

Selected papers presented at
the XIII All-Polish Seminar on
Mössbauer Spectroscopy (OSSM 24)

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WARSAW

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The Symposium was organized by

- Institute of Materials Engineering, Faculty of Science and Technology, University of Silesia in Katowice

In cooperation with

- Faculty of Natural Science, University of Silesia in Katowice

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- Rector of University of Silesia in Katowice

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Preface

Meetings of the Polish Mössbauer community began in the late 60s and were organized by the Kraków group. Only in 1996, after a dozen years without these meetings, the Lublin group renewed the conference under its Polish name “Ogólnopolskie Seminarium Spektroskopii Mössbauerowskiej” (OSSM). From that time on, the biennale meetings became a tradition, and subsequent regional conferences were organized by groups from different centers in different places (Wrocław–Sobótka Górka, 1998; Radom–Zbożenna, 2000; Białystok–Goniądz, 2002; Katowice–Wisła, 2004; Częstochowa–Koszęcin, 2006; Kraków–Koninki, 2008; Warszawa, 2010; Lublin–Kazimierz Dolny, 2012; Wrocław–Pawłowice, 2014; Radom–Turno, 2016; Białystok–Goniądz, 2018).

The recent meeting took place on June 16–19, 2024, in Zawiercie — a charming corner of the Kraków–Częstochowa Upland. The meeting was organized by a group of employees of the University of Silesia in Katowice, representing the Faculty of Science and Technology and the Faculty of Natural Sciences.

We invited researchers who use and develop the Mössbauer spectroscopy method in their scientific work and all interested scholars who want to learn about the current topics of research using this method. We also invited PhD and undergraduate students to actively participate in the Seminar, so that they had the opportunity to expand their knowledge, improve research their methodology, and constructively discuss the results of their research.

The XIII All-Polish Seminar on Mössbauer Spectroscopy (OSSM 2024) was attended by forty-six participants representing Mössbauer centers in Białystok, Częstochowa, Katowice, Kraków, Lublin, Radom, Warszawa, and Wrocław. The speakers delivered thirty-two lectures covering a broad field of different scientific investigations in which Mössbauer spectroscopy is applicable.

The seminar program focused on the following topics: magnetic phases, nanomaterials, biomaterials, and multiferroics. Numerous lectures were devoted to interdisciplinary research subjects such as geophysics, biophysics, and material science.

We would like to express our thanks to all participants of the Seminar for their interesting lectures and papers, as well as valuable scientific contributions.

Special thanks go to the companies and institutions that supported the organization of the seminar, especially the Jura Skalka mineral water bottling plant and the steel production B-D plant in Zawiercie.

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