

Post-War European Optics Journals

John N. Howard

It's a tale of international intrigue that includes the outbreak of war, a special arrangement with the Vatican, Soviet scientists in the Cold-War era, and the birth of a publishing empire. Read on to learn about the surprisingly colorful history of several post-war European optics journals—and the *other* important Maxwell in optics.



Ian Robert Maxwell
in a 1987 watercolor
by Michael Frith.

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The journal *Optik* appeared in Germany in 1946. It was published in Stuttgart and had two co-editors: Fritz Gossler of Heidenheim/Brenz and Norbert Guenther of Aalen. (Heidenheim was the first West German home of the Carl Zeiss works before the construction of the research center in nearby Oberkochen.) It started as a small format journal; there were 26 articles occupying 380 pages in volume 1.

Optik modeled itself after *Revue d'Optique*; it contained a section of brief reviews of interesting optics articles that had appeared in other journals. Its subtitle was “a journal for the entire region of scientific and applied optics.” The articles in the early volumes tended to favor instrumentation. Other principal topics were microscopy, interferometry and color measurements. There were a half-dozen through-calculations of optical systems. All of the papers were in German.

By Volume 5 in 1949, the subtitle had changed to “a journal for the entire region of light and electron optics.” At that point, a fair fraction of the papers were about electron microscopy, as the German Society for Electron Optics had become a co-sponsor of the journal. By

the mid-1950s, there were occasional papers in English, and, by the mid-1970s, about half of the articles were in English. In 1985, the journal changed to a larger format similar to that of the *Journal of Optics* or the *Journal of Modern Optics*.

Optik is now the official journal of the German Society of Applied Optics, and also of the German Society of Electron Optics, and is affiliated with the European Optical Society. It is now in volume 118, and all of its articles are in English.

Spectrochimica Acta

The journal *Spectrochimica Acta* was launched at a particularly unfortunate time—1939, just before the outbreak of World War II. It was originally published by Springer, Berlin, and its editors were Walther Gerlach and G. Scheibe (Munich); R. Breckpot (Louvain); Frank Twyman (London); and Fr. Alois Gatterer of Castel Gandolfo, the scientific observatory of the Vatican. The journal's intended scope was spectroscopic techniques and the analysis of spectral energy levels, principally by experimental methods.

Most of the early articles were in German, with a sprinkling of French and

English. There were also brief reviews of related articles that had appeared in other journals. Volume 1 covered the years 1939 to 1941, and Vol. 2 included 1941 to 1944. The journal did not appear in 1945 or 1946 because of the disruption of the war. At this point, Fr. Gatterer was given permission by Pope Pius XII to publish the journal in the Vatican. Thus, Vol. 3, 1947 to 1949, appeared from the Vatican, with the subtitle “Commentarium Scientificum Internationale Tractans de re Spectrochimica.”

The articles remained a mix of German, French and English. The Vatican authorities were not happy with the cost of publishing a scientific journal. In 1950, they sold the journal to Robert Maxwell, an enterprising young man who recognized that there could be a profitable commercial future for international technical journals, particularly if Russian papers were added to the mix.

Maxwell was born as Jan Ludvik Hoch in 1923 in Czechoslovakia, but came to England just before WW II and served in the British army. He was self-educated, very bright, and fluent in French, German, Russian and English. He served in military intelligence, adopting the

name Ian Robert Maxwell. At the end of the war, the Foreign Office sent him to Berlin, where he was the head of the Press Section.

One publisher's vision

With the advent of the Cold War and the associated arms race, most Americans and Western Europeans had little feeling for what was happening in Soviet science. Maxwell saw a promising market in Western libraries for specialized international technical journals, particularly if each journal also had a Soviet co-editor who could encourage publication in that journal by his Soviet colleagues. Maxwell would personally recruit these Soviet editors.

He scraped together all the money he had or could borrow, formed a small company called Pergamon Press, and bought *Spectrochimica Acta* for about \$16,000. Since 1950, *Spectrochimica Acta* has been a Pergamon publication. Throughout the 1950s and 1960s, Pergamon vigorously launched a wide variety of "international interdisciplinary journals." It was probably the financial success of these specialized "international" journals that inspired several other commercial publishers to enter the technical journal market. In the late 1950s and early 1960s, scarcely a month went by that one did not receive an announcement of the impending arrival of yet another international interdisciplinary journal specializing in some aspect of physics or engineering.

Maxwell was clever enough to recognize that, for these new journals to succeed, they should have editors (and "Honorary Editorial Boards") of experts well-known in each discipline. For example, he persuaded H.W. Thomson of Oxford, Foil Miller of Pittsburgh, and Verne Fassel of Iowa—three very

distinguished spectroscopists—to serve as co-editors of *Spectrochimica Acta*. Pergamon Press became an important publisher of commercial journals, and Maxwell became quite wealthy, although chiefly from other ventures.

For example, he produced a film version of Mozart's "Don Giovanni" from the Salzburg Festival in 1954 and the Bolshoi Ballet's "Swan Lake" in 1968. In 1988, he founded *Moscow News*, an Eng-

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lish-language paper in Russia. He formed many companies, including mergers with the publisher Macmillan, the language company Berlitz, and the *Official Airline Guide*. In 1984, he became publisher of the *Daily Mirror*, a London tabloid.

He ran for Parliament (and was elected), and acquired a baronial estate near Oxford, where he lived like an English lord. Unfortunately, his extensive empire of holdings unraveled in the late 1980s.

Sadly, in November 1991, he died in an apparent suicide. His body was found floating near his yacht off the coast of Africa. Pergamon Press and its journals still exist, but in a more prosaic form than in the Maxwell heyday.

OSA's Board of Directors became acutely aware of Maxwell and his incursions into optics when Pergamon announced in 1959 its proposal to bring out a journal called *Infrared Physics*, with a scope that overlapped a considerable portion of that of JOSA. The threat of that journal spurred OSA to begin its own interdisciplinary journal, which was to be called *Applied Optics*. ▲

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