# Special Issue XLVI Extraordinary Congress of Polish Physicists (PART II)

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### Preface

Poland regained its independence in 1918 after 123 years of partitions. The road to independence, however, was marked with numerous uprisings and armed conflicts in which Poles sacrificed their lives for their country. It seemed unlikely that the scientific activity could quickly be resumed in the newly independent Poland.

The Polish Physical Society (PPS) was actually founded very soon, on April 11, 1920. Its first meeting was held in the edifice of the Faculty of Physics at the Warsaw University of Technology and attracted delegates from five regions of Poland: Lviv, Vilnius, Kraków, Poznań and Warsaw. Professor Władysław Natanson from Kraków was elected the first PPS president. Over time, this founding group of enthusiastic, outstanding physicists grew into the Society with 19 regional branches and nearly 2,000 members. Among them were prominent scientists representing various Polish research groups and academic centers as well as creative physics teachers working at all school levels.

The First Congress of Polish Physicists took place in Warsaw in 1923. Since then, congresses have been organized on a regular basis, becoming an adequate forum for exchanging concepts and taking new research directions. Congresses' lectures, presentations and sessions for teachers are open to everyone, therefore they can be followed by the general public. These meetings have strongly influenced the growth of a knowledge society in Poland.

The Senate of the Republic of Poland commemorated the 100th anniversary of the Polish Physical Society by declaring 2020 as the Year of Physics. In this way, the contribution of the Polish physicists' community to the development of international science and physics in Poland has been aptly recognized. The year 2020 was a particularly momentous one in the history of the PPS. The 46th Extraordinary Congress of Polish Physicists was scheduled to be held in Warsaw on April 24–26 but, due to the coronavirus pandemic, the congress was postponed until October 16–18 and re-organized into a hybrid form. The overall congress success and degree of the community engagement well manifested the strength and organisational potential of the Polish physicists. The congress's lectures, teaching sessions and the *Didactic Bazaar* can all be accessed at 100lat.ptf.net.pl.

One of the events that attracted much attention was a poster session entitled 100 Posters for the 100th Anniversary which displayed one hundred and nineteen posters, representing a very broad spectrum of Polish research. Three best posters won prizes sponsored by the EPL journal (Europhysics Letters) and the PPS Award for the best educational poster was also granted.

The current special issue of *Acta Physica Polonica A* carries papers by authors of the posters presented at the 46th Extraordinary Congress of Polish Physicists. On behalf of the Polish Physical Society, the Editorial Board of *Acta Physica Polonica A* and the authors of the included articles, I wish you an inspiring and pleasant reading.

President of the Polish Physical Society
Leszek Sirko