PREFACE

The Nuclotron-based Ion Collider fAcility (NICA) the new flagship project of the Joint Institute for Nuclear Research

Mega-project NICA is being developed at JINR in Dubna. The project is in advanced stages of realization. Considering that — it is a perfect moment to present its actual state and to find new people from scientific and engineering environment, companies and students for further development and cooperation. This conference will bring together experts, scientists, engineers and students interested in heavy-ion physics and in various aspects of design and construction of measuring equipment for NICA experiments.

The IV MPD Collaboration Meeting is a regular meeting of the MPD International Collaboration, held at the same place and time. NICA Days is associated also with V Slow Control Warsaw 2019, held in the last days of the meeting.

The conference was organized by Heavy-Ion Reaction Group (HIRG) at the Faculty of Physics, Warsaw University of Technology and the Joint Institute for Nuclear Research (JINR) in Dubna. It was held at the Centre for Innovation Management and Technology Transfer (CZIiTT) of the Warsaw University of Technology (WUT) on October 21–25, 2019.

This conference is the third of the series of *NICA Days* conferences. The two previous conferences took place in 2015 and 2017. Growing interest of the scientific and technical community in participating in these conferences is remarkable. The numbers of participants in these three consecutive conferences were: 99, 136, 216.

The conference topics include:

- Heavy-Ion Collisions and QCD Phase Diagram,
- world experiments and theoretical models related to NICA,
- experimental complex and basic equipment for NICA,
- Slow Control System and Databases,
- new technologies for large physics experiments, etc.

These topics are covered with review reports, invited and contributed talks, and the progress reports by junior participants.

An initiator of the conference and its main organizer was **Marek Peryt** from the Warsaw University of Technology and the Head of Sector at JINR in Dubna. Unfortunately, Marek is no longer with us. He fell victim of Covid-19 in February 2021.



Marek Peryt with the ring of Nuclotron accelerator at JINR.

The organization of conference is only one of elements of Marek's activity at WUT and JINR. Several decades ago, while working at the Institute of Physics at WUT, he introduced the computer calculations and data analysis to student physics laboratories, organizing also the national conference MI-CROFIZ'87, "Computers in physics education". He and his brother Wiktor have formed and led during many years the student association "CAMAC" in the Institute of Physics at WUT.

In recent years, as the head of "Engineering Support" sector at JINR, he organized student practices and internships, in which almost a hundred of students from many Polish universities have already participated. He is an author of the concept of NICA-MPD-Platform containing the power, gas, water *etc.* supply and control systems for the whole MPD detector.

One can continue the enumeration. His activities are now taken by other people, but the memory of him as a person of exceptional knowledge, experience and skills, full of invention and creative thinking, as an excellent organizer of teamwork, as irreplaceable colleague and friend, and first of all — as a good and honest man — will remain with us forever.

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