

## ALAN J. CRIDDLE DSc 1944–2002

### Memorial Notice

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Self-portrait digital image created December 2001.

The death of Alan Criddle on May 2<sup>nd</sup> 2002, aged just 57, was a tremendous loss both to his friends and family and to the international mineralogical community. At that time Alan was Chairman of the Commission on Ore Mineralogy and UK national representative on the Commission on New Minerals and Mineral Names of the International Mineralogical Association. His loss will be most keenly felt in the field of reflected light microscopy as he had taken up the challenge of quantifying the reflectance of ore minerals and creating databases such as the Quantitative Data File (QDF) for Ore Minerals (2<sup>nd</sup> and 3<sup>rd</sup> editions), that could be used for mineral identification. In addition to planning a 4<sup>th</sup> edition of the QDF available free over the internet, prior to his death he was also working on the idea of producing internet or CD digital images of ore mineral textures in reflected light.

Alan's first interest in rocks and minerals was probably stimulated as a child by collecting fossils and stones from the coastline of his native South Wales.

Attending his local university in Cardiff, he was awarded an honours degree in petrology by the University of Wales in 1966. Subsequently, Alan undertook a masters degree on mineral deposits in part of the South Wales coalfield, successfully completed in 1967. After a period as a research assistant, again at Cardiff, when he started work on a PhD on the Llanharry iron mines that was never completed, in 1969 he was appointed Scientific Officer at the British Museum (Natural History) with the responsibility for initiating research in ore mineralogy and microscope-spectrophotometry. Within a few years he was promoted to Senior Scientific Officer and his laboratory was under development.

Working with Peter Embrey, and together with Norman Henry he helped to develop both technique and theory in the quantitative measurement of reflected light optical properties of ore minerals. He took over the editorship of the Quantitative Data File for Ore Minerals from Norman Henry in 1978 and, together with colleagues and collaborators around the world,

worked towards producing a 2<sup>nd</sup> edition filling significant gaps in the original database. When the 2<sup>nd</sup> edition was published in 1986, the cover was a light blue (Cambridge) in honour of Norman Henry, detail and wry humour typical of Alan.

In 1988, Alan's work was recognized by the naming of the mineral criddleite  $TlAg_2Au_3Sb_{10}S_{10}$  from the Hemlo gold mine in Canada.

Towards the end of the 1980s, with the changes associated with a new Head of the Department of Mineralogy and a new Director of the Natural History Museum, Alan turned to applying his work in spectrophotometry to the field of materials science, teaming up with Karen Reeson, a former PhD student. A Science and Engineering Research Council grant was awarded in 1992 on the 'Non-destructive characterization of semi-conductor materials and devices using microscope-spectrophotometry'.

In the early 1990s work was again undertaken on the Quantitative Data File for Ore Minerals with the 3<sup>rd</sup> edition published in 1993 almost coincident with the award of a DSc from the University of Wales.

Alan's scientific legacy includes four co-edited monographs, of which the Quantitative Data File for Ore Minerals is the main reference work in the field. He produced more than 110 peer-reviewed papers, with co-authors from all over the world. Of these papers, no less than 65 are descriptions of minerals entirely new to science, some of which were discovered by him, others for which he provided characteristic optical data.

Alan was kind and generous, always willing to give up his time to his students, research assistants and other colleagues, also to the various learned societies and organisations of which he was a member. He served the Mineralogical Society of Great Britain and Ireland as Treasurer from 1986 to 1991 nurturing the Society's investments at a time of growth followed by economic downturn. More recently he served on Council from 1998 until 2000 and as a Managing Trustee from 1997 to 2000. He served the International Mineralogical Association as Chairman of the Commission on Ore Mineralogy from 1998 until his death having spent more than 20 years as Treasurer, and he was UK representative on the Commission on New Minerals and Mineral Names from 1988 until 2002.

He helped organize many Short Courses, Workshops and Summer Schools around the world, most recently the series which started in

Budapest in 1995, and was followed by Porto in 1997, Ottawa in 1998, Pretoria in 1999, and Helsinki in 2000.

The research groups now working on mineral systematics, ore deposits and environmental mineralogy at the Natural History Museum in essence continue the work he started.

As a person, he was sociable, a fastidious bon-viveur whose acute sensory perceptions enabled distinction between the perfect and marginally less than perfect. Few who dined with him would have missed seeing food or wine of less than the highest quality rejected as such. Likewise his aural demands ensured the best attention from hi-fi specialists and merchandisers. His love of music ranged from Gregorian Chant to Jimi Hendrix and more lately he was a fan of the Russian pianist Grigory Sokolov.

He was an accomplished artist of several hundred works, some of which he exhibited and sold. Many are colourful and vibrant; others reflected his pain and agony or the effect of the strong painkillers that took over the last few years of his life. Regarding his art he wrote

"...I have been called to paint intermittently since childhood, drawn to paint first by the images hanging and stored in my home. These, to my childish eyes, were mysteriously beautiful. Two oils, of lilies and bull rushes, painted on mirror, though yellowed by light, nicotine and mirror polish, were real to me ...".

Although his illnesses kept him away from the Natural History Museum for long periods during the last seven years of his life, he remained active and productive while working from home often in great pain and discomfort borne with characteristic courage and fortitude.

We salute Alan's achievements in science which earned the respect of friends and colleagues from so many nations. He is missed by us all.

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