

## Editorial

For many years now, the *Journal of Applied Crystallography* has acted as a host journal for the small-angle-scattering community. Once again, I am pleased to introduce a large special issue devoted to this important topic, this time devoted to the Tenth International Conference on Small-Angle Scattering (SAS-96) held in Campinas, Brazil. I believe that in this issue there will be much to interest the specialists in small-angle scattering as well as those on the periphery of this

subject. The refereeing and handling of the papers was highly involved and amounted to a great deal of effort by the Guest Editors, and I would personally like to express my gratitude to Professors Aldo Craievich, Gernot Kostorz and José Teixeira for their considerable skill, organization and attention to detail that have made this issue possible.

A. M. GLAZER  
*Editor*

### Tenth International Conference on Small-Angle Scattering Campinas, Brazil, 21–26 July 1996

The Tenth International Conference on Small-Angle Scattering (SAS-96) was the continuation of a series. The first Conference was held at Syracuse, USA (1965) and was followed by others at Graz, Austria (1970), Grenoble, France (1973), Gatlinburg, USA (1977), Berlin, Germany (1980), Hamburg, Germany (1984), Prague, Czechoslovakia (1987), Leuven, Belgium (1990) and Saclay, France (1993). The Tenth International Conference took place at Telebras R&D Center and at the National Synchrotron Light Laboratory/LNLS, Campinas, São Paulo State, Brazil, 21–25 July, 1996. A one-day satellite Workshop on 'Synchrotron Radiation and Neutron Small-Angle Scattering: Instrumentation and Industrial Applications' was held at LNLS just after the end of SAS-96.

The objective of SAS Conferences is to promote interaction among scientists who use X-ray and neutron small-angle scattering to study a variety of materials, such as liquids, solids, alloys, glasses, polymers, gels, liquid crystals, proteins in solution, biopolymers *etc.* The scientific presentations are focused on structure and structural transformations and on their connection with physical and chemical properties of the materials.

The Tenth International Conference on Small-Angle Scattering was attended by 208 participants, 55 from different Brazilian scientific institutions, 28 from other American countries, 105 from Europe and 20 from Asia.

The Conference and satellite Workshop consisted of 27 invited lectures, 10 microsymbiosia with 44 invited participants, and 139 contributed communications, 7 presented orally and 132 in poster sessions. A total of 210 communications were included in the Abstract Booklet. The number of scientific contributions presented at SAS Conferences has increased steadily since 1984 (when there were about 100), indicating that small-angle scattering is a growing and very alive field.

The oral and poster sessions of the Conference were divided into the four classical domains: (i) topics of general interest; (ii) inorganic materials; (iii) polymers, complex fluids and colloids; (iv) biology. The invited speakers were selected from among the world's best specialists in the different fields following suggestions of the members of the International Advisory Board.

Ten thematic microsymbiosia were held at the Tenth Conference and satellite Workshop. They were focused on: (i) simultaneous small-angle scattering and wide-angle scattering; (ii) applications of small-angle neutron scattering to complex liquids; (iii) SAS investigations with perfect-crystal cameras; (iv) anisotropy of SAS from liquid crystals and ill-ordered materials; (v) associating polymers; (vi) SAS applications to biology; (vii) structural aspects of block copolymers and gels; (viii) kinetics of structural changes in biological macromolecules by small-angle X-ray scattering methods; (ix) synchrotron radiation and neutron SAS instrumentation; (x) industrial applications of SAS. The subjects, organizers and invited participants of the microsymbiosia were chosen by the members of the International Advisory Board. Other participants were selected by the symposium organisers from among the scientists who submitted contributed communications.

The attendance at all invited lectures, microsymbiosia and poster sessions was high and many interesting discussions arose. The general level, originality and variety of the scientific contributions to SAS-96 demonstrate that the field of small-angle scattering continues to develop very rapidly, both in the extension of the scientific fields covered and in the depth of theory and analysis. A visit of the participants to the new synchrotron-radiation facility at the National Synchrotron Light Laboratory, Campinas, showed that the necessary heavy technology around large instruments already exists

in Brazil, that new and original technical ideas are under development and that the forthcoming years can be viewed with optimism.

The manuscripts of the papers contained in these Proceedings were submitted by the authors during or up to one month after the Conference. The Guest Editors sent each manuscript, except for those co-authored by them, to two referees for evaluation. Thanks to the efforts of more than 100 referees (some of whom reviewed more than one manuscript), it was possible for the Guest Editors to complete the scientific evaluation by January 1997. The refereeing of the manuscripts co-authored by the Guest Editors was the responsibility of the Editor of the *Journal of Applied Crystallography*, A. M. Glazer.

The generous financial support provided by a number of funding agencies, national laboratories and instrument manufacturers is acknowledged. The availability of these funds allowed the Local Organizing Committee to cover the local living expenses of the 71 invited participants and to provide partial support to 50 young scientists and scientists from less privileged countries.

A proposal of the American SAS community for the organization of the next Conference was submitted to the participants at a plenary session and approved. Consequently, the Eleventh International Conference on Small-Angle Scattering, the last of the twentieth century, will take place at the National Synchrotron Light Source, Brookhaven, USA in 1999.

ALDO CRAIEVICH  
*SAS-96 Chairman and Guest Editor*

GERNOT KOSTORZ  
JOSÉ TEIXEIRA  
*Guest Editors*

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#### Financial Support

Foundation for the Support of Research of the State of São Paulo (FAPESP), *São Paulo, Brazil*, National Council for Scientific and Technological Development (CNPq), *Brasilia, Brazil*, Foundation for the Support of Education and Research (FAEP-UNICAMP), *Campinas, Brazil*, International Union of Pure and Applied Physics, C-10 (IUPAP), *Frolunda, Sweden*, Latin-American Center of Physics (CLAF), *Rio de Janeiro, Brazil*, International Center of Theoretical Physics (ICTP), *Trieste, Italy*, United States Army Research Office (ARO), *Research Triangle Park, NC, USA*, Service for Cultural and Scientific Cooperation, *French Embassy, Brasilia, Brazil*, National Synchrotron Light Laboratory (LNLS), *Campinas, Brazil*, Stanford Synchrotron Radiation Laboratory (SSRL), *Stanford, USA*, Leon Brillouin Laboratory (LLB), *Saclay, France*, National Synchrotron Light Source (NSLS), *Brookhaven, USA*, Siemens Analytical X-ray Instruments, *Karlsruhe, Germany*, M. Braun-Graz Optical Systems, *Graz, Austria*, Daimler-Benz Aerospace, *Friedrichshafen, Germany*, Danfysik, *Jyllinge, Denmark*, Anton Paar, *Graz, Austria*.