

How Important are Biofilms in Conservation?

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Biofilms are complex microbial communities attached to surfaces. The majority of microorganisms in most environments are found in biofilms, and art or historically important objects are no exception. For example, in our lab, we have studied microbial biofilms on synthetic textiles from Apollo spacesuits, wax statues and paintings, polymeric coatings for outdoor bronzes, steel from the USS Arizona, and limestone from Maya archaeological sites. Many studies have reported the presence of microorganisms on art and historic objects and documented significant aesthetic changes caused by microbial growth. A more difficult task is to determine the contribution of microbial biofilms to deterioration of these objects relative to physical and chemical causes. The talk will explore our recent work biofilms and microbial growth on cultural heritage materials.



MCI
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