

XXII CAC

CONFERENCE ON APPLIED CRYSTALLOGRAPHY

PREFACE

This volume presents the proceedings of XXII Conference on Applied Crystallography that took place in Targanice, Poland in 02-06.09.2012.

The Conference was organized by the Institute of Materials Science of the University of Silesia under the patronage of the University Rector, prof. Wieslaw Banys. The International Union of Crystallography and the Committee of Crystallography of Polish Academy of Sciences were the sponsors and co-organizers of the event.

It is the tradition of these conferences to create platform for presenting achievements in developing methods of structural studies and their application to materials utilized in industrial practice. For many years the conferences have played an important role in promoting contacts between scientists from Eastern European and Western countries. This was especially important in times when those contacts were difficult due to political and/or financial reasons.

Initially, the conference dealt exclusively with X-ray powder diffraction and its application identification of minerals, ores, metallurgical products, steels and alloys. Over the years the range of subjects dealt with at these conferences has broadened and apart from X-ray methods, also other diffraction methods e.g. electron and neutron diffraction has been introduced as methods for study of real structure of materials.

The main topics of interest of the present XXII Conference on Applied Crystallography were:

- Structure determination from powder diffraction,
- Quantitative phase analysis by X-ray method,
- Development of methods and techniques in X-ray and electron diffraction,
- Electron crystallography,
- Crystallography of phase transformations,
- Texture studies and microstructure determination,
- Materials structure.

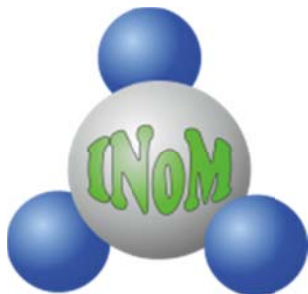
The conference was attended by many distinguished specialists who presented their papers on 12 plenary and 31 oral sessions. Additionally, 88 posters presented works of scientists from many countries such as Germany, Ukraine, Italy and Poland. All together, the conference was attended by 138 participants from 19 countries including Japan, Australia, Tunisia and The United States of America.

These conferences are also regarded as a good meeting place for young scientists to whom they provide opportunity to learn and exchange ideas. For the first time during the conference there were two oral sessions at which young people presented their works.

It was of special interests for the organizers to create an opportunity and good atmosphere for the conference participants for promoting new contacts and friendship, exchanging ideas not only during the conference sessions but also during informal discussions and so giving rise to further development of applied crystallography.

Danuta Stróż

ORGANIZER AND PARTNERS



**Institute of Materials Science
University of Silesia
Katowice, Poland**



**Committee of Crystallography
Polish Academy of Sciences**



**International Union
of Crystallography**

XXII Conference on Applied Crystallography

*Held under the Auspices of the Rector of the University of Silesia,
Prof. zw. dr hab. Wiesław Banyś*

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Conference photo



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