Record Nr. UNINA9910139922603321 Organic mass spectrometry in art and archaeology [[electronic resource] **Titolo** /] / edited by Maria Perla Colombini and Francesca Modugno Pubbl/distr/stampa Chichester, West Sussex, U.K.; Hoboken, N.J., : Wiley, 2009 **ISBN** 1-282-25938-5 9786612259388 0-470-74191-0 0-470-74192-9 Descrizione fisica 1 online resource (517 p.) 20.15 Classificazione Altri autori (Persone) ColombiniMaria Perla ModugnoFrancesca 702.88 Disciplina 708.87 Soggetti Mass spectrometry Organic compounds - Analysis Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Organic Mass Spectrometry in Art and Archaeology; Contents; List of Nota di contenuto Contributors; Acknowledgements; Preface; Part I Introduction; 1 Organic Materials in Art and Archaeology; 2 Overview of Mass Spectrometric Based Techniques Applied in the Cultural Heritage Field; PART II DIRECT MASS SPECTROMETRIC ANALYSIS; 3 Direct Mass Spectrometric Techniques: Versatile Tools to Characterise Resinous Materials; 4 Direct Mass Spectrometry to Characterise Wax and Lipid Materials; 5 GALDI-MS Applied to Characterise Natural Varnishes and Binders; 6 MALDI-MS Applied to the Analysis of Protein Paint Binders PART III GAS CHROMATOGRAPHY/MASS SPECTROMETRY7 GC/MS in the Characterization of Lipids; 8 GC/MS in the Characterisation of Resinous Materials: 9 GC/MS in the Characterisation of Protein Paint Binders: 10 SPME/GC-MS in the Characterisation of Terpenic Resins; 11 Py-GC/MS of Organic Paint Binders; 12 Py-GC/MS of Natural and Synthetic Resins; PART IV LIQUID CHROMATOGRAPHY/MASS SPECTROMETRY: 13

Characterization of Organic Natural Dyes by Electrospray Mass

Spectrometry Coupled with HPLC and/or Capillary Electrophoresis; PART V OTHER MS-BASED TECHNIQUES

14 Compound-specific Stable Isotopes in Organic Residue Analysis in Archaeology15 ToF-SIMS Study of Organic Materials in Cultural Heritage: Identification and Chemical Imaging; 16 Accelerator Mass Spectrometry for 14C Dating; Index; Colour Plates

Sommario/riassunto

Offers an overview of the analysis of art and archaeological materials using techniques based on mass spectrometrylllustrates basic principles, procedures and applications of mass spectrometric techniques. Fills a gap in the field of application on destructive methods in the analysis of museum objects Edited by a world-wide respected specialists with extensive experience of the GC/MS analysis of art objects Such a handbook has been long-awaited by scientists, restorers and other experts in the analysis of art objects