



OPUS SPECTROSCOPY SOFTWARE

A.I.D. - Autonomous Composition Identifier

More Finding. Less Searching.

What is A.I.D. ?

Autonomous Composition Identifier is an innovative approach to evaluating infrared and Raman spectra. A.I.D. leverages advanced machine learning techniques to enable rapid and precise analysis of complex spectra. This method provides unparalleled ease of use and speed, delivering valuable insights into the chemical composition of unknown samples.

What can A.I.D. do for me?

A.I.D. is built as **the** standard search-and-find tool for any IR or Raman spectra. It compares spectra to libraries and identifies the best match, either through a single reference spectrum or a combination of multiple references. The entire analysis takes only seconds, even with libraries containing tens of thousands of reference spectra.

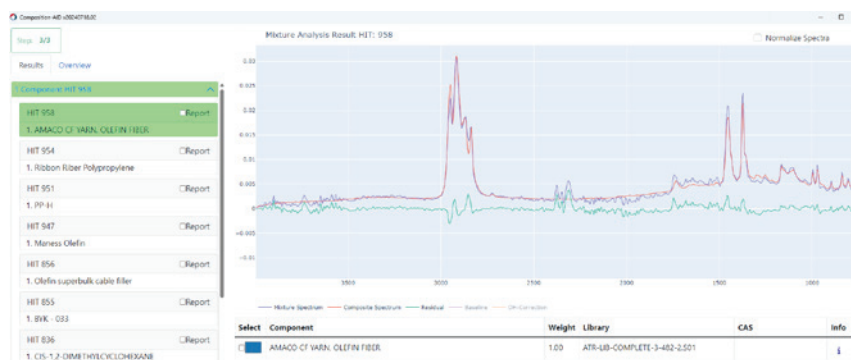


Fig. 1

A.I.D. Identifier result. With one reference (red) explaining the sample spectrum (blue) optimally. The difference (green) shows no unexplained peaks of relevance.

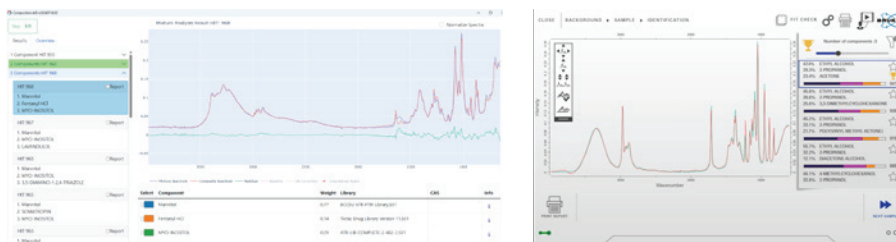


Fig. 2
A.I.D. result of a multi component sample in OPUS (left) and OPUS TOUCH (right). Different compositions and their respective hit qualities can be explored.

What is the scope of A.I.D. ?

The goal of Autonomous Composition Identifier is to work seamlessly with any data produced by Bruker IR and Raman spectrometers and microscopes. It is designed to be a smart assistant, helping users generate meaningful and reliable Identifier results in fields such as failure analysis, forensics, and reverse engineering. A.I.D. provides a „best match recommendation“ for the most objectively reasonable result while also allowing users to review alternative matches and refine the analysis interactively.

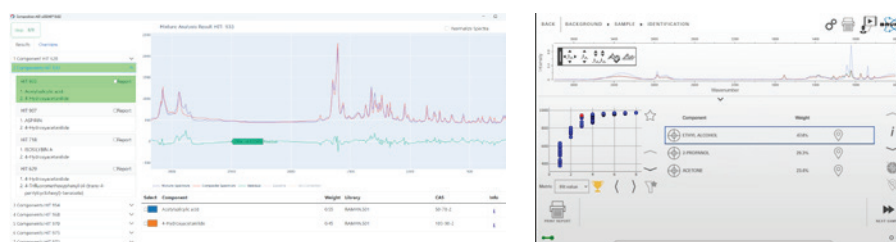


Fig. 3
A.I.D. result for a Raman spectrum (left) and OPUS TOUCH „check fit“ interface to evaluate the result in detail

Which systems are compatible with A.I.D.?

A.I.D. is available as a perpetual license or a year-by-year subscription for all Bruker FT-IR, IR laser, and Raman spectrometers and microscopes.

License Type:

- **With O/IR**
O/AID-OPUS for perpetual license
O/AID-OPUS-1Y for 1 year subscription
- **With O/TOUCH**
O/AID-TOUCH for perpetual license
O/AID-TOUCH-1Y for 1 year subscription

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**Bruker Optics is ISO 9001, ISO 13485,
ISO 14001 and ISO 50001 certified.**

