



Within the next month or two many of the physics journals will appear with reduced margins and with less space between the lines. Although the page size remains the same, these typesetting changes will add twenty percent to the content of any page which is solid text, so that fewer pages will be needed to publish a given amount of material. There will be a consequent saving in expense for presswork and paper which will help the journals meet their primary obligation of publishing research results even though costs and the volume of contributed material are both rising faster than is income.

Each month it grows more difficult to finance scientific publications adequately. Figures readily available for the Journal of Chemical Physics make this crystal clear. Compare the following:

Year	Pages	Total Cost	Per page
1944	596	\$ 9,909	\$16.63
1945	654	10,805	16.27
1946	822	14,006	17.04
1947	962	19,297	20.06
1948	1252	approx. 28,000	22.36
1949	need 2000	est. 50,000	25.00

The budget was balanced in 1948 only by "holding over" some 200 pages ready for publication. Dr. Mayer, the Editor, estimates that to catch up and keep up with the accelerated flow of material meeting the editorial standards of the Journal, 2000 pages are needed for 1949. The estimated total income of the Journal for 1949 is \$30,000, which falls \$20,000 short of providing for the demand. The inflation of printing prices far surpasses volume savings in printing more pages per issue.

To meet the need of the Journal of Chemical Physics and others of a like nature, the Institute would have to budget such large deficits as to exhaust its total financial reserves in eighteen months. Obviously a more durable solution must be found. Meanwhile the Executive Committee of the Institute must very reluctantly restrict the page budget for 1949 to a figure much lower than 2000.

At its November 17th meeting, the Executive Committee appointed a Printing Costs Committee, instructing it to consult with the Board of Editors of all the physics journals and investigate ways of reducing printing costs by typographical changes, by the use of less expensive paper, or by substitute

printing processes where applicable and economical. Mr. Melvin Loos, Director of Printing, Columbia University Press, was appointed to the position of Consultant on Printing.

Mr. Loos and the Institute staff have since been busy seeking ways of reducing expenses. The Lancaster Press has also been very cooperative in working out the typesetting changes referred to above. Of all the methods of saving proposed, decreased margins and line spacing is the quickest and easiest to put into effect. Another suggestion, which may be adopted, is the use of a laterally more compact type-face, which would increase the average number of characters per line. Very much more must still be done to reduce costs, increase income, or both.

This case of the Journal of Chemical Physics is not unique. The Journal of Applied Physics is in like straits. The American Physical Society is currently considering how the Physical Review can continue to fulfill its role.

Increased advertising income is not the answer. Naturally, extraordinary measures are being taken to increase it, but the most optimistic estimates indicate increased income from this source would fall far short of meeting the existing need. Methods of printing our technical material without setting metallic type are under study but the cost comparisons obtained so far are a little disappointing. Future developments may improve the comparison.

It is hard to overstate the seriousness of the present situation. Increases in dues and subscription prices have far less than balanced the declining value of the dollar. The same is true of the per-page publication charge. It is clear that some increases are inevitable. Meanwhile, other recourses will be fully investigated.

The editors and the officers of the Societies and the Institute are anxious to learn what readers and contributors think of their journals. Are papers too wordy or too condensed? Are the standards for acceptance too severe or too lenient? How important is it to republish in the journals the abstracts which first appear in the meeting programs? Bearing in mind that these journals exist to provide for the publication of research results, is it better to raise dues and subscription prices or effect a saving by reducing the volume of such publication?

Comments on these questions from readers of this column would be welcomed. HENRY A. BARTON