



# Volatile Organic Compounds and the Conservation of Inorganic Materials

Alice Boccia Paterakis

<b>ISBN</b>	9781909492400
<b>Publisher</b>	Archetype Publications
<b>Binding</b>	Paperback / softback
<b>Territory</b>	USA & Canada
<b>Size</b>	6.94 in x 9.59 in
<b>Pages</b>	120 Pages
<b>Illustrations</b>	63 color, 22 b&w
<b>Price</b>	\$50.00

- Identification, treatment and prevention of Volatile Organic Compounds in museums and galleries

Volatile organic compounds (VOCs) are carbon-based molecules which, in museums and galleries, are often found as indoor pollutants. The result of off-gassing of materials used in the construction of show cases, storage cabinets and containers, and also resulting from methods of exhibit preparation and cleaning, VOCs not only present possible health hazards but can also affect objects in collections. This book focuses on acetic and formic acid often present in wood and wood products, adhesives, sealants, paints, polyester and rubber as well in the outdoor atmosphere.

The author's research into this topic took her to various museum collections where she observed and recorded the deleterious effects of these volatile compounds on various inorganic materials, many of which are illustrated in the text. Having identified the sources of the VOCs she discusses appropriate conservation treatments, display and storage materials, and ways of monitoring and mitigating the effects of the local environment.

Contents:

Chapter 1 Introduction; Chapter 2 Volatile organic compounds and the formation of acetate and formate compounds on inorganic materials; Carboxylic acids; Acetic acid and acetates; Formic acid and formates; Calcareous materials; Non-calcareous materials; Chapter 3 Calcareous materials; Ceramic and unfired clay; Shell; Stone, fossils and minerals; Stucco and plaster; Chapter 4 Non-calcareous materials; Metals; Glass; Chapter 5 Identification, mitigation and conservation; Identification and quantification of pollutants and corrosion/efflorescence; Mitigation; Conservation; Conclusions; Bibliography; Index.