

Preface

A Century of Chromatography and Volume 1000 of the Journal of Chromatography

It is very instructive to observe the adsorption phenomena during filtration through a powder. First a colourless, then a yellow (carotene) liquid flows out from the bottom of the funnel, while a bright green ring forms at the top of the inulin column, below which a yellow ring soon appears. On subsequent washing of the inulin column with pure ligroin, both rings, the green and the yellow, are considerably widened and move down the column.

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Early in 1958, Elsevier, then known as the Elsevier Publishing Company, somewhat reluctantly (“Will this chromatography last”? “We already publish a journal on analytical chemistry [*Analytica Chimica Acta*]”) began publishing the *Journal of Chromatography*. The proposal to start such a journal (the first international scientific journal dedicated to chromatography and electrophoresis) came from Michael Lederer, who together with his cousin Edgar Lederer, had just completed their classic book “*Chromatography – a Review of Principles and Applications*”. As the Editorial in the first issue stated, the new journal was intended to “. . . cope with three tasks:

- (1) To publish *review articles* on techniques of chromatography etc. and applications to various fields and problems.
- (2) To publish *original papers* dealing with chromatographic methods and their application in analysis and pure chemistry.

- (3) . . . to present collections of these data [R_F values and retention volumes] for the identification of unknown substances.”

This is certainly an excellent summary of what the Journal has been doing for the last forty-five years, even if the nature of the data used to identify unknowns has markedly changed during this period.

In many respects, the *Journal of Chromatography* was immediately successful: Volume 1 comprised no less than 564 pages (+ 44 pages of Chromatographic Data). It will come as no surprise that most of these papers dealt with paper chromatography, with gas chromatography and ion-exchange and electrophoretic techniques lagging far behind. On the other hand, it may be rather unexpected – specifically for the younger generations – that quite a number of the papers were written, not in English, but in French or German. Actually, five out of the first ten papers were in French – with the wide-ranging *Séparation d’isotopes par chromatographie et par électrophorèse*, by Marius Chemla, having the honour of being the first article.

It took the *Journal of Chromatography* slightly over three decades to reach the Volume 500 landmark. A most conspicuous contribution to this issue was the 90-page ‘family album’ organised by the founding Editor of the Journal, Professor Michael Lederer (who else!), with the kind assistance of another pioneer, the late Professor Al Zlatkis. Some 600 pages were devoted to scientific contributions – all in English by this time – with column liquid chromatography in a dominant role, and (on-line) sample preparation being a notable newcomer. This commemorative volume was published in 1990, a mere thirteen years ago, and it is – at least to me –

surprising to find that mass spectrometry still played a rather modest role at that time: it was a key aspect in less than ten per cent of the contributed papers – and for use in gas chromatography only!

And, now, in the middle of the year 2003, we have Volume 1000 in front of us. Some will, of course, congratulate the publisher, and others will applaud the good work done by the Editors and Editorial Board members. However, all of these are but the servants of our interested audience composed of authors, referees and readers (and with, fortunately, many a scientist playing all three roles more or less simultaneously). It was a pleasure to cooperate with the staff of the Journal's Editorial Office, to encourage the invited contributing authors to deliver their (often extensive) manuscripts and to see how much progress has been made in the past decade. To give just a few examples of such progress: today's eye-

catching role of LC–MS-based techniques, the emergence of comprehensive separation procedures, and the availability of a variety of essentially mature capillary electrophoretic techniques. However, it is even more important to note that the dedicated and validated application of whatever hyphenated technique is selected to real-life sample analysis is at the centre of much current research: practicability increasingly is, and should be, the final touchstone.

In other words, catchwords such as optimisation, integration, identification and hypernation will keep us occupied for many years to come: analytical separation techniques have a bright future, and so has our journal!

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