

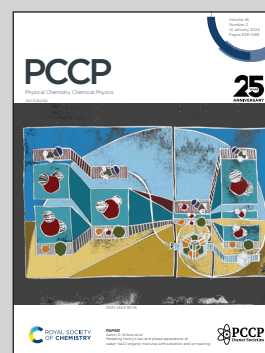


Showcasing the collaborative research on bacterial model membranes at Mars-like subsurface conditions from the Federico II University of Naples in Italy and TU Dortmund University in Germany.

Bacterial model membranes under the harsh subsurface conditions of Mars

Research on biomembranes at harsh environmental conditions is fundamental to exploring the physical and chemical limits of life. We investigated the impact of Mars relevant salts, including perchlorates and sulphates, on a bacterial model membrane. The results show that the lipid bilayer retains its lamellar structure even at high salt concentrations. Moreover, the physiologically relevant fluid state of the membrane is preserved in the presence of the chaotropic perchlorate anion.

As featured in:



See Concetta Giancola, Luigi Petraccone, Roland Winter *et al.*, *Phys. Chem. Chem. Phys.*, 2024, 26, 760.