Historical survey

The First Quarter Century

The Journal of Thermal Analysis (affectionately known as JTA) celebrated the 25th year of its publication in 1994 and it is therefore appropriate that the completion of that year be marked by this special issue containing invited papers. To readers who may wonder why this Preface is not being written by the Editors, who have laboured so long and lovingly for the journal, I must explain that the invitation to compose a historically oriented Preface was so charmingly and persuasively written that it would have been exceedingly churlish to refuse – even although it attributed to me qualities I do not possess!

The first discussion I recall on the possible establishment of an international journal for thermal analysis occurred at the First International Conference on Thermal Analysis (1st ICTA) in 1965. There it was suggested that the then Thermal Analysis Review (produced by John Redfern and distributed by Stanton Instruments) be converted to a journal, but this was decisively rejected on the grounds that (a) such a journal could not attract sufficient good-quality papers and would be of a low standard. (b) technique would be put before topic and (c) one commercial organization had already considered and turned down the idea (Minutes of Open Forum, 9 September 1965). Prof. László Erdey, the driving force behind JTA, could not attend that meeting but clearly did not (as it turned out, rightly) share these pessimistic sentiments with the result that, in 1967 or 1968, many of us received invitations to serve on the Editorial Advisory Board (EAB) of an international journal to be known as the Journal of Thermal Analysis, which would be published by Akadémiai Kiadó, Budapest, in collaboration with Heyden and Son, London, ICTA Council discussed this at their meeting at 2nd ICTA in 1968, deciding that they 'could not support a journal on thermal analysis [and that] individual members of [Council] who had accepted invitations to join the Editorial Board ... should write to ... Prof. L. Erdey, stressing that their acceptance in no way implied official recognition of the journal by ICTA' (Item 3.19, ICTA Council Minutes, 18-21 August 1968). That, despite this decision, all then Council members, including the President, did join the EAB must have given encouragement to Prof. Erdey and the first issue of JTA appeared in 1969.

Although Budapest, thanks to the efforts of Prof. Erdey and his colleagues, was internationally recognized as a centre of thermoanalytical excellence, it

must have required extreme faith even to consider establishing a new journal. One can well appreciate the difficulties encountered by Prof. Erdey and his staff in the process, yet one feels he must have been spurred on by his broad international outlook, which recognized that a journal based in Hungary (one of the most outward-looking of eastern European states) would attract material from both the East and the West. As Eastern scientists at that time sometimes found it difficult to get permission to publish in the West and many in the West were unaware of developments in the East, a much better two-way flow of ideas would inevitably result.

Although Prof. Erdey, very perspicaceously, selected Editors from his own staff - namely, E. Buzágh and J. Simon, Editors; F. Szabadváry, Consulting Editor; G. Liptay, Editor of Bibliography Section – the international nature of the iournal was stressed not only by the use of two publishers but also by the appointment of Regional Editors, each with a specific geographical area to cover. For Vol. 1, these were, in order of appearance, J. F. Johnson, USA, J. P. Redfern, UK, F. Paulik, Hungary, M. Harmelin, France, H. Kambe, Japan, I. S. Rassonskaya, USSR and F. Freund, FRG. International aims were also emphasised by the acceptance of papers in English, French and German as well as by providing all papers with abstracts in English, French, German and Russian: French abstracts were, however, dropped in 1982 and Russian in 1990, so that only English and German now remain. The EAB for Vol. 1 consisted of, in addition to Prof. Erdey as Chairman, R. Barta, Czechoslovakia, L. G. Berg, USSR, S. K. Bhattacharyya, India, C. Duval, France, P. D. Garn, USA, G. Lombardi, Italy, R. C. Mackenzie, UK, C. B. Murphy, USA, A. V. Nikolaev, USSR and W. W. Wendlandt, USA. Although, remarkably, the Editorship has changed only by the introduction of B. Androsits in 1991 after the untimely death of Eva Buzágh (JTA 36(5) (1990) 1633-1634), the Regional Editors and the EAB have been subject to periodic change because of deaths (the first being that of Prof. Erdey himself - JTA 2(1) (1970) 3-9), retirements and additions of new blood (the first occurring in 1972). Of the original list, only Ferenc Paulik (still Regional Editor), John Redfern (now on the EAB) and the writer (still on the EAB) now remain. The present 13 Regional Editors and 27 EAB members indicate the increase in coverage and status of the journal. Judit Simon became Editor-in-Chief in 1993.

The volume structure of JTA has been somewhat complex. From one volume of 4 issues per year in 1969, the format changed to one volume of 6 issues per year in 1973, to two volumes of three issues each per year in 1975–1978 and to three volumes of two issues each per year in 1979–1982 before reverting to one volume of 6 issues per year in 1983. Vol. 35 (1989), which included a special issue celebrating 20 years of existence, extended to 7 issues and Vol. 36 (1990) to 8 issues: consequently, it was no surprise that, in 1991, JTA became a monthly publication. Ever since 1973, when papers from a symposium on the derivation of kinetic data from thermal curves appeared as a normal issue (Vol. 5, No. 2–3), special issues containing papers presented at important thermoanalytical meetings, whether national or international, have

been a feature of JTA, either as part of the normal publication schedule (e.g. Vol. 35, No. 2, 1989; Vol. 38, Nos. 8 and 9, 1992) or as additional volumes (e.g. Vol. 23, 1982; Vol. 33, 1988; Vol. 40, 1993), The Proceedings of the 4th European Symposium on Thermal Analysis and Calorimetry (4th ESTAC) (Vol. 33, 1988) and Proc. 10th ICTA Congress (Vol. 40, 1993) were also produced in hard-back form for participants and for sale, but Proc. 5th ESTAC (Vol. 38, Nos. 1-4, 1992) does not seem to have been so treated. The Editors are to be congratulated that such special issues are normally typeset, as this not only enables articles to be properly refereed but also saves the reader the eyestrain so often associated with variable-quality camera-ready reproduction. As regards other special issues, a tribute to Clement Duval on his 70th birthday preceded the text in Vol. 4, No. 2 (1972) and a similar tribute to Anatolii Nikolaev appeared in Vol. 5, No. 4 (1973), but neither issue seems to have been a 'Festschrift' in the true sense. However, 'Festschriften' (the most recent celebrating the 60th birthday of Slade Warne - Vol. 39, No. 8-9, 1993) and 'Regional Issues' (e.g. Vol. 37, No. 9, 1991), both containing invited papers and organized by guest editors, have appeared and more are in the pipeline.

Originally, the journal was published on very high-quality paper that reproduced half-tone plates excellently, as may be seen from the photographs accompanying obituary notices and biographies prior to 1983. In that year, however, no doubt much to the chagrin of the Editors, the paper suddenly deteriorated markedly in quality and became very variable. Whether this was for availability or financial reasons, or both, is not known, but the fact that the change occurred at about the change in western publishers form Heyden to Wiley and Sons is almost certainly coincidental. It is pleasing to note that since 1990 the paper used has improved immensely in quality and is now entirely comparable with that of other scientific journals. Similarly, the binding of individual issues, which was at times very weak, has now reached a satisfactory standard.

Other changes that have occurred in JTA over the years include the dropping in 1975 of the 'yellow pages' section that provided information on each paper is the issue in a form suitable for mounting on index cards, the improvement in 1982 of the expression of content on the front cover and the periodic updating of the scope of the journal on the inside front cover, the most recent inclusion being 'calorimetry of all types'.

Some interesting figures have been obtained in an attempt to quantify changes over the years by examining in some detail the volumes for 1969 (Vol. 1), 1981 (Vols. 20, 21 and 22) and 1993 (Vols. 39 and 40). The number of pages in these were 495, 1347 and 3012, respectively, this representing, since all papers in JTA have always been refereed, a true increase and not inclusion of low-quality material. Mean increases for 1969–1981 were ~70 pp./year and for 1982–1993 ~130 pp./year – but, of course, actual yearly increases were never smooth. Inclusion of Proc. 10th ICTA Congress (Vol. 40) in 1993 means that the number of pages was undoubtedly inflated, although decrease in the length of the Bibliography Section in Vol. 39 and comparison with 1988–1992

(2500–2800 pp./year) suggests this inflation is not too serious. In the same three years (taking pages occupied by text only and only Vol. 39 for 1993), the mean length per paper (or review, since these have always been a feature of JTA) was \sim 10, \sim 9 and \sim 11.5 pp. Whether the variation is significant is uncertain, but one can at least conclude that the mean length since the inception of JTA was \sim 10 pp./paper.

The frequent assertion, without any evidence being adduced, that JTA is predominantly eastern European is clearly refuted by the figures in Table 1, which show that the proportion of papers from that area, although understandably high for 1969, has markedly decreased with a concomitant increase in the proportion of papers from outside Europe. The low proportion from America is accounted for by the start in 1970 of Thermochimica Acta, which, being edited in the USA, tends to attract almost all American papers. Presently, therefore, JTA has a European bias with indications of increasing support from the Far East.

Table 1 Geographical origin of	papers published in 1969-1993 (as percentages)

Origin	1969	1981	1993
	(Vol. 1)	(Vols. 20, 21, 22)	(Vol. 39)
Eastern Europe	52	38	34
Western Europe	33	26	27
America	12	7	5
India/Pakistan	3	13	10
Middle East/Africa	0	12	14
Far East	0	4	10
Total	100	100	100

So far as topics are concerned, the number of papers/year on inorganic compounds and on kinetics+theory were virtually identical in 1969, 1981 and 1993, the two together making up 47, 43 and 29%, respectively, of the papers published. Papers on complexes were close behind at ~13% in all three years. Of other topics, polymers and phase studies+thermodynamics rose over 1969–1981 (5–10% and 3–9%, respectively), whereas minerals increased from 5 to 10% over 1981–1993. Although thermometric titrimetry dropped from 5 to 1% over 1969–1993, the numbers of papers on this and other subjects were too small to establish significant trends. Briefly, the main subjects covered over the whole period were inorganic compounds, kinetics+theory and complexes, decrease in the proportion of papers on these being compensated for largely by

In the following discussion, 1993 will be represented by Vol. 39 only, as inclusion of Vol. 40 might introduce atypical features.

increase in the number of topics rather than by increase in the proportion of papers on topics already covered.

The increasing cost of journals is a sore point with librarians – so how has JTA fared? The annual subscription rate of \$18 for 1969 was very modest, even allowing for the low cost of eastern European publications at that time, but it was maintained for three years, presumably to attract subscriptions. In 1972 it increased to \$30 and then increased every year. Thus, in 1975 it was \$135, in 1981 \$407, in 1986 \$565 and in 1993 \$1495. These figures give a cost per page of \$0.04, \$0.10, \$0.30, \$0.40 and \$0.50 for 1969, 1975, 1981, 1986 and 1993, respectively – amounts that represent both inflation and, in all probability, concurrence of eastern and western values.

In conclusion, all the evidence obtained points to JTA being in a very healthy state and still growing in scope and maturity. The Editors, therefore, deserve our thanks for the immense efforts they have made over the years, often in very difficult circumstances, and for the manner in which they are directing the journal towards future growth and increased status: the publishers also should be aware of our appreciation. Indeed, we look forward with confidence to the next 25 years.



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