Chemical processing in molten salts

Dominic Gervasio
University of Arizona, Tucson, Arizona

Eutectic mixtures of molten chlorides salts give reaction fluids which are environmentally benign and low in cost due to their great natural abundance with desirable properties such as low melting points (as low as 90 degrees Centigrade), viscosity (2 cP at 500°C) and high boiling points (vapor pressure is only a few psi at 800°C) and their superb chemical, thermal and physical stability.

These eutectics are being used for heat transfer fluids, lixiviants and show great promise for battery electrolytes.

---

i gervasio@email.arizona.edu