

## FOREWORD

Fascination with minerals and rocks is as old as mankind itself; the first chapter of the history of our fascination can be read from the stones, metals and gems used by early human communities. The first flint mines in Europe can be traced back to about 5000 BC. The first clay bricks were made around 6000 years ago in Mesopotamia. Copper was probably the first metal used by our ancestors. Gemstones were used for personal ornaments and have always had magical powers attributed to them.

Aristotle (384–322 BC), and Theophrastus (372–287 BC) were probably the first to describe the properties of some minerals, and early Arab voyagers recognised the magnetic properties of magnetite and used it in compasses. Ibn Sina (Avicenna, 980–1037) set up the first mineral system, used until the beginning of the 19th century, and Agricola (1494–1555) had a good knowledge of minerals and also described their mining and processing.

Yet the first steps in the development of modern study of these substances were the seminal observations of Steno (1638–1686) on the growth of crystals; a century later this resulted in the formal definition of crystallography by Romé de L'Isle (1736–1790) who employed the first angle measurements. That, and the rapid and parallel late-18<sup>th</sup> century development of chemistry, (which was then working mainly on natural solid compounds and minerals), established mineralogy as a proper science.

In 1774 Werner (1750–1817) published his book about the classification of minerals based on their external properties, and the Hungarian translation quickly followed. (Ferenc Benkő, 1784).

In the 1774–1775 academic year Mineralogy became a compulsory subject for students at the Royal Hungarian University. Founded in 1635, it is today named the Eötvös L. University, and is the oldest active University in Hungary.

Throughout the past 230 years mineralogy has been taught uninterruptedly in the different Faculties of the University. On the occasion of this Anniversary the Department of Mineralogy, the successor of this teaching heritage, compiled

the current volume of *Acta Mineralogica-Petrographica*. The volume contains 13 research papers dealing with mineralogy and its application to petrology and ore deposits. The papers give a cross-section of the research interests and current results of recent staff and PhD students of the Department, who are mostly financially supported by the National Research Fund (OTKA) and the Ph.D. School of Earth Sciences. The papers went through the normal review process of the *Acta Mineralogica-Petrographica*.

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In addition to these professional research papers we have also prepared a condensed review of the history of our institution over the last 230 years, concentrating on teaching, but giving also basic background information about the academic and historical context. This paper is based mainly on the results of Science History research started in the Department in the mid 1980s. Part of this history has already been published, mainly in Hungarian; but new data, which inspired fresh interpretations, was also found during the preparation of the current paper.

This paper reflects the views of its authors, and all imperfections remain in it are their individual responsibility. Many of our recent and former colleagues and friends – L. Bognár, I. Dódy, I. Gatter, M. Hauer, M. Kázmér, I. Kubovics, Gy. Lovas, A. Mindszenty, F. Molnár, T. Póka, D. Pop, T. Váczi, D. Watkinson – have earned our sincere thanks for their comments on the manuscript in different phases of its preparation.

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