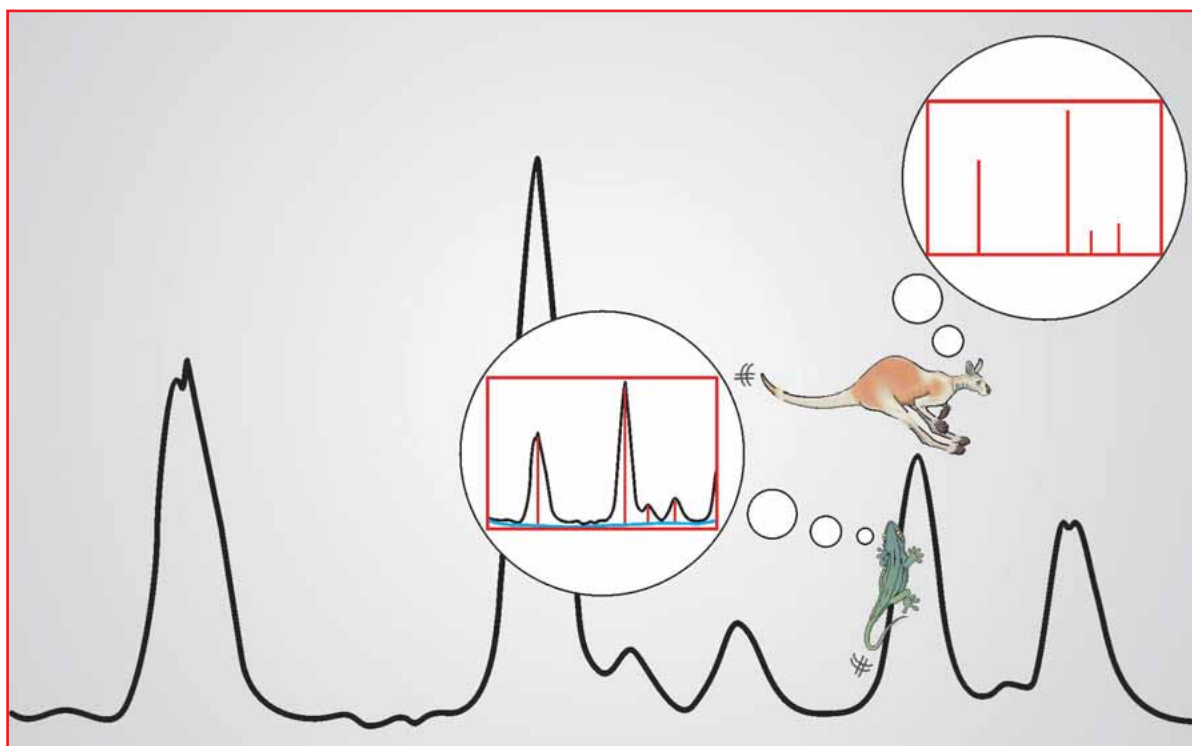


STANDARDLESS ANALYSIS

"Scan Whizzing" vs. "Peak Hopping"



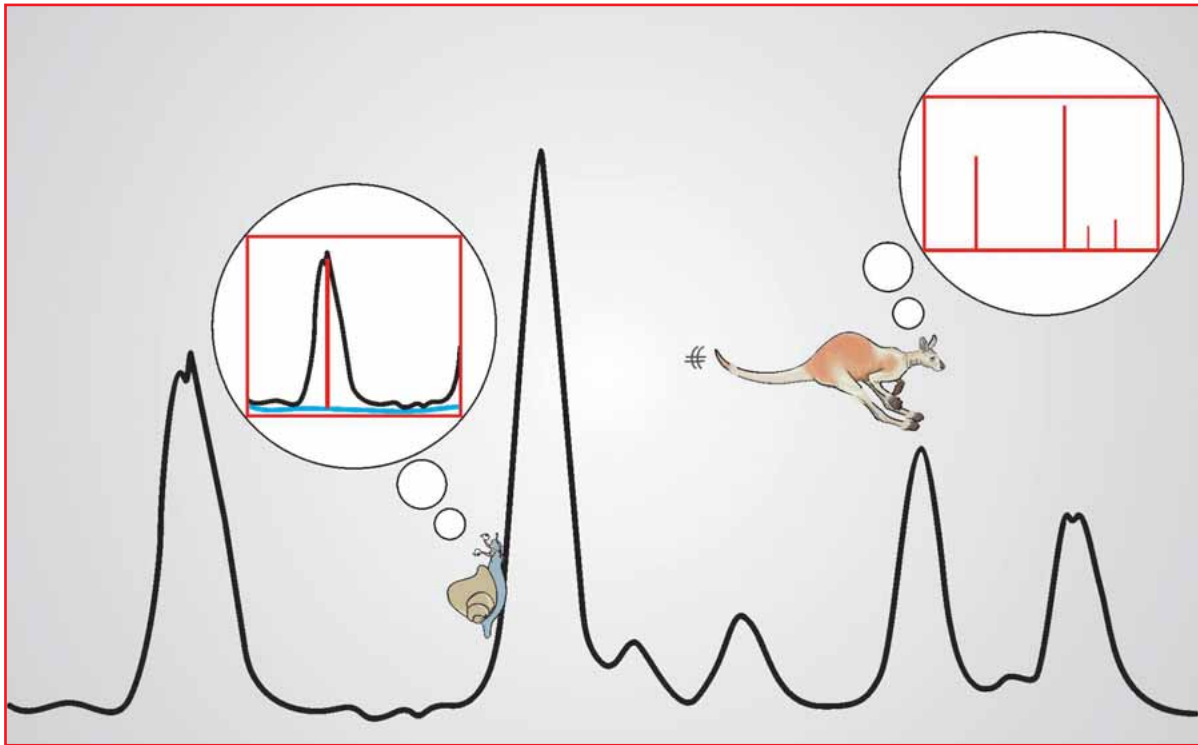
Measurements prove clearly (see Analytical Note No. 371 "Standardless Analysis: Spectrum vs. Pre-defined Angles", Bruker AXS 2004, A84-E00012):

- Peak (-background) hopping is just a little bit faster (due to background positions and double measurements for elements with chemical shift).
- Down to the lowest ppm range the precision of complete scans applying the same measurement time as a 1 peak + 1 background "hop" is just a factor of 2 to 5 lower.
- Scan measurements are inevitable for a universal precalibrated analysis method due to its appropriate information depth (i.e. the entire spectrum including real background and even interfering elements).
- Background determination via scans is universal, independent of the sample type, and allows for a graphical check and an interactive refinement for any sample. As opposed to scan measurements peak hopping is a dangerous black box procedure without any graphical check option (a "press the button and pray" technique). Furthermore, analysis results obtained applying a wrong background model cannot be corrected by the measurement of a few background points.



STANDARDLESS ANALYSIS

"Peak Hopping" vs. "Scan Crawling"?



This is what our competition (ARL-Uniquant) claims:

- Complete scans are slow. Peak hopping is much faster.
- Measuring the peak and the background(s) for the same amount of time as that allowed for the complete scan yields a smaller counting statistical deviation, thereby providing better precision.
- Measurement of the entire background is not necessary as the background can be calculated with only a few points being measured to help refine the calculation.

NO ... – rather it's
(see frontpage)

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