Pollens and fungal spores are currently debated as potential IN particles. But only little research on this topic has been done up to now. Especially, we’re working on the identification of the pollen INAs. Measurements are mainly performed by cryo-microscopy of oil emulsions in the immersion mode. For comparison some measurements have been performed at a Smog Chamber.

**left:** Median freezing temperatures of different samples. The bars mark the range from 10% to 90% nucleation. The red series stands for measurements with whole sample grains, the blue series for measurement with pollen extract (therefore pollens have been suspended in water and then removed). As it can be seen, the INAs of the pollen surface have to be easily-suspendable.

**right:** A list of median freezing temperatures obtained at the Smog Chamber.

**bottom:** A table showing the nucleation temperatures (in K) of the INAs. Extracts exposed to different temperatures, enzymes or chemicals have been measured to determine the INA stability and to gain information about their composition.

The pollen INAs have to be easily-suspendable surface components in the nanometer range. They’re very robust and neither proteins, nor lipids. They might be either polysaccharides or inorganics.