editorial

Physics information—a success story

The report in this issue (page 23) by Arthur Herschman on AIP's new physics information system modestly refrains from self-congratulation. The fact is that the new computer-based system now beginning to get into operation is regarded by information experts as a major advance in the field of information dissemination. And it is becoming available none too soon in view of the difficulties American physics has begun to experience as a result of the incredible proliferation of the published literature.

We are not entitled to take this good fortune for granted since many other disciplines have not progressed as far in developing comparable systems for their members.

The primary literature for physics is now published in some 800 different journals. The 31 journals published by AIP alone contain 100 000 pages a year, about one third of the world's total. As Herschman points out, the most important problem for the research physicist confronted with this staggering output of physics literature is the "current-awareness" problem—keeping in touch on a month-to-month basis with what others are doing in fields of importance to him.

The new AIP information system is designed to enable the physicist to handle this problem with ease. The system will begin in 1972 to provide him with a monthly list of titles and prepublication abstracts of papers appearing in the world's 70 most important physics journals. The cost of these services will each be no greater than the cost of a subscription to a single journal such as the *Physical Review*. In addition many institutional libraries are already subscribing to the magnetic tape and microfilm service that furnishes the individual with full microfilm text of papers he decides are of interest to him from reading a computer printed-out abstract selected for him from the magnetic tape.

One sometimes hears the suggestion that with our modern physics information system now a working reality, perhaps we can do away with the refereed journal system. According to the information experts here at AIP, such a step would be totally unsound. It is even more essential that we have available as input to the computer-based methods of dissemination papers that have had the benefit of critical evaluation.

In fact the production of the printed, refereed journals at AIP has also been modernized. Under the strain of the information explosion the old journal system (which was set up in 1894) had been tottering on the edge of collapse. Issues were chronically appearing two or three months behind schedule; the indexing operation had become hopelessly jammed up while at the same time page charges were steadily increasing. The archaic indexing operation is now in the process of being supplanted by the new computer system. More efficient production procedures (including typewriter composition of journal articles and photo-offset printing) have corrected the lateness problem. For the first time in recent memory most of AIP's 31 journals this year were mailed to subscribers on schedule (by next month all will be on schedule).

And for the first time in recorded history (even with the new improvements in services) the charges to the author are beginning to go down instead of up.

Harold L. Davis