## PREFACE



Due to its great success since the Laue, Ewald discoveries and Braggs contributions, crystallography is a multidisciplinary science interacting with most fundamental disciplines, physics, chemistry, geology, biology, applied mathematics and informatics but also with applied science, medicine, pharmacy and industry. Therefore the community of crystallographers is spread over all these disciplines and has rapidly to develop, besides its own crystallographic research, the necessary tools useful and usable for non crystallographers: instrumentation, automatic data collections, users friendly softwares, databases. . . . For example the development of automatic diffractometers and of all "black boxes" softwares for solving X ray crystal structures has followed very rapidly fundamental research. The "products" offered to non crystallographers seem so easy to use for a non crystallographer that many chemists, physicists or biologists claim that crystallography is now only a technique not a science. In that way, crystallography has been a victim of its own success: many university colleagues do believe that crystallography has not to be taught in physics, chemistry, biology, material sciences or geology courses. It is a big mistake which will soon lead to the disappearance of crystallography as an academic science if crystallographers and their associations do not react; one of the consequences will be the publication of false and wrong results. Suppressing crystallography lectures and tutorials at university is a very big error: hence, since the general use of neutron and of synchrotron radiation, and with the increasing power of computers, Crystallography is a new science which brings many accurate structural informations unattainable by any other techniques or spectroscopies: precise Bragg reflexions leads to charge density and thermal displacement analysis, accurate measurements of "out of Bragg" peaks gives answers to disorder related to solid state properties. Powder diffraction collected at synchrotron sources give now precise structural informations. Exotic experiments like high-pressure crystallography, diffraction under electric field...permits a new thermodynamic approach of crystals with application in physics, chemistry, material science, geology. Using the time structure of synchrotron radiation allows time resolved experiments, leading to the description of excited state structures, to dynamic understanding of ligand protein interactions and of chemical reactivity. All these data need new crystallographic research to be accurately and precisely interpreted in terms of physics, chemistry, mineralogy and biology.

These news directions are very exciting for us and for our young colleagues. Along these lines, crystallographers can study and work for many years and we may predict many beautiful, new and often unexpected results. We therefore need new generations of crystallographers for this new age of crystallography.

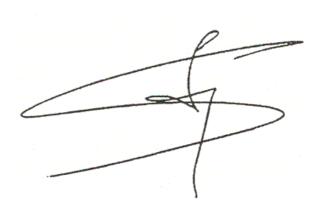
The national, regional and international crystallographic associations in that sense are very important for the development and promotion of crystallography, by:

- publishing our results, organizing schools, congresses and meetings
- producing teaching books, booklets or on line courses
- helping developing countries to practice crystallography at a high level
- gathering crystallographers in commissions or special interest groups (SIG) devoted to specialized new crystallographic topics...

The European Crystallographic Association (ECA) has been created to answer these questions at the European, Middle East and African level: the first interest in an European crystallographic organisation started at the VIII IIUCr Congress in Stony Brook (USA) and was formalised in April 1971 at the 0th "European" Crystallographic Meeting in Manchester: In August 1972 the charter of the European Crystallographic Committee (ECC) was drawn up: the geographic boundary was "Europe in a broad sense" and the goals "exchange of information and coordination of dates and topics of the various meetings held in Europe". Nineteen Countries, Czechoslovakia, Denmark, Finland, France, both Germanies, Great Britain, Hungary, Israel, Italy, The Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, USSR, Yugoslavia) were members of ECC. It was decided that two ECMs will be organised in the two years between two IUCr Congresses. In 1973 the 1st European Crystallographic Meeting (ECM) took place in Bordeaux (France). The ECC became a Regional Associate of the IUCr at the IUCr Congress in Warsaw in 1978. Egypt joined ECC in 1990, South Africa became a member of ECA in 1998. Greece and Turkey in 2001. Morocco will join ECA in 2002 and other African countries will follow. In 1997 at the Lisbon meeting, the European Crystallographic Association (ECA) was founded. The first President was C. Giacovazzo, with J. Bernstein as VicePresident, P. Beurskens as Secretary and S. Harkema as Treasurer, the ordinary members being F. Allen, M. A. Carrondo and P. Pautler. In 2000 at the ECM in Nancy, I became President, with P. Beurskens as VicePresident, G. Filippini as Secretary and M. T. Duarte as Treasurer, the ordinary members being E. Dodson, M. Jaskolski and D. Viterbo. The present membership consists of 30 National members (Austria, Belgium, Bulgaria, Croatia, Czech Rep. and Slovakia, Denmark, Egypt, Estonia, Finland, France, Germany, Greece, Hungary, Israel, Italy, Latvia, The Netherlands, Norway, Poland, Portugal, Russia, Serbia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, UK, Ukraine), more than 500 Individual Members and 8 (Corporate) Affiliate members.

The goals of ECA are promotion of crystallography in Europe, in Middle East and in Africa, development of all aspects of crystallography by means of the SIG s (special interest groups), teaching crystallography and providing all information useful to crystallographers. As president of ECA, my special effort is now developing crystallography in Africa and in Middle East: the AMC (Association Marocaine de Cristallographie) was founded beginning of February 2002. Discussions for creation of Kenya, Algeria, Ivory Coast, and Cameroons crystallographic associations under the auspices of ECA are underway.

ECM (European Crystallographic Meeting) is now one of the most important crystallographic meeting in the world bringing together more than 1000 researchers from ECA but also from allover the world: the scientific sessions are organized by a committee working in very close collaboration with the ECA SIGs and most new crystallographic results in physics, chemistry, biology and geology are discussed. Since the ECA foundation, ECM were held in Lisboa, Portugal (1997), Prague, Czech Republic (1998), Nancy, France (2000), and Krakow, Poland (2001). The next crystallographic meeting ECM21 will be in Durban, South Africa, end of august 2003. You are very welcome at this meeting. It will be the first ECM organized by an African country and on the African continent. More informations are given on the ECA web site, Ecanews <a href="http://www.ecanews.org">http://www.ecanews.org</a>.



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