

- **How to simplify and improve identification of compounds from TLC plates MS**

(Egon Stahl revisited: expanding TLC with MALDI MS)

High Performance Thin-Layer-Chromatography (HPTLC) is a widely used technique in the investigation of chemical synthesis products, natural products, food, and drugs. For routine TLC, identification of compounds is based only on the migration distance in comparison with a standard. Adding a simple mass spectrometry step to the workflow builds an extra dimension of confidence in for the confirmation of products or ID of unknowns. MALDI-MS can achieve this without scratching bands from HPTLC plates or cumbersome extraction steps. The molecular mass of compounds and their fragment mass fingerprints by MS/MS are directly observed from the HPTLC plate. In the webinar examples of the use of this workflow related to quality control of lipids, phthalates, polymers, and other small molecules will be shown.