



Contribution ID: 49 Contribution code: S06-CMPSP-218

Type: **Poster presentation**

Crystallization of sodium chlorate crystals by evaporation in a magnetic field

Tuesday, August 30, 2022 6:00 PM (1h 30m)

Slow evaporation as a crystallization technique can allow the growth of large oriented crystals. In the experiments performed, sodium chlorate crystals were obtained by evaporating microdroplets of a saturated aqueous solution both at ambient conditions and at a constant temperature of 31.5°C in a closed container. The solution was saturated at a temperature of $(31.5 \pm 0.1)^\circ\text{C}$. A 5 μL drop of the solution was placed on silicon wafers to evaporate slowly. To determine the effect of magnetic field on crystallization, experiments were performed under zero-field conditions and in a static magnetic field of $B=(390 \pm 5)$ mT. Preliminary research results show that larger and more regularly shaped macrocrystals are formed by slow evaporation in a closed system at constant temperature in the applied magnetic field.

Primary author: Dr VUČETIĆ, Branislava (Faculty of Physics)

Co-authors: MILOJEVIC, Milica (Faculty of Physics); Prof. MITROVIĆ, Mico (Faculty of Physics); Prof. ŽEKIĆ, Andrijana (Faculty of Physics); Dr MAKSIMOVIĆ, Biljana (Faculty of Physics)

Presenter: MILOJEVIC, Milica (Faculty of Physics)

Session Classification: Poster session

Track Classification: Scientific Sections: S06 Condensed Matter Physics and Statistical Physics