

T1. Interactive Series Baseline Correction Algorithm

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A new interactive approach to the baseline correction problem for hyphenated techniques has been suggested. It allows adapting traditional automated single-scan baseline correction routines or performing manual correction on bilinear data as if it were a single curve. Advantages of the method include "transparency" of the process and the means for extensive operator's interaction. The method has passed a long-term testing in an industrial laboratory, and was integrated into a professional software package.

In spite of simplicity of the algorithm, it allows to successfully eliminate the background even in complex cases. The approach can be effectively applied to hyphenated chromatographic data such as HPLC-DAD or, more generally, to any hyphenated technique that apply a spectroscopic detector to control processes evolving in time. In the present work the method performance as a preprocessing stage for resolving mixture components is shown using several experimental datasets from two hyphenated techniques: HPLC-DAD and TGA-IR.