

PROCEEDINGS OF THE 2ND INTERNATIONAL
SCHOOL AND SYMPOSIUM
ON SYNCHROTRON RADIATION
IN NATURAL SCIENCE

Jaszowiec, Poland, May 18–26, 1994

Organized by Polish Synchrotron Radiation Society

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Part I

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POLISH ACADEMY OF SCIENCES
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PREFACE

The *2nd International School and Symposium on Synchrotron Radiation in Natural Science*, ISSRNS'94, was held in Jaszowiec, Poland, at the "Gwarek" Hotel, from the 18th to the 26th of May 1994. The eight-day School was attended by about 110 participants from 16 countries. It was organized by the Polish Synchrotron Radiation Society, a nonprofit nationwide organization established in 1991. The Society joins the researchers from different Polish scientific institutions who are interested in application of synchrotron radiation (SR) in their studies.

The ISSRNS'94, which followed the first School organized in Jaszowiec in 1992, aimed at continuing the biennial cycle of the SR users meetings. The main objectives of the School were:

- to propagate the experimental techniques based on synchrotron radiation and the relevant ones for application in different branches of the exact and natural sciences, like e.g. physics, chemistry, materials science, molecular biology, medicine etc.;

- to give scientists from different countries (especially from the Central and Eastern Europe (CEE)) an opportunity for meeting and discussing various aspects of application of the SR in their research programs;

- to enhance the East-West research collaboration for establishing new contacts that could provide the scientists from the CEE countries (who do not have any SR sources) an access to the western SR facilities.

The scientific program included 27 lectures delivered by the specialists who have been invited by the International Program Committee (a complete list given below). It covered various topics related to the application of synchrotron radiation. The contributed papers have been presented during two poster sessions. The program also included separate sessions devoted to demonstration of software packages used for data analysis, e.g. in EXAFS- or X-ray diffraction techniques.

These volumes of Proceedings (Part I and II) contain a majority of the invited lectures and of the contributed papers presented at the ISSRNS'94.

Preparation of the School and its success would not be possible without contributions of the sponsors, listed above. The Organizing Committee feels especially indebted to the Commission of the European Communities in Brussels for its partial, but the most significant, support of our conference budget from the grant CIPA 3510CT923190 within the program of "Cooperation in Science and Technology with Central and Eastern European Countries".

It should be emphasized here that this sponsorship enabled the organizers to provide full coverage of the School expenses for 20 participants from the CEE countries (except Poland) and for 20 invited lecturers from the West European countries. Thus the number of contributed papers presented at the ISSRNS'94 has been doubled compared with our first School in 1992.

The ISSRNS'94 organizers gratefully acknowledge the assistance of the International Advisory Board for their helpful suggestions, the efficient work of the International Program Committee in contributing to the selection of Invited Pa-

pers, and all the Invited Lecturers for their valuable presentations at the School and their help in refereeing the Contributed Papers.

The Organizing Committee would also like to express gratitude to the company DOCTORQ from Cracow for providing our conference with the computer equipment (without any charge) and to the company APRIL Business Computer from Warsaw for free rental of their Multimedia TFT Projection Panel.

The members of the Organizing Committee deserve also special recognition for their assiduous labor in planning and implementing the meeting.

Proper running of the School would not be possible without a friendly service offered by the staff of the "Gwarek" Hotel, and a hard work of our Colleagues from the Institute of Physics P.A.S., Mr L. Borg, Mr B. Wiczorek and Mr M. Pogonowski, whose devotion and professional skills should be greatly acknowledged.

Finally, the Editors would like to thank all the participants in ISSRNS'94 for their contribution to a variety of a scientific menu and to the nice ambience of our School.

Special acknowledgement is also addressed to the staff of the Editor Office of the journal *Acta Physica Polonica A*, who did all the efforts to speed up publishing of these Proceedings.

Krystyna Ławniczak-Jabłońska
Ryszard J. Iwanowski
Institute of Physics, Polish Academy of Sciences, Warsaw

List of invited speakers

W.Z. Chang (Germany)	Z. Dauter (Germany)
S. Doyle (Germany)	K. Eichhorn (Germany)
M. Eriksson (Sweden)	A. Fontaine (France)
P. Fratzl (Austria)	F.J. Himpsel (USA)
A. Jablonski (Poland)	D.C. Koningsberger (Netherlands)
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P. Laggner (Austria)	S. Lagomarsino (Italy)
R. Manzke (Germany)	G. Margaritondo (Switzerland)
S. Mobilio (Italy)	P.O. Nilsson (Sweden)
J. Nordgren (Sweden)	P. Perfetti (Italy)
A. Renouprez (France)	J. Robinson (USA)
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