

A Dust Atlas

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Dust particles are unwanted in the museum environment. The dust may contain compounds which attack objects' surfaces, e.g. by corrosion. In addition, the removal of dust is resource consuming and may jeopardize the objects with regard to surface wear, dents or scratches.

An important reason to sample and analyse dust is to be able to identify the type of dust particles and their sources, in order to be able to perform the most effective dust mitigation actions.

Dust can be sampled by several methods, e.g. dust lifting, or sticky sampling. However, for all methods it is crucial that an exact identification of the various particles in the samples can be made.

In our work during several sampling campaigns in museums and historic houses, we have collected a large reference collection of optical microscope images as well as SEM images, of (mostly coarse) dust particles. These images includes typical indoor particles (textile fibres, hair, skin flakes, building material flakes and fibres, etc.) and outdoors particles (sand grains, pollen, fungi spores, insect parts, salt crystals, etc.)

In this poster we will show a collection of annotated images of typical dust particles, with comments on size, source, and conservationally concerns. This reference collection is work in progress, it is constantly growing in size and could, at some point, be made public available, preferably on the Internet.