

## Overview

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The origin of metallography is traced generally to the pioneering efforts of Henry Clifton Sorby, gifted British amateur scientist, who in 1863 made the first observation of the microstructure of a polished and etched metal specimen. However, the industrial and scientific world greeted this development with indifference and nearly 25 years passed before others began to build upon Sorby's work.

The growth of the steel industry after the Civil War, spurred by developments such as the Bessemer converter and the open hearth furnace, transformed technology and society. But this growth could not be accomplished without development of the science of metals. Techniques such as metallography made this possible.

ASTM Committee E4 on Metallography was founded in 1916, 53 years after Sorby's initial observation of microstructure. Prior to that, ASTM had one committee, E1, that covered all methods of testing of metals and alloys and only one standard, E 1, containing two pages devoted to metallography. It was recognized that more work needed to be done and a new committee, E4, was formed for this purpose.

This symposium, held on 8–10 May 1991, commemorates the 75th anniversary of committee E4. Fittingly, it was held in Atlantic City, where ASTM met annually for many years, up to about 1970.

Committee E4 has been a leader in developing metallographic test methods. This has been accomplished by the combined efforts of hundreds of volunteer members over the past 75 years. The enclosed historical review of E4 highlights the technical achievements and the lives of many of the responsible E4 members. Putting together this history was difficult and it probably is imperfect. However, it does show the importance of drawing talented metallographers into E4 activities.

Many of the papers in this book discuss the historical developments of specific areas in metallography. Knowledge of the past is important, not simply to maintain our perspective, but as a foundation for growth. Too often, we ignore the past and find that we are merely redeveloping what others have done before and, perhaps not as well.

### *George F. Vander Voort*

Carpenter Technology Corporation, Reading, PA  
19612, symposium cochairman and coeditor

### *Samuel M. Purdy*

National Steel Company, Trenton, MI 48183,  
symposium cochairman and coeditor

### *Francis J. Warmuth*

Cameron Forge Company, Houston, TX 77251,  
symposium cochairman and coeditor

### *Albert Szirmai*

U S Steel Corporation, Monroeville, PA 15146,  
symposium cochairman and coeditor