

COLLABORATION OF CRYSTALLOGRAPHERS FROM ITALY
AND FORMER YUGOSLAVIA
(*Italian - Yugoslav Crystallographic Conferences*)
1972 - 1991

1. The initiative for holding regularly the Italian-Yugoslav Crystallographic Conferences (IYCC) was put forward by Giuseppe Allegra (at that time professor at the University of Trieste) and Italian Crystallographic Association (ICA). During the 7th Conference of the Yugoslav Crystallographic Centre (YCC) held on 19th and 20th October 1972 in Novi Sad (Vojvodina) representatives of Italian Crystallographic Association were invited to be the guests of this meeting in order to discuss possible perspectives of such joint meetings. They were professors G. Cocco (Perugia), at that time President of ICA, Giuseppe Allegra (Trieste) and Mario Nardelli (Parma). The YCC was represented by professors Drago Grdenić, President and Boris Kamenar, Secretary of the YCC. At the same time G. Allegra and M. Nardelli were the invited plenary lecturers. The decision to organize the 1st IYCC Conference in Trieste was warmly supported by both sides. The Conference was held from 11th to 14th June 1973 with the audience of about 200 participants presenting 70 scientific communications. The plenary lecturers were given by Drago Grdenić, Zagreb (*Crystal Chemistry of Mercury*), V. M. Coiro et al., Roma (*Semi-empirical Potential Functions in Crystal Structures Determination*), Giovanni Andreotti, Parma (*A Fast Procedure for Phase Determination. Centrosymmetrical Space Groups*) and Biserka Kojić-Prodić, Zagreb (*The Crystal Structures of Heavy Metal Phosphates*). Short lecture was also given by Ljubo Golič, Ljubljana (*About Some Structures with Short Hydrogen Bonds*).

2. During the 10th Conference of YCC held from 5th to 7th June 1975 in Kumrovec (small place North of Zagreb) President of ICA Alessandro Vaciago and Boris Kamenar (at that time Secretary of YCC) discussed thoroughly the profile and character of joint Italian and Yugoslav Conferences and agreed to proceed with triennial conferences organizing them alternately in Italy and in Yugoslavia. The Programme Committees of each Conference will be members nominated from both parties and the plenary lecturers will be crystallographers from Italy as well as from Yugoslavia. Distinguished crystallographers from the third countries will also be invited. The host organization will have to prepare the *Books of Abstracts* while the plenary lectures will be *in extenso* published by YCC in the *Annual of the Yugoslav*

Centre of Crystallography. The official language was decided to be English. Also, it was suggested that the conferences should include some interesting social programmes. At this occasion A. Vaciago (with Aldo Domenicano, Rome) gave a plenary lecture under the title *Molecular Geometry of Substituted Benzene Derivatives (A Critical Approach of Structural Results)*. The next 2nd Yugoslav-Italian Crystallographic Conference was held in Dubrovnik from 31st May to 3rd June 1976. About 75 participants presented 70 scientific papers. Main Conference lecture was given by Nobel Laureate Dorothy C. Hodgkin, Oxford (*Growing Points and Sticking Points in X-ray Analysis*). Other plenary lectures were given by Stefano Merlino, Pisa (*Framework Silicates*), Franc Lazarini, Ljubljana (*Structural Aspects of Bismuth Coordination Compounds*), Massimo Simonetta, Milano (*Structure and Dynamics in Molecular Crystals*) and Marija Herceg, Zagreb (*The Crystal Structures of Macrocyclic Compounds*).

3. The 3rd IYCC was held in Parma from 29th May to 1st June 1979. About 150 participants gave 60 scientific communications. All contributions were divided into six groups and presented by rapporteurs and simultaneously by the authors at the poster sessions. Six invited lectures were given by Sidney C. Abrahams, Murray Hill, N.J., USA, (*Field Induced Atomic Displacements in Crystals*), Ilija Krstanović, Beograd, (*Crystal Structure of Serpentine Minerals*), Jurij V. Brenčič, Ljubljana (*Structural Aspects of the Compounds with Quadruple Molybdenum – Molybdenum Bond*), C. Keith Prout, Oxford (*Crystallography in Pharmacological Research*), Martino Bolognesi, Pavia (*Protein Crystallography: Second Decade*) and Michele Catti, Torino (*Lattice Energy in Ionic Crystals: Calculations and crystalchemical Applications*).

4. The 4th YICC was in Bled (Slovenia) from 31st May to 3rd June 1982. There were again about 150 participants with 71 communications (divided into six thematic groups) presented by the rapporteurs and at the poster sessions. The plenary lectures were given by Robert F. Stewart, Pittsburgh, PA, USA (*Mapping Electrostatic Potentials from Diffraction Data*), T. Neil M. Waters, Auckland, New Zealand (*Molecular Detail from Crystallographic analyses – Some Observations on Coordination Complexes of Copper*), Gastone Gilli, Ferrara (*The Role of Structural Chemistry in Molecular Pharmacology*), Boris Matković, Zagreb (*Doped Dicalcium Silicates*), Giuliano Fagherazzi, Venezia (*X-ray Methods and Investigations of Glass-*

ceramic Fibers) and Zvonimir Maksić, Zagreb (*Geometry of Molecules in the Light of Modern Quantum Chemistry*). Short lectures were also given by Werner Nowacki, Bern, Switzerland (*On the Crystal Chemistry of Natural and Synthetic Sulfosalts*), Joyce M. Waters, Auckland, New Zealand (*Structural Chemistry of Osmium Carbyne and Related Complexes*) and by A. Santoro, Washington, DC, USA (*New Developments in Neutron Powder Profile Analysis*).

5, The 5th Conference was in Padova from 3rd to 6th June 1986. The rapporteur system was replaced by short individual oral (22) and poster (72) presentations. All communications were divided into six thematic groups. The invited lectures were given by David M. Blow, Imperial College, London (*Protein Crystallography and Protein Engineering*), Biserka Kojić-Prodić, Zagreb (*Correlations between Molecular Structure and Properties*), Carlo Mealli, Firenze (*Structural Problems in Organometallic Chemistry: An Interpretational Approach*), Roberto Zanetti, Padova (*Applications of Crystallography to Material Science*), Stanko Popović et al., Zagreb (*The Doping Methods in Quantitative X-ray Diffraction Phase Analysis*), R. Grimaldi, Genova (*X-ray Diffraction in Metallurgical Research*), Vittorio Petracone, Napoli (*X-ray Diffraction in Polymers*), Marcello Mellini, Pisa (*Electron Diffraction and Electron Imaging in the Study of Inorganic Crystals*), Albert Prodan, Ljubljana (*Electron Diffraction Studies of Modulated Structures*) and Davide Viterbo, Torino (*Direct Methods: An Ever Improving Tool for the Solution of Crystal Structures*).

6. The 6th Conference was the last one and was held in Pula (Istria) from 28th to 31st May 1989. The Conference attended about 150 participants. Conference programme was grouped into three thematic microsymbosia and two separate groups of common interest. Altogether they were 28 oral and 56 poster presentations. The main lecture given by John R. Helliwell, Manchester (*New Developments in Synchrotron Radiation Crystallography*) was followed by Luciano Fonda, Trieste (*Status of the Trieste Synchrotron Light Source*) and Mario Nardelli, Parma (*Crystallographic Databases*). Other plenary lectures were: Tonči Balić Žunić, Zagreb (*Systematics of Sulfosalts and the Role of Thallium in their Crystal Structures*), Lelio Mazzarella, Napoli (*Structure of Ribonucleases*), Ivan Leban, Ljubljana (*Structural Investigation of Vitamin D₂*) and Peter Prelovšek, Ljubljana (*Electronic Models in Superconductors*).

7. Maybe the best example of collaboration between the crystallographers from Italy and former Yugoslavia is the organization of the 13th European Crystallographic Meeting. Here is a short history. The European Crystallographic Committee accepted the invitation of Yugoslav crystallographers to organize its 13th meeting in 1991 in Ljubljana. However, in that time the political situation in former Yugoslavia was turbulent and the war started first in Slovenia and then significantly more bloodcurdling in Croatia. The organizers were faced with difficult situation: either to cancel the 13th European Crystallographic Meeting or to transfer it to one of the neighbouring countries. Boris Kamenar, at that time President of the YCC, asked Lucio Randaccio for help to organize the meeting jointly in Trieste. This was just two months before the meeting was planned. The answer was quick and efficient. Lucio Randaccio received all possible support by the Trieste University and its Rector Professor Giacomo Borruso. The Meeting was saved and held as planned from 26th to 30th August 1991. Among 329 scientific contributions there were six plenary lectures, 76 oral presentations and 247 posters all divided into 12 thematic microsymbosia. The main lecture was given by the Nobel Laureate Robert Huber, Martinsried, München (*Macromolecular Crystallography at the Intersection of Physics, Chemistry and Biology*) while the other plenary lecturers were by Boštjan Žekš, Ljubljana (*Ferroelectric Liquid Crystals – a Liquid Analogue of Incommensurate Crystals*), P. M. Zorky, Moscow (*Topology of Molecular Crystals*), R. Vincent, Bristol (*Advances in Structure Determination by Convergent Beam Electron Diffraction*), Giuseppe Allegra, Milano (*Size, Strain Statistics and Diffraction Profiles in Polycrystalline Samples*) and Peter Murray-Rust, Greenford, Middlesex, UK (*Protein Crystallography and Medicinal Chemistry*). Well organized satellite meeting was related to the «Synchrotron Radiation in Crystallography». In spite of all difficulties the 13th ECM was successful and it was really organized jointly by both Italian and Yugoslav crystallographers. It will be remembered as Ljubljana - Trieste Meeting.

Boris Kamenar

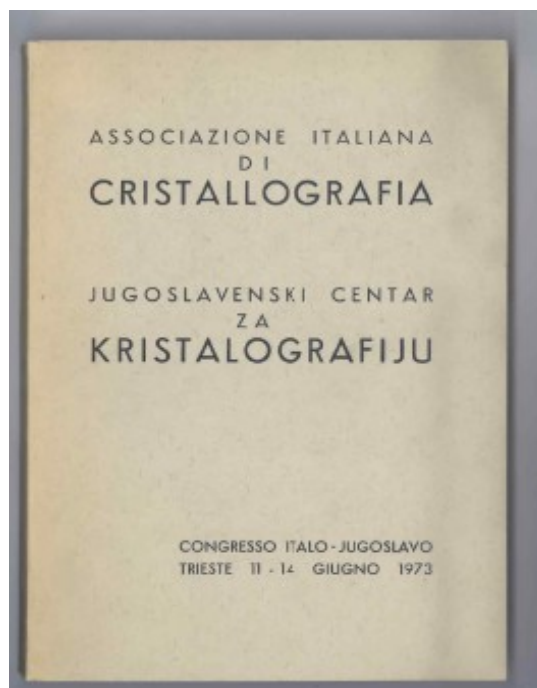


Fig. 1. Book of Abstracts. 1st Italian – Yugoslav Crystallographic Conference, Trieste 1973.



Fig. 2. Drago Grdenić, Dorothy and Thomas Hodgkin during the 2nd Yugoslav – Italian Crystallographic Conference, Dubrovnik 1976.



Fig. 3. Mario Nardelli and Boris Kamenar at the poster session during the 5th Italian – Yugoslav Crystallographic Conference, Padova 1986.



Fig. 4. Book of Abstracts. 5th Italian – Yugoslav Crystallographic Conference, Padova 1986.

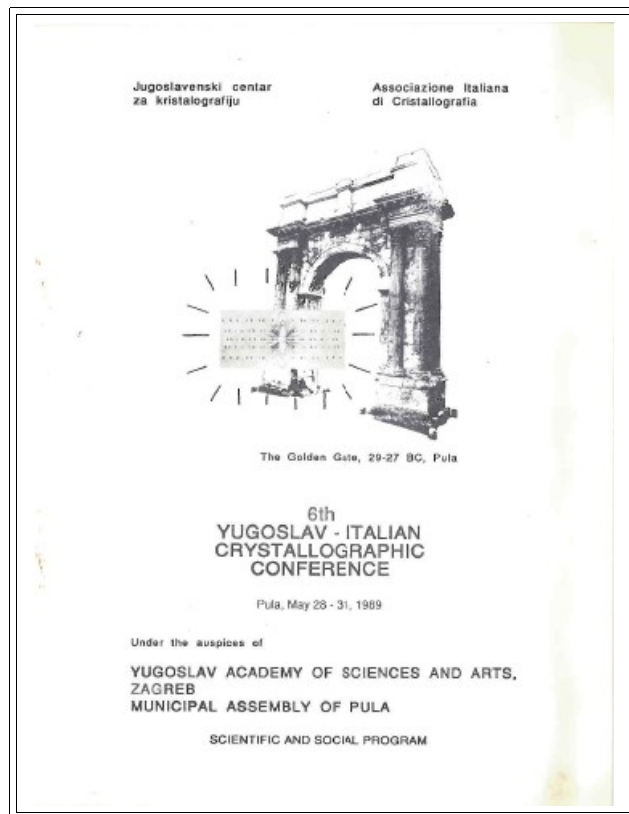


Fig. 5. First Circular Letter for the 6th Yugoslav – Italian Crystallographic Conference, Pula 1989.

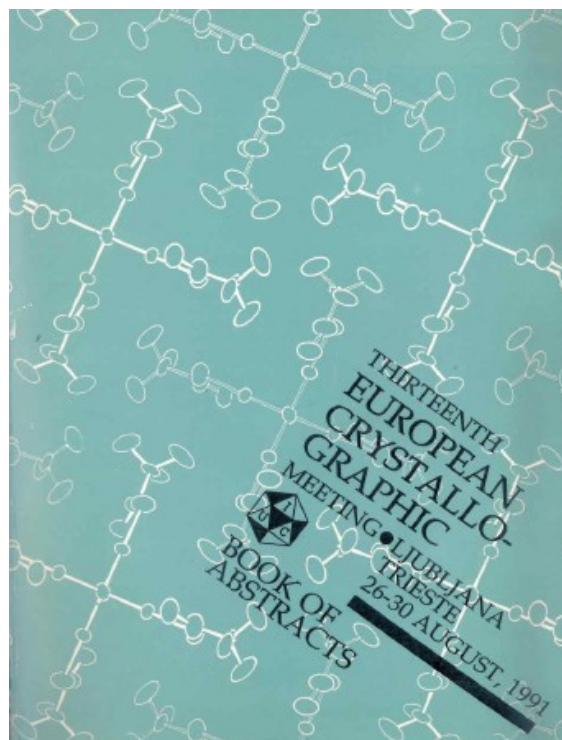


Fig. 6. Book of Abstracts. 13th European Crystallographic Meeting. Ljubljana – Trieste 1991.