Bruker / MIT Symposium 2009

ABSOLUTE CONFIGURATION OF CHIRAL COMPOUNDS BY X-RAY CRYSTALLOGRAPHY

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A review of the methods used to determine absolute configuration by single-crystal X-ray diffraction will be given, including interpretation of the Flack parameter for quantifying intensity differences in Bijvoet pairs caused by resonant scattering (anomalous dispersion). Emphasis will be on compounds with weak resonant scattering and recent advances in increasing the sensitivity of enantiomer discrimination in such cases. This will be illustrated by examples of natural-product structures of various types from our laboratory. Recent successes using the Bayesian statistical method of Hooft *et al*. will be presented