## Symposium on the Literature Chemist in the Chemical Industry\*

By HERMAN SKOLNIK

Research Center, Hercules Powder Company Wilmington, Delaware Received January 13, 1962

This symposium is unique in the annals of Chemical Documentation. It is the first time that a group of experts in chemical documentation is talking to a group of experts in chemical education. It is our hope that the "talking to" evolves into a "talking with" by the end of the panel discussion which follows this symposium.

Chemical documentation is a relatively new discipline of chemistry. It has no roots in colleges or universities. We must go to the chemical industry to define and to explain the importance of chemical documentation and the literature chemist, the chemist who has adopted chemical documentation as a field of specialization.

Historically, chemical documentation and the literature chemist have arisen in response to the challenges of the size, growth, and complexity of the chemical literature. I like to define chemical documentation as the art and science of putting information to work or alternatively, as the application of the knowledge of documentation to the solving of problems in chemistry. Both definitions require some elaboration.

The art and science of putting information to work and the knowledge of documentation are concerned with (1) selecting and obtaining documents, (2) organizing documents and designing systems for retrieving the information in them, (3) the manipulation of information into concepts and a body of knowledge, and (4) the communication of the information to those who need it.

A literature chemist is a B.S. chemist or chemical engineer or an M.S. or Ph.D. organic chemist, physical chemist, or chemical engineer by education, training, and

\* Presented at the Fourth Delaware Valley Regional Meeting, American Chemical Society, January 25, 1962, Philadelphia, Penna. experience. He is a literature chemist by adoption and by the acquirement of more than a modest skill in and knowledge of the following:

- 1. His native language
- 2. Several foreign languages
- 3. Information sources and services throughout the world
- 4. Chemical nomenclature
- 5. Indexing systems and their design
- 6. Classification systems and their design
- 7. Data handling equipment and systems
- 8. Communication equipment and systems

Most importantly, the literature chemist must have a broad knowledge of chemistry and be an expert in at least one area of chemistry.

These skills and areas of knowledge are the prerequisites to the art and science of putting information to work. They are not possessed in equal measure by all literature chemists any more than are the skills and areas of knowledge of organic chemistry possessed by all organic chemists. A literature chemist, however, must be an expert in one or more of these areas and have these skills and be knowledgeable in the other areas at least to the extent that every chemist should.

This symposium describes the literature chemist from six viewpoints, that of the translator, patent chemist, technical editor, abstractor and indexer, literature research chemist, and documentation research chemist. There are other viewpoints, of course, but with these six we hope to tell you what a literature chemist is, what he does, and the importance of his skills and knowledge in the world of chemistry.

## The Chemical Translator

By BENN E. CLOUSER

Research Center, Hercules Powder Company, Wilmington, Delaware Received Feburary 12, 1962

The chemical translator is a chemist who specializes in translating. As a chemist he is a product of our educational system. As a translator, he is a product of his own design and scholarship, for, in general, he has not been exposed to a greater formal education in languages than that of his scientific peers. Thus he is a chemist who is different merely in doing full time and for the benefit of others what most chemists do only occasionally to satisfy their own information needs.

\* Presented at the Fourth Delaware Valley Regional Meeting, American Chemical Society, January 25, 1962, Philadelphis, Penna.

To his colleagues, the chemical translator is a fellow chemist with special interests and skills which supplement their own. Consequently, it is not surprising that he is effectively employed in an industrial environment where his language ability serves to bring information directly to laboratory chemists who need it and use it. There is a gratifying and valuable feedback from this relationship between the translator and the laboratory chemist. Although the translator's satisfaction derives mainly from his linguistic accomplishments, he is a chemist, who can appreciate the value of his contribution when he sees it used on the operating level. Most importantly, any