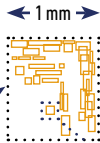


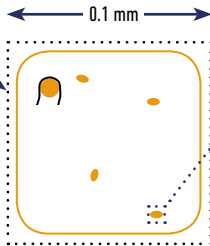
A salt crystal (halite, NaCl) containing halophilic microbes

**Features of buried salt that enhance long-term survival**

- Protection from radiation



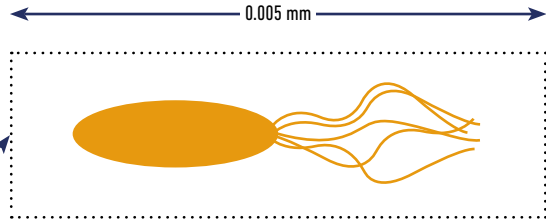
Part of the salt crystal showing the brine inclusions



A brine inclusion containing *D. salina* and *H. salinarum*

**Features of brine inclusions that enhance long-term survival**

- Salt saturated
- Low oxygen concentration
- Co-entombed microbes as a source of carbon and energy



*H. salinarum*

**Features of *H. salinarum* cells that enhance long-term survival**

- High KCl concentration
- High manganese:iron ratio
- Manganese antioxidant complexes
- Multiple chromosomes
- Carotenoids