

# The Beginnings of *Geochimica et Cosmochimica Acta*

by Denis Shaw

## Introduction

It is believed by some (see Ingerson, 1985) that it was the Geochemical Society which founded its journal, *Geochimica et Cosmochimica Acta*, but this was not the case and it will be seen in the following that GCA is some five years older. The prime mover for the new journal was a former scientific editor named Paul Rosbaud, whose background will be introduced shortly.

In his declining years in England, V.M. Goldschmidt discussed with Rosbaud that the time was coming for launching a journal devoted to geochemistry. This was not to happen during Goldschmidt's lifetime, but soon after his death a meeting was called in Durham, in 1949, to oversee the start of a journal (see below); it is clear that the instigator was Rosbaud, as he had written the following:

"I am aware that the new journal will, at the beginning, have to fight its way through the maze of scientific literature, but I have no doubt that the journal will soon be established and become a very valuable contribution to the development of geochemistry and cosmochemistry. I am deeply sorry that the late Professor V M Goldschmidt, who was an old friend of mine, is with us no longer. I have discussed the idea of such a journal with him many times after the war, and he would certainly have given every possible support to it." (*in Wickman, 1988*)

In the following, we will look first at the role played by Rosbaud, then at how the British publishing business developed after World War II, and finally at the birth of *Geochimica et Cosmochimica Acta*.

## The Instigator - Paul Rosbaud

It is not clear to the writer how familiar Paul Rosbaud was with the earth sciences in general, or geochemistry in particular, although as a young man he had worked in X-ray crystallography. But Haines tells us (1988, p.135) that at Butterworth in 1946

A[Rosbaud] was to edit the journal which the board proposed to publish...

and that was clearly to be *Geochimica et Cosmochimica Acta*. Rosbaud had also been a friend of V.M. Goldschmidt and wrote (Rosbaud, 1961) a short biography as an obituary for him (*in Mason, 1992*). He did not in fact become the editor of G.C.A. but is evident that he was the prime agent in persuading a group of geochemists that the time had come to initiate it.

His background was colourful and moulded by the times. Before and during World War II he was science editor for Springer Verlag in Berlin. According to the biography by Kramish (1986, p. 250), Rosbaud had been seen, apparently, as "a pillar of Nazi society" when he was, in fact, a spy for Britain, with the codename "Griffin". The book credits him with the first information to reach Britain about the German V-2 rockets which brought terror attacks on London in late 1944, and it was from him that the British Government first learned of the German intention to build an atomic bomb. He was also the first to send word of Hitler's plan to launch a blitzkrieg against England with the help of submarines. His motive was a burning hatred of Nazism.

Paul Rosbaud was instrumental in getting Otto Hahn and Fritz Strassman's paper on the fission of uranium into press in *Die Naturwissenschaften* on an accelerated schedule, so as to alert the scientific community of the danger of this discovery. He hoped to inform the scientific community without delay about these exceptionally important results, fearing, perhaps, that the results might

be suppressed by the Nazi secret services (Khariton and Smirnov, 1993).

During 1945, Rosbaud was spirited out of Berlin in military uniform, and took up various consultancies with European scientific publishers, including the one with Butterworth. Sometimes he had his payments from German firms remitted directly to his friend Ruth Lange. She was living in 1988 in Berlin in poverty, but was apparently content to have been with him during the most trying years of his life. Two of his other mistresses lament that Rosbaud ruined their lives (Kramish, *op.cit.*).

Ruth's sister, Hilde Benjamin, became the Minister of Justice for East Germany and authorized the building of the Berlin Wall. She dispensed harsh justice to those who attempted to cross it and became known as Rote Hilde, Red Hilde. It is she who was the model for the president of the tribunal that tried the spy who came in from the cold, in John le Carré's novel of that name. The woman who had opposed the tyranny of Adolf Hitler sentenced 146 people to death, 356 to life imprisonment, and more than 24,000 to a total of 116,476 years of penal servitude (Kramish, *op.cit.*).

## The emergence of Pergamon Press

In describing the origins of Pergamon Press I have borrowed heavily from Haines (1988, p. 134-136 and 166-168) and Kramish, 1986, p.250.

As already mentioned, in 1945, Rosbaud was smuggled out of Berlin in military uniform by Eric Welsh. With the support of Welsh, Sir Charles Hambro, and Count Frederick van den Heuvel, Rosbaud helped to establish a Springer Verlag affiliate in London, collaborating with a young British army captain, of Czech origin, who had been press officer in Berlin for the Foreign Office, and who had adopted the name of Robert Maxwell. Books hidden in Herberstein castle, in Styria, supplied the initial stock.

Springer Verlag wanted to resume its pre-war eminence and regain its old customers, especially in the United States, and in the years up to 1952 Springer Verlag needed Robert Maxwell because he was their outlet to the world. The collaboration with Maxwell between 1947-50 brought SpringerVerlag many successes, as no direct exports from Germany were then possible, and Maxwell knew how to obtain advantages for Springer Verlag in every respect. He cleverly used the difficulties which existed in Germany to Springer Verlag's benefit. Without his intervention, this would not have been possible. The close relationship with Springer Verlag not only brought him great financial advantages but enabled him to lay the foundations on which he could build his publishing house, Pergamon Press.

The company which was to become Pergamon Press was, in fact, founded jointly in 1948 by Butterworth and Co. (Publishers), Ltd., one of Britain's oldest publishing houses, and Springer Verlag. It was called simply Butterworth-Springer, Ltd., and incorporated in April 1949. But its origins went back to November 1946, when the British Government suggested to Butterworth that it should enter the field of scientific publishing. A company history says that the Government's emissary was Count Frederick Vanden Heuvel, a shadowy and influential person, described as "the epitome of a diplomat with his imperial whiskers and black homburg". Vanden Heuvel (or Huyvel), a Dutchman by descent, was a Count of the Holy Roman Empire and died in 1963 at the age of 78. In reference books he was described as being a member of the British diplomatic service in Switzerland during the war - in fact, he was the station chief of the Secret Intelligence Service (MI6) in Berne - and was awarded the high honour of the C.M.G. in 1945. Also involved were Captain Maxwell and some of the best-known scientists of the day.

The scientists who met Butterworth in government offices in Great George Street, just off Whitehall, were: Sir Wallace Akers, Sir Charles Darwin, Sir Alfred Egerton, Sir Richard Gregory, Professor R.S. Hutton and Sir Edward Salisbury. Also there were representatives of Butterworth and Sir Charles Hambro, chairman of Hambro's Bank. A Scientific Advisory Board was set up with Professor Hutton as its secretary. Sir Alexander Fleming, the discoverer of penicillin, joined the board at its second meeting. Sir Edward Appleton became a member in 1949. The Butterworth representatives were John Whitlock, their joint managing director, and Hugh Quennell, both of whom became directors of Butterworth-Springer when it was formed. Quennell and Whitlock, "novices in the world of science", leaned on Vanden Heuvel for advice and support. John Whitlock used to refer to the Count as the cloak and dagger man. He was called by his friends Van, but those who had known him longer, and perhaps a little better than Whitlock, referred to him as Fanny the Fixer.

The purpose of the Scientific Advisory Board was to develop British scientific publishing through Butterworth, using the expertise of SpringerVerlag. Paul



Rosbaud, as a Springer Verlag protégé, was also at the initial meeting and was to edit the journal which the board proposed to publish. Rosbaud was another who had lived in the world of espionage and he had been introduced to Butterworth by Vanden Heuvel.

The development of the Butterworth-Springer company was of labyrinthine complexity in its financial and company arrangements, and by 1948 Butterworth was becoming concerned about the links between Springer Verlag and Maxwell. A Butterworth account says that Rosbaud was at this time not on the Butterworth payroll, but working for them freelance. His reports on visits to Springer Verlag tended to reach Quennell via Vanden Heuvel, who got to know Robert Maxwell through Whitlock.

In the summer of 1950 the Scientific Sales Manager of Butterworth, Ron Watson, believed that Butterworth-Springer worked more to the advantage of Springer than Butterworth. As a consequence, and after discussions in Berlin with Dr Lange and Ferdinand Springer, Butterworth decided to pull out of the partnership. In May 1951 Butterworth agreed to sell its interests to Maxwell for British Pounds (BP) 13,000 net and to a change of name for the company to Pergamon Press Ltd. (an original intention to change it to Parthenon Press was abandoned). Butterworth waived a debt of BP 23,547 owed to it by Butterworth-Springer, which meant it emerged from what it calls an "adventure" showing a loss of BP 10,547.

The stock of titles published by Butterworth-Springer and handed to Pergamon, thus forming the beginning of Pergamon's book list, consisted of five books and the following three journals:

*Spectrochimica Acta* (bought by Vanden Heuvel for Butterworth from the Vatican)<sup>1</sup>.

*Journal of Atmospheric and Terrestrial Physics*.  
*Geochimica et Cosmochimica Acta*.

According to Kramish (*op.cit.*, p. 250) the name, Pergamon Press, was proposed by Rosbaud. But Haines (*op.cit.*, p. 38) says that:

Maxwell took the name for his new company from a Greek town in Asia Minor, famous for a great work of art, the Altar of Pergamon, dedicated to the goddess Athena, and for a library unique in the civilised Mediterranean world. The company's colophon, or publisher's imprint, was taken from a head of Athena shown on the back of a coin of about 400 B.C. Board of Trade approval for the new name came on July 17, 1951.

When Maxwell acquired Butterworth-Springer it had only the few journals and books mentioned above. Up to the end of 1987 Pergamon Press had published some 11,000 books, had 4,000 or so titles in print and was publishing new titles at the rate of 365-400 a year.

Rosbaud collaborated with Maxwell over a number of years and then the relationship broke down (Haines, *op.cit.*, p.166-168). Pergamon had moved in March 1955 to larger offices in Fitzroy Square, London, which were to remain its headquarters until the move to Headington Hill Hall, Oxford, in 1960. An extraordinary general meeting of the company had increased its capital from BP 10,000 to BP 50,000 by the creation of 40,000 shares. But this galloping expansion was resisted by Pergamon's science director, Paul Rosbaud, who was, after Maxwell, the most important man in the company and one who, because of his reputation with SpringerVerlag, had the trust of many of the scientists whom Maxwell had recruited. Rosbaud doubted the wisdom of such a vaulting ambition and such rapid growth as Maxwell was demanding. Friction began to grow between him on the one hand and Maxwell and the rest of the board on the other. The row simmered for months before reaching a crisis in May 1956.

Rosbaud had written a letter to Hugh Handsfield, editor-in-chief of the American scientific publishers McGraw-Hill, telling him that Pergamon could not fulfil his order for copies of *Principles of Optics*<sup>2</sup> in the time required, nor could it possibly quote him a price. But the time and the price were paramount in a deal which had already been negotiated by Maxwell. "Surely there must be some misunderstanding", Rosbaud wrote to Handsfield:

I don't think there will be any hope for the sheets to be shipped for twelve to fifteen months, and with regard to price, we cannot possibly give you a quotation as we don't even know the size of the book ....

Maxwell exploded. There was an acrimonious meeting with Rosbaud on May

25, two days after that letter had been sent, and then a formal letter from Maxwell to his science director later that same day:

This is to confirm our discussion this morning when I informed you of the immediate suspension from your duties as science editor .... I regret to have to take this step but I am afraid that your letter of May 23 addressed to the editor-in-chief of McGraw-Hill leaves me no alternative ... having regard to similar acts of disloyalty in the past about which you have been reprimanded. I would remind you also that in September 1955 you assured me, on your word of honour, of your loyalty, support and co-operation. I am afraid that I am unable to accept your apology and explanation that you have acted impulsively. I regard your letter to McGraw-Hill, together with many other recent actions you have taken, as constituting a definite breach of your service agreement with the company. (Haines, *op.cit.*, p. 167).

Rosbaud protested, in a reply written that day, that he had in no way been disloyal and said the suspension ordered by Maxwell was "entirely unjustified". But at a special board meeting of Pergamon four days later Maxwell set out his case. He had, he said, earlier in the year agreed that publication of *Principles of Optics* would take place towards the end of 1956, with a view to getting a firm order from McGraw-Hill. He had also agreed with them a maximum price for 2,500 copies. When Rosbaud had seen the order he had taken "unilateral action of a most disloyal and harmful nature". The only object of his action, said Maxwell, must have been to encourage McGraw-Hill to negotiate directly with him, thus "seeking to discredit the veracity as well as the authority of the Managing Director" (Maxwell).

Dr Rosbaud admitted, again, that he had acted impulsively, but denied Maxwell's allegations about his motives. The chairman of Pergamon in those days was Harry Siepmann, previously an executive director of the Bank of England, who had been recruited by Maxwell. The minutes record him (Siepmann) saying:

He would categorically acquit Dr Rosbaud of disloyalty to the Press, though at the same time he considered him to be constitutionally unable to be loyal to any one person. He did not appear to realise that being loyal to a company meant being loyal to the individual members directing that company .... The letter should never have been written ....

The suspension of Rosbaud was then confirmed. After negotiations, Rosbaud gave "undertakings about his future conduct", but his days were numbered. By October the board was agreeing to pay him BP 2,500 for loss of office and Paul Rosbaud formally resigned and sold his shares. Maxwell said of him later:

He was an outstanding editor of the European type from whom I learned some of the trade in the early days.

After 1956 he was the European editor for Interscience Publishers and a consultant to other publishing companies. On September 28<sup>th</sup> 1961 Dr. Rosbaud was made the first recipient of the John T. Tate International Medal for distinguished service to physics, by the American Institute of Physics,

"for his stimulating and unconquerable devotion to conscientious publication in the physical sciences" (Snively, 2002)

He died two years later.

### The First Issue of *Geochimica et Cosmochimica Acta*

The meeting in Durham mentioned at the beginning took place in May 1950 and was attended by F.A. Paneth, L.R. Wager and P. Rosbaud; it is not certain whether any of the other original editors, *i.e.* C.W. Correns, E. Ingerson, S.R. Nockolds, were present.

It is clear that Rosbaud was instrumental in starting the periodical. Ingerson later said (1985) that:-

I negotiated the establishment of *Geochimica et Cosmochimica Acta* with Paul Rosbaud, who was active with Pergamon Press at the time...we started working on it in 1949 ... unfortunately, Paul Rosbaud's untimely death happened before G&CA reached full bloom, but his knowledge, foresight, and planning helped it do so sooner than it could have without his early participation.

Of course, Ingerson is premature in here identifying Pergamon Press, which

was incorporated later, as already discussed.

The journal was already past the planning stage at the time of the Durham meeting in 1949 and, in fact, the first issue was being put together, and of course came out in June 1950, under the imprint of Butterworth Springer Ltd, but with the business side handled by Lange, Maxwell & Springer Ltd. The colophon from the coin found at Herakleia (see above) was used on the first issue and continued to be used when the company name changed, in 1951, to Pergamon Press.

The main topic at the Durham meeting was the preparation of a Foreword for that first issue, which duly appeared (1950) as follows:

The aim of this journal is to publish original research papers on geochemistry and cosmochemistry, such as have hitherto been scattered over a wide range of geological, mineralogical, chemical and astronomical periodicals.

The chemistry of the Earth and of the Cosmos has become a branch of science independent enough to have a journal of its own. As there should be no political frontiers in science, the Editors and Publishers hope that the new Journal will be used as a means of publication by scientists of all countries.

The scope of the journal will be wide. Geochemistry as conceived by the pioneers - F.W. CLARKE, V.M. GOLDSCHMIDT, V.I. VERNADSKY - will be its leading theme but papers from neighbouring fields will be welcomed if they have geochemical significance.

There is a close link between geochemistry and cosmochemistry and in this journal papers dealing with the chemical composition of extra-terrestrial matter, knowledge of which comes mainly from the study of meteorites in the laboratory and the chemical interpretation of spectra, will appear alongside the results from the related geochemical field. (Foreword, 1950)

Wickman comments (*op. cit.*) that

... it is still after 45 years an impressive document...

To conclude this account of the beginnings of the journal, it may be added that in 1955 the Geochemical Society was founded and early in 1957 the first ballot on Society issues carried the question

*Shall Geochimica et Cosmochimica Acta be designated as the official publication of the Geochemical Society?...*

The vote was favourable: Yes 655, No 125. The initial rate for members was US\$10, about half the regular rate for individuals.

#### Acknowledgements

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#### References

- Foreword 1950 *Geochimica et Cosmochimica Acta*: vol. 1, p. 1.  
 Haines, Joe 1988 Maxwell.  
*Macdonald and Co Publishers Ltd., London*, ix + 525 p.  
 Ingerson, E. 1985; letter to Bryan Gregor, *Geochemical Society archives, McMaster University Kettle, S.F.A.* 1988 *Spectrochimica Acta*. in *Robert Maxwell and Pergamon Press, ed. Elisabeth Maxwell*, Pergamon Press plc, xvi + 887 p., 490-492.  
 Khariton, Y. and Y. Smirnov. The Khariton version. *Bulletin of the Atomic Scientists*, May 1993.  
 Kramish, Arnold 1986 *The Griffin*. *Houghton Mifflin Co., Boston*, viii + 294 p.  
 Mason, Brian 1992 Victor Moritz Goldschmidt: Father of Modern Geochemistry *The Geochemical Society, Special Publication No. 4*, xi + 184 p.  
 Maxwell E.J.J. (*co-ordinating editor*) 1988 Robert Maxwell & Pergamon Press: 40 Years Service to Science, Technology and Education *Pergamon Press, Oxford*, xiv + 887 p.  
 Rosbaud, Paul 1961 Victor Moritz Goldschmidt (1888-1947). *Great Chemists (Eduard Farber ed.) Interscience Publishers Inc.*  
 Snively, Benjamin B 2002 *Corporate Secretary, American Institute of Physics*, personal communication.  
 Wickman, F. 1988 The first years of *Geochimica et Cosmochimica Acta*. In *Robert Maxwell and Pergamon Press, ed. Elisabeth Maxwell*, Pergamon Press plc, xvi + 887 p., 575-576.

#### (Footnotes)

- <sup>1</sup> A brief account of *Spectrochimica Acta* is given by Kettle (1988).  
<sup>2</sup> The author of this book is not given by Haines (*op. cit.*) and it is not clear whether it was eventually published.

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