

Troubleshooting Liquid Chromatographic Instrumentation and Methods

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1. Summary

The ability to assess analytical performance is a fundamental component of measurement science. Ultimately, measurement quality depends on the proper function of instrumentation in combination with appropriate methods. Evidence of proper function is typically provided by the instrumentation, chromatograms, and the resulting data generated. Chromatographic peak shape is diagnostic of problems that originate with the instrumentation as well as the method and sample. Once a problem has been clearly identified, steps can be taken to resolve the issue. This presentation will describe common problems than may be encountered, with representative illustrations of the resulting effects on chromatographic performance.¹

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