

## **Application of nanomaterials for desorption mass spectrometry**

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Advances in nanotechnology and nanomaterial developments have been reflected in the field of (bio)analytical chemistry in the recent years. Two applications of nanomaterials for biomolecule analysis based on desorption mass spectrometry will be presented. The first approach employs gold nanoparticles as the extraction and desorption probes for small molecule analysis by surface-assisted laser desorption/ionization mass spectrometry; the potential as well as the limitations of the method have been investigated. In the second part, polyethylene terephthalate glycol plates coated with a golden nanolayer will be introduced as promising sample targets for off-line coupling of separation techniques with both molecular- and element-specific mass spectrometry.