conflict in timing on 2 or 3 papers, he can decide which is the more worthwhile to attend. (3) If he doesn't attend the national meeting, he receives a digest of all of our papers via the Preprint about one year in advance of regular publication in the journals.

From the standpoint of the individual member, I believe that the Preprint pays big dividends. If he spends \$100 for travel expenses and \$100 of his time to come to a national meeting, the Preprint (which cost him \$2) allows him to get considerably more out of the meeting. If he doesn't come to the meeting, at least he has a digest of the papers one year before he would otherwise see them in the regular journals. Many of the papers (as submitted for our Preprint booklet at least) are not intended to take the place of the final article to be published in a national journal. They do have value, I believe, in serving our Division members in the ways outlined above.

Other New Activities of Our Division.—The replies to our 1959 questionnaire also stimulated the formation of a biannual Polymer Symposium—patterned somewhat after the Organic Symposium. Our first three-day symposium held in June, 1962, at Michigan State University was attended by 385 members. The members who attended voted it an outstanding success. We expect to continue it on a biannual basis.

Some of the other suggestions dealing with "Stimulation of Educational Activities" are being worked on. Still others are being held in abeyance awaiting time and volunteers.

If officers of other Divisions want a copy showing the voting on our 1959 questionnaire, I shall be glad to furnish this. The replies to our questionnaire may be of interest to other Divisions which are considering new activities.

## Division of Water and Waste Chemistry Preprints— Advantages and Problems\*

By HENRY C. BRAMER Mellon Institute, Pittsburgh 13, Pa. Received August 16, 1962

The Division of Water and Waste Chemistry issued its first preprint booklet in connection with the September, 1961, Meeting of the Society in Chicago. The limited experience of three preprint issues has shown that the advantages and problems of preprinting are largely those that were foreseen before the program was instituted.

The Executive Committee of the Division had discussed the pros and cons of various types of publications for several years. The principal reasons for considering such publications were the low percentage of Division papers published in the Society's journals and the consequent growing reluctance of many authors to submit papers for presentation. The principal problems in any such venture seemed to be that of financing the initial effort and the effect on Division membership of an increase in dues. It was decided that a booklet containing preprints of sixpage extended abstracts of papers would provide the best Division publication medium and that the first issue would be financed from Division funds with a dues increase to finance future issues.

The preprint booklets have been continued in the format of the prototype issue, which was patterned after that used for several years by the Division of Fuel Chemistry. Authors are asked to prepare six-page extended abstracts

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of their papers for direct costs of longer manuscripts. The Division does no editing of any kind; if the extended abstract is not received by the announced deadline, the 200-word abstract submitted with the final program is used. All manuscripts are prepared on 8.5 by 11" sheets, including mounted figures; the booklets are printed in  $5"\times7"$  size for economy in both printing and mailing. It has been possible to have the booklets printed in two weeks or less and to mail the preprints at least two weeks prior to the meeting date. About one hundred extra booklets are printed and the extra copies are sold at the Division technical sessions and by mail.

The first preprint issue was a success insofar as the immediate membership reaction was concerned. The comments that were received were nearly 100 per cent in support of the effort. The subsequent dues increase necessary to finance the preprints, however, produced quite a different reaction. The first preprint booklet was issued in time for the September, 1961, Meeting; the dues notices for 1962 announced an increase from \$1 per year to \$4 per year and included a letter from the Chairman explaining the increase in detail. Approval of the preprinting program had been expressed at the General Meeting of the Division and each member had the first booklet in his possession free of direct cost. About one-third of the 1961 members failed to pay dues for 1962 and such comments

as were received made it clear that the increase in dues was the principal reason for non-continuance of membership. On the other hand, the number of new members obtained during 1962 was substantially greater than in past years. It now appears that the number of paid members in 1962 will be about 20 per cent. less than in 1961, but that the rate of growth of the membership will continue to be somewhat greater than that of past years.

The preprints have resulted in more and better discussions of papers during the technical sessions and probably have resulted in improving the quality of the papers presented. The preprints enable the audience to become more familiar with the subject of each paper than is possible from a short abstract; discussion thus tends to be something more than a series of superficial questions put to the author. The preparation of the extended abstract manuscript probably results in better final manuscripts, since the author must have his paper well formulated some five to six weeks prior to the date of the meeting.

Although the preprints do not constitute publication in the formal sense, they do provide a medium by which new technical information can be distributed in a bound volume to the group of specialists most likely to be interested. Many worthwhile papers are never published in the Society's journals or elsewhere; the extended abstracts of the preprints provide some permanent, semi-public record of such work.

The preprints provide a tangible, useful benefit to dues-paying members of the Division and permit those members who do not attend a Society meeting to derive more benefit from the technical sessions. A perennial question asked of any Division membership recruiter is: "What will I receive for my dues?" The preprint booklet is an additional answer to that sometimes troublesome question. The preprint booklets are in themselves useful additions to a technical library and in most cases provide all of the information one needs on the subject of a paper, unless it happens to cover a matter of special, current interest.

The biggest problem in preprinting Division papers is in obtaining the extended abstract manuscripts from the authors, prepared in accordance with the directions, by the announced deadline. Preprinting of this type requires that the author write three separate manuscripts: a short abstract some three months prior to the meeting; the extended abstract a month or so prior to the meeting; and the final manuscript by the date of the meeting. Although this would seem to be a reasonable progression, and possibly an aid to the author, the experience has been that many authors simply will not write the preprint manuscript. The Division does not presently require the preparation of preprint manuscripts; the opportunity is provided, but its use by any author is entirely voluntary. Only about one-half of the authors of papers for any single technical session have prepared preprint manuscripts for the three issues which the Division has so far printed. This is the most disappointing aspect of the venture and was entirely unforeseen. Many authors evidently feel that the preprint is not worth the extra effort involved. A completely undocumented, personal opinion is that the authors of the best papers usually prepare preprint manuscripts and do so in exact accordance with the

directions, including submission well in advance of the deadline date.

There is, of course, considerable extra work involved in the mechanics of preprinting. To date, the Secretary of this Division has been given the sole responsibility for this work. His experience has indicated that the mechanics of the operation would best be assigned to some other individual. Not only must the manuscript be assembled, abstracts typed in lieu of missing manuscripts and arrangements made for printing and mailing, but extra copies must be stored, mail orders filled and copies sold at Division sessions if the full value is to be realized from the effort. As those familiar with Division affairs will realize, these are extra straws added to an already full load of any Secretary.

A problem possibly unique with the Division of Water and Waste Chemistry has been in handling papers presented at sessions arranged by the Division in cooperation with other groups. Joint symposia with other Divisions present no problem, since the Division involved can decide beforehand whether or not to preprint papers and under what arrangements. A presently small percentage of the members of this Division, however, have primary interests in air pollution problems and the Division has for many years arranged symposia on this subject in cooperation with the Committee on Air Pollution of the Society. The place of such papers in the preprinting program has yet to be resolved finally. A limited trial issue of preprints of these papers has been prepared for the September, 1962, Meeting in Atlantic City. This experience should point the way in handling this particular problem.

In summary the advantages and problems connected with the Division of Water and Waste Chemistry preprints may be tabulated.

## ADVANTAGES

- 1. Better discussion of papers at technical sessions and a probably significant improvement in the quality of papers.
- 2. Immediate availability of new technical information to the most interested specialists.
- 3. A tangible benefit received for dues paid.
- Some permanent record of otherwise unpublished papers of value.
- 5. A probable long-range increase in the rate of membership growth in the Division.

## PROBLEMS

- 1. A short-range decrease in membership.
- 2. Difficulty in obtaining the voluntary cooperation of some authors.
- 3. The extra work load presently handled by the Secretary
- The unique problem of special symposia of limited interest to the general membership of the Division.

The preprinting effort seems to be worthwhile when a balance is drawn between the advantages and the problems involved. A service is being provided to the members of the Division and the great majority seem to approve. This is, of course, a criterion by which any Division activity should be judged.