Production of 2-Reel, 70-Minute Kinescope Film on Gravimetric Techniques

	Man-Hours Expended by: TV Lab	Chemistry Dept.
Preliminary conferences Informal discussions and demonstrations among 3 chemists and 2 TV experts. Includes script preparation and rehearsal by the chemists	24	60
Filming Three chemists and a TV crew of 7. Each scene rehearsed immediately prior to filming. TV monitoring very useful. Film shot silent, sound added later	84	36
Editing Two chemists, editor, and narrator. Editing conferences, cutting, and splicing, narrative revision	66	38
Sound recording One chemist and a TV crew of 3. Includes rehearsals and revisions by narrator	34	4
Master film Sound track and film combined by editor to give master film, from which copies may be made	3	0
Totals	211	138

Master film and processing costs amounted to $430.

Figure 1

and working habits of the students were improved perceptibly.

These two films are a vitally important part of the instruction in our elementary analytical course. They are not simply educational entertainment. It is not possible to do as good a job of teaching without them as with them.

Kinescope Films in Industrial Laboratories

On-the-job training has become an important and expensive item in industrial and research laboratories. When a new employee joins an analytical laboratory, for example, his first days are spent in practicing the techniques that he will be required to perform. Also, for some time after the initial training period, the new employee's output is not always high, and his analyses must frequently be repeated by him, or even checked by an experienced worker.

On-the-job training is expensive; it requires not only the time of the novice, but also the time and effort of the experienced employee who teaches the new worker. Often, the experienced man must sandwich his instruction inefficiently between his regular commitments.

Kinescope films could be very useful for on-the-job training, especially in analytical laboratories. They seem admirably suitable not only to demonstrating techniques, but also to outlining certain methods of analysis, and to describing the theory, manipulation, and application of analytical instruments or complex instrumental installations (*1*). Films would probably not only shorten the training period of the new worker, but would probably greatly reduce the teaching effort by the regular employees. But most important of all, if our academic experience is any indication, films might greatly shorten the troublesome interim period after instruction that is required to bring the new worker up to adequate performance standards.

Need for Economy

There seems to be a real, large, and widespread need for necessary films in teaching chemistry. However, any particular film would probably not be useful to a large

Copies of these films may be obtained for viewing without charge from the Television Laboratory, University of Wisconsin, Madison 6, Wis. The balance film, at a cost of $99 per copy, describes the long swing method of weighing. The main reel of the gravimetric film describes the silver chloride determination with a sintered-glass crucible, while a shorter supplementary reel describes the Gooch crucible and filter paper. Both gravimetric reels together cost $148.50, but each may be purchased separately.