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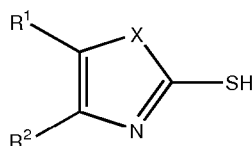
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(54) Title: MALDI MATRIX AND MALDI METHOD



(I),

the use of a MALDI matrix composition in a gas phase coating method. The matrix material of the invention comprises a 2-mercapto-4,5-dialkylthiazole according to formula (I), wherein X is chosen from S, O or N, and wherein R¹ and R² are independently chosen from hydrogen, methyl, methoxy, ethoxy, and propoxy, or wherein R¹ and R² are taken together to form an optionally substituted aromatic ring structure, optionally comprising one or more heteroatoms, or a tautomeric form thereof. A matrix composition preferably includes the matrix material and an alcohol. The alcohol can be halogenated. The MALDI MS method comprises contacting the analyte with the matrix material or the matrix composition; ionising at least part of the analyte, and separating the ionised components using a mass spectrometer, e.g. TOF-MS. Preferably, bioaerosols are contacted with the matrix material in the gas phase.

(57) Abstract: Matrix for real-time aerosol mass spectrometry of atmospheric aerosols and real-time aerosol MALDI MS method Abstract The invention is directed to a matrix material for MALDI mass spectrometry, to a matrix composition for MALDI mass spectrometry, in particular for aerosol MALDI mass spectrometry, to a MALDI mass spectrometry method, in particular an aerosol MALDI mass spectrometry method, to the use of a specific compound as a MALDI matrix material, and to