

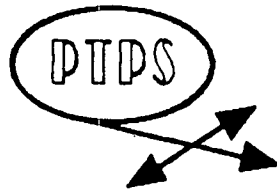
PROCEEDINGS OF THE INTERNATIONAL  
SCHOOL AND SYMPOSIUM  
ON SYNCHROTRON RADIATION  
IN NATURAL SCIENCE

Jaszowiec, Poland, May 13–21, 1992

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

Synchrotron radiation crosses the traditional subdivisions of science and gives us one of the most powerful instruments for physics, chemistry, material science, mineralogy, molecular biology and medicine. Rapid development and future projects of new synchrotron radiation sources (SRS) as well as heavy demand placed on existing ones is one of today's milestones of science. International cooperation in operating and usage of such big scientific installations is a necessity in today's scientific community. Meetings of current and intended users of SRS should be one of the important parts of this cooperation. This school was intended as a new initiative assumed by Polish Synchrotron Radiation Society and its main aim was to gather together and discuss among some more experienced users and operators as well as newcomers to these current topics in research at SRS.

The Polish Synchrotron Radiation Society is a new nonprofit organization with members from many Polish scientific institutions interested in work with synchrotron radiation. Synchrotron radiation users come from many disciplines of science and such organization can help them in realization of the common goal: to obtain access to the synchrotron radiation and to inform about possible exploitation of the unique properties of this radiation. In Europe twelve SRS operate now and two third generation sources are under construction (they should be ready in the end of 1994); several new projects are also discussed. Up to now East-European countries do not possess any national SRS. The economic conditions in these countries indicate that in the near future construction of such installations is not possible. But the scientists from these countries should not stay aside from this big challenge in X-ray physics. Therefore, the aim of this meeting was also looking around themselves of mainly those communities which do not possess national SR sources, like East-European countries, and establishing new working connections and cooperations in this field.

20 lecturers from Germany, Sweden, France, Switzerland, Austria and Russia gave excellent presentation which, beside the new achievements, presented introduction to the synchrotron radiation science. Reader can find most of these lectures in the presented book of Proceedings. The subject of the School covers briefly most important fields of synchrotron radiation use. Therefore, the organizers hope that the presented proceedings can be useful as a textbook for newcomers or scientists working in nearby disciplines. The contribution papers present mostly the experiments performed by Polish scientists in cooperation with other users of well-known SRS and are just the examples of common work between scientists from West- and East-European countries, which should be further developed.

Whether the School fulfilled the expectations of the participants and the organizers, it will be seen in the future. To continue this initiative, which was welcomed with great interest by scientific community, we are planning to organize next meeting scheduled on May 18-26, 1994, Jaszowiec, Poland. In order to obtain more information please contact with the School Secretary\*.

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