and the Scientific History Institute of the Polish Academy of Sciences, i.e. *Polish Contribution to Natural Sciences and Technology*, a five-volume dictionary discussing more than 1.3 thousand *Polish and Poland-related explorers, inventors and pioneers of mathematical and natural sciences, as well as technology*.

IPN is currently preparing the digital edition of the *Dictionary*, and plans to have it translated, simultaneously with the launch of an educational campaign aimed at popularization of this knowledge. We will continue the campaign until the end of this year, in cooperation with *Sieci* weekly magazine.

Our aim is not only to recall the pioneer achievements of the Second Polish Republic in aviation, railway industry, medicine and many other domains, as well as the profiles of their creators. We will also present the contribution of Polish technical thought in the victory of Allies during World War II. Polish cryptologists, brilliant mathematicians breaking the codes of Enigma German encryption machine, have been mentioned for years. Few people, however, have heard about Engineer Henryk Magnuski, inventor of the most famous radiotelephone in the world – walkie-talkie, broadly used by the American army on all fronts, Engineer Józef Kosacki, constructor of the manual Polish Mine Detector, or bomb launchers invented by Engineer Jerzy Rudlicki and mounted in American flying fortresses.

More than a decade ago, a former communist intelligence agent,

thanks to whom Soviet Union gained insight into many domains of American warfare technology, became a media star and an author of best-selling books. On the other hand, Engineer Zdzisław Starosiecki, a soldier who fought during September of 1939, member of the Polish Victory Service, prisoner of gulags, participant of the battles of Monte Cassino and Bologna, who later was one of the creator of Patriot system missiles, did not gain even a fraction of recognition he deserved.

By bringing these figures back, the Institute of National Remembrance also wishes to emphasize the ideas they followed and their ethical principle of serving the independent state, rooted in honesty and conscientiousness – a principle that was shattered in the Polish People’s Republic and still has not been restored to this day, in the Third Republic of Poland.

Jarosław Szarek, PhD, President of the Institute of National Remembrance

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