

Luigi Cavalca founded and directed the Departments of Structural Chemistry and Physical Chemistry of the University of Parma and a School of Structural Crystallography, which became well known and appreciated not only at the national level but also internationally.

He was a scholar gifted with superior intelligence and curiosity for knowledge, which is typical of a high level researcher and he succeeded, even if working with limited means, in obtaining in his studies results comparable with those of the most advanced and well equipped research groups working abroad. At the beginning of electronic computing he immediately realized the importance that this tool had for his research and this led him to found in 1960 the Computing Centre of the University of Parma, which he directed for over ten years putting at the disposal of researchers and students of the University the most advanced computing facilities.

He was also director of the Centre for Study of Structural Chemistry of the Italian Research Council from its foundation (1970) until 1979 and afterwards was appointed Chairman of the Scientific Council of this Centre until 1983.

His researches range across several different fields and are mainly based on diffractometric methods of modern crystallography; the first ones dealt with several compounds of interest in inorganic chemistry, but his wide knowledge of and curiosity in the problems of the natural kingdom led him also to study minerals and inorganic compounds of biological interest, like the phases of calcium carbonate in the shells of lamellibranchiata and the skeletons of acantharia that he showed were built of single crystals of strontium sulfate. Further research work spanned the fields of coordination, metal-organic and organic compounds, fields to which he brought valuable contributions, both through results but mainly through methods. Indeed, it is important to remember that the successes that diffraction methods have reached today were just starting at that time, making use of the knowledge the research brought on one side and the development of electronic computers and automatic devices for collecting experimental data on the other. A strict and accurate experimenter, he succeeded in setting up apparatus for collecting diffraction data and for measuring X-ray intensities and developed computer methods for processing them. He had an extremely clear vision of structural crystallography, particularly of those problems that, at

that time, seemed obscure and complicated to the researchers working in the field. A teacher of really exceptional gifts, he succeeded in transferring to his pupils the very clear ideas and enthusiasm he had for scientific research.

A scientist of great rigour and deep culture, he enjoyed general esteem not only from his pupils and colleagues but also from the Italian community of crystallographers, and abroad from all of those who knew him. Also, from the human point of view, his gifts were really exceptional, particularly in being able to recognize the real merits of people and in helping students and pupils. As Dean of Faculty and a member of Councils of the University, he always endeavoured to support students, particularly those with merits and deserving help.

In addition to the love of his pupils and the esteem of his colleagues, he received also formal honours like the Gold Medal for Culture and the 'Comenda al Merito della Repubblica.'

Health and family problems in the last years took him away from the University, but this fact does not reduce the sorrow of his death to all who knew him, particularly the writer who, for so many years, collaborated with him in his studies and shared in his successes and also received from him many gifts of knowledge given with love and friendship.

M. NARDELLI

*J. Appl. Cryst.* (1991). **24**, 974

#### Sir Frank Claringbull 1911–1990

G. F. Claringbull was best known to mineralogical crystallographers for *Crystal Structures of Minerals* (1965) of which he was joint author with Sir Lawrence Bragg. This thoughtful, indeed seminal, survey was much more than just a revised edition of Bragg's classic *Atomic Structure of Minerals* (1937).

Gordon Frank Claringbull was born on 21 August 1911, educated at Finchley Grammar School and Queen Mary College, where he graduated as BSc in 1932 and PhD in 1935, and joined the staff of the Mineralogy Department of the Natural History Museum, South Kensington, London, in 1935. Except for secondment to the University of Birmingham in 1939 to learn the techniques of X-ray crystallography and consequent wartime work on sabotage explosives with Sir Gordon Cox, he was to remain at the Natural History

Museum for the next 41 years. He was sole or joint author of papers on a wide variety of minerals between 1938 and 1961, each stemming from a request for identification by the museum. Claringbull's contribution was usually the determination of unit-cell data. Seven new minerals, including the rare gem minerals sinhalite and taafeite, were described impeccably. A short communication on kalsilite appeared in the first number of *Acta Crystallographica*. The wide range of his mineralogical research fitted him admirably for collaboration in *Crystal Structures of Minerals* (1965).

As Keeper of Mineralogy 1953–1968 his administrative skills enabled him to provide his laboratory with the most up-to-date equipment. On appointment as Director of the Natural History Museum in 1968 he took up the challenge to modernize the museum with characteristic energy and by his retirement in 1976 the museum had begun to acquire a widely acclaimed new style.

He served the Mineralogical Society as General Secretary 1938–1959 and as President 1965–1967. He was knighted in 1975. He died on 23 November 1990.

DUNCAN McKIE

## Notes and News

*Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the Executive Secretary of the International Union of Crystallography, 5 Abbey Square, Chester CH1 2HU, England.*

*J. Appl. Cryst.* (1991). **24**, 974

### International Scientific Exchange Programme

The International Council of Scientific Unions and UNESCO have just set up a new joint programme aimed at promoting international cooperation in science by enabling scientists from developing countries to carry out short-term studies in well established scientific centres and to learn and use techniques not accessible to them in their own countries.

Candidates must already be engaged in research, return to their country of origin upon termination of their fellowship and produce evidence that the theoretical and practical knowledge or training to be acquired in the foreign laboratory will be beneficial to their scientific development. Reference: UNESCO/ICSU Short Term Fellowships, Division of Basic Sciences, 1 rue Miollis, F-75015 Paris, France.