dollars per year and for this amount a member receives a Spring and a Fall preprint, mailed to him prior to the appropriate national meeting.

To keep our publication costs at a minimum we require authors to submit their complete manuscript typewritten on special paper (which we supply), with photographs, graphs and line drawings prepared in accordance with our special instructions. The manuscript is reviewed by the chairman of the session involved and by a member of the executive committee of the division who is appointed to work with the chairman. Papers which are accepted for presentation are assembled by the secretary of the division, the pages numbered by hand and this copy given to the printer for reproduction.

Our standard preprint booklet is 8.5×5.5 inches, by approximately three hundred and fifty pages. It is printed on sixteen pound opaque stock and bound in 65 pound cover stock. These covers formerly were grey but beginning in 1962 they are yellow with the ACS emblem prominently displayed. Printing usually takes about two weeks from the time copy is received by the printer. Currently we print about twenty-two hundred copies per issue. These cost us approximately \$1.50 per copy printed, bound and mailed to the members. Extra copies have been sold for \$2.50 each to members of the division or \$3.00 to non-members of the division.

For a number of years we were limited by American Chemical Society rules to printing a number not exceeding 130% of our membership. This restriction has been re-

moved recently. We have never attempted to support our publication by advertising, and we have always managed to stay within our budget for printing and distributing the preprint booklet and still show a small profit to the division each year.

Full files of these preprints are maintained at the John Crerar Library in Chicago, the New York Public Library and the Chemists' Club of New York. In addition many of our industrial libraries bind and index this booklet. It is not indexed by *Chemical Abstracts* as a matter of editorial policy. It has been copyrighted as a publication of the American Chemical Society since 1954.

There are problems in publishing a preprint booklet. These are mostly problems of persuading an author to get his manuscript in on time, legibly typed according to our requirements. The officers of this division must undertake the responsibility of reviewing and assembling the papers and seeing that all of the printing deadlines are met so that the members receive their preprint booklets well in advance of the national meetings. All of the officers feel that these problems are small in comparision to the rewards of a growing membership, a healthy treasury and the sense of accomplishment that the preparation of this publication provides.

I wish to acknowledge the help and advice of several present and past officers of the Division of Organic Coatings and Plastics Chemicals: Allen Alexander, J. K. Wise, E. R. Mueller, George Somerville, and Robert Helmreich.

Preprints of ACS Polymer Chemistry Division—Advantages and Problems*

By CHESTER K. ROSENBAUM

Research and Development Division, Plastics Department, E. I. du Pont de Nemours & Co., Wilmington, Delaware Received August 22, 1962

How Our Preprints Originated.—Our Preprints were started in answer to a demand from the members of our Polymer Chemistry Division. Our Division Chairman, Frank Mayo, early in 1959 asked me, as an informal committee of one, to scout for possible new activities. I sent out about 50 letters to representative members suggesting a couple of ideas, and asking for their comments and suggestions. I received back 30 replies with a variety of ideas for new activities. With the assistance of John Howsman and Harold Spurlin, we then grouped these ideas into a series of 24 questions under the following broad areas: (a) Type of Meetings, (b) Stimulate Educational Activities. (c) Sponsor Publications and (d) Other Ideas. We then mailed this questionnaire in June, 1959, to our 1000 divisional members. We received back 226 replies. The voting on the questions pertaining to Preprints was as follows.

Questionnaire Sent to Members

 Require full manuscripts for all papers so that Preprints may be mailed in advance of meetings. (Costs in other Divisions are about \$1.50 to \$2.00 per meeting—and thus would require that our dues be increased.)

		Yes	No
		130	57
Α.	Require manuscripts for general		
	papers only	21	53
В.	Require manuscripts for symposium		
	papers only	36	41
С.	Require manuscripts for symposium		
	papers only at option of the		
	Chairman	38	27
2.	If Preprints are furnished, shorten		
	time for oral presentation and in-		
	crease discussion time.	134	48
3.	Reduce number of papers accepted		
	for presentation (note $\stackrel{\leftarrow}{\epsilon}$ and kind)	68	95
4.	Increase time available for discussion	144	33

Presented before the Division of Chemical Literature, ACS National Meeting, Atlantic City, N. J., September 10, 1962.

You will note that the voting was 70% in favor of Preprints for *all* papers. The members voted against the modifications (A) and (B) requiring manuscripts for only some of the papers. Also 80% of the votes on questions (2) and (4) were in favor of allowing more time for discussion at the meetings. This can go hand in hand with having Preprints.

We next sent out to all members a proposal for discussion and vote at the September business meeting.

"Resolved that the Program Committee shall require full manuscripts for all papers, and issue Preprints to members of the Division in advance of national meetings. To cover the added cost, the Executive Committee may raise the annual dues, as necessary, to a maximum of \$4.00. Extra copies may also be offered for sale to members and non-members, but not below cost."

At our business meeting in September, 1959, our members approved this proposal with the added definition that "the paper be at least 1000 words long and contain experimental data upon which the conclusions are based." The Executive Committee then voted to raise our annual dues from \$1.00 to \$4.00 to defray the added cost of the Preprints. These are now sent to all members in advance of the Spring and Fall national meetings.

Method of Preparing Preprints.—A notice is sent to all members about 6 months in advance of the national meeting, listing the special symposia and the chairmen of these. Papers are submitted to these Chairmen, or to F. H. Winslow (our Division Secretary) for general papers. These papers are typed by the author's secretary on special paper, maintaining 1 inch margins on 8.5×11 inch sheets.

The symposium chairman reviews his papers for technical content, and then sends them on to me, along with his time schedule for the meeting day. The Secretary performs the same chore for the "General" papers.

As Editor, I look over the make-up, try to do a small amount of rearranging to save pages, number the pages, prepare an index and write a foreword including notices or information to our members. The package of papers, ready for photographing, is sent to John S. Swift Co. in New York. The 8.5×11 inch pages are reduced to 5.5×8 inch size and assembled into a book.

Problems in Preparing the Preprints.—Our procedure goes along moderately well, but we have some problems in assembling the Preprint booklet. From the standpoint of the Editor these are:

- Authors do not meet a 3-month deadline (a few papers still are missing 2 months before the meeting).
- 2. Papers are of unequal length. They should be 5 to 10 pages, rather than 2 to 20 as at present.
- 3. Some graphs too small; others too large.

The remedy to the above problems is to educate the authors. Under our present setup, we do not have enough time to send papers back to the author to suggest condensation, or elaboration or to improve his graphs. The papers usually are printed in the shape that the authors submit them. This makes for uneveness that would not be suitable in a journal.

Costs of Publishing Our Preprints.—The costs of sending the Preprints to our 1200 members (plus some extra copies printed for sale) during our three year period have been:

Meeting	Pages	Copies	Total cost	Per copy
Spring 1960	340	1300	\$18 30	\$1.48
Fall 1960	342	1400	1794	1.28
Spring 1961	219	1400	1521	1.09
Fall 1961	384	1500	2191	1.48
Spring 1962	339	1300	1977	1.52
Fall 1962	660	1600	3600	2.25

You will note that the typical total costs, including mailing, for our Division have been about \$1.50 per copy for say 350 pages. The *incremental* cost is about \$1.00 per copy for 350 pages. The large volume containing 660 pages for our 1962 Fall meeting will cost about \$2.25 per copy. This would bankrupt our treasury for a membership of say 1300. However, the *incremental* cost for this copy is only \$1.50. Thus, with a membership of say 2000, we could issue a 600 page Preprint booklet twice a year and just about break even.

Effects on Division Finances.—Members of other Divisions may wonder how the Preprints have affected our finances. This is shown in the table:

Year	Members	Annual dues	Treasury balance
1958	1000	\$1	\$3260
1959	1004	Raise to \$4	4858
1960	1292	4	4856
1961	1290	4	5060
1962	1277	4	Not complete

Thus, you will note that we have gained in our total number of members. We attribute this chiefly to the fact that people are willing to pay \$4.00 a year to be sure to get the two Preprints mailed to them. We usually sell 200-300 extra copies at \$3.00 per copy to non-members who want a copy for just that one meeting (and probably prefer to put the \$3.00 on their expense account). We have not made much of an effort to gain new members by writing follow-up notes to our former members. Some of these put their dues notice away, forget to send in a check, and thus are dropped. Active follow-up to these, I am sure, could increase our membership.

Effects on Meetings.—The Preprints have increased the attendance at our meetings. The papers usually are arranged with 15 minutes allowed for presentation, plus 5 minutes allowed for discussion, or 20 minutes presentation and say 10 minutes of discussion. It has not been possible to cut the presentation to a shorter time because about half of the audience hearing a typical paper will not have Preprints, and thus the author must cover the meat of his paper orally. However, since furnishing Preprints to our members, the discussions have been more lively and, on a few occasions, have become fairly heated. We definitely are getting the audience participation that our members voted for.

Summary of Benefits of Preprints.—Viewed from the standpoint of an officer of our Division, or as an individual member, the chief benefits I think are as follows.

- (A) Benefits for the Division.—The Preprints (1) have increased our membership, (2) have increased the interest and the participation of the majority of our members and (3) have increased the discussion at our meetings.
- (B) Benefits for the Individual.—(1) The individual can get more out of the paper while hearing it if he has read or studied the Preprint beforehand. (2) If the member has a

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