

## THE INFLUENCE OF MAGNETIC FIELD IN RECRYSTALLIZATION SOLUTIONS OF SODIUM CHLORIDE (NaCI)

Pedrosa, A. D. O. S.\*1; Sales, F. H. S.2

With the growth of crystals in a solution, especially with solutions of sodium chloride NaCl) can be observed intrinsic and relevant aspects of the magnets and their magnetic fields, which may in itself to influence the crystal structure (cubic). The behavior of the crystals on non-zero magnetic field discusses different features for the cubic materials themselves can suit different medium that is provided to them. Given this scientific context, this study conducted an experimental study, discussing the behavior of recrystallization of sodium chloride (NaCl) under the influence of a static magnetic field (generated by a permanent magnet). The crystal growth occurs as follows: the initial solution was supersaturated. As the water will evaporate and therefore reducing the amount of water in the container, the NaCl will precipitate in the form of a cubic crystal microscope. With continuous evaporation of water, the NaCl will precipitate. But the rainfall occur preferentially on the NaCl that is already crystallized and therefore acting like a seed so that more NaCl to crystallize. The natural tendency of NaCl to crystallize in the cubic form. If you're offered a surface or material with the same cubic atomic arrangement, he will find it easier to settle on this stuff and not about anyone else. The results showed the formation of crystals with genuinely more balanced and organized composition, being more noticeable role and influence of the magnetic field in these structures. The observation by optical microscopy, compared the samples, based on the test (crystals under the influence of permanent magnets) group and the control group (without crystals influence of permanent magnets).

<sup>&</sup>lt;sup>1</sup>Technical Course in Chemistry, IFMA, São Luís, Maranhão, Brasil

<sup>&</sup>lt;sup>2</sup>Applied Physics Laboratory, IFMA, São Luís, Maranhão, Brasil

<sup>\*</sup>allanis.dimitria@gmail.com