



Andreas Römpp, Dr. habil., contact information

<https://www.uni-giessen.de/cms/fbz/fb08/Inst/iaac/spengler/coworkers/roempp>

## **Title:** Recent Trends and Developments in Mass Spectrometry Imaging

**Abstract:** Mass spectrometry imaging provides spatial and molecular information for a wide range of compounds. The community has been very active in the last years and we have seen a number of exciting improvements in instrumentation and applications. These developments will be discussed with a focus on spatial resolution and molecular specificity of MS imaging data.

In addition, the last years have seen a number of collaborative efforts towards standardization and consolidation of MS imaging. One example is the common data format imzML which has become a de facto standard format for mass spectrometry imaging data. A new application of imzML is the implementation of a public data repository and the first 'open data' example for mass spectrometry imaging. Reporting guidelines for MS imaging have also been proposed recently. An important task for future MS imaging studies is the comparison and combination of methods and instrumentation across different laboratories. An approach on how to conduct such 'multicenter studies' will be discussed.