

MANAGING AN X-RAY DIFFRACTION LABORATORY WITH RESPONSIBILITIES TO RESEARCH, DEVELOPMENT, ENGINEERING AND PRODUCTION

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Significant changes have occurred in X-ray diffraction technology over the twenty five years the author has been involved with an industrial XRD laboratory at Corning Incorporated. This talk will discuss some of the major hardware and software changes that have resulted in significant improvements to throughput, higher quality results and quicker response to customer needs.

To help manage the rapid changes in XRD technology, Corning has formed relationships with local universities and national laboratories in an effort to keep up with the latest technology and meet the always changing characterization needs of Corning's materials research and development efforts. Results of recent high temperature lattice expansion measurements completed at Alfred University and Oak Ridge National Laboratory will be discussed.