

COLORED IRON COMPOUNDS: AN EXPERIMENTAL PROPOSAL USING LOW COST MATERIALS

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Abstract

Experimental activities play an important role in the teaching and learning process in chemistry, because it motivates students and promotes the correlation between the activities in the classroom and everyday situations. Based on this context, this work presents an experimental proposal for the synthesis of $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ using steel wool, aiming at the presentation of concepts such as stoichiometry, oxidation-reduction reactions, the ideal gas law, the intermolecular interactions, solubility, volumetric and equilibrium in aqueous medium, emphasizing the acid-base, precipitation and complexation equilibria. The experiment is designed for both high school students and undergraduate students, with the goal of helping them to develop key concepts in General Chemistry, Inorganic Chemistry and Analytical Chemistry. Moreover, activity may also assist in reflection on reuse of materials.



Biography:

Simone Garcia de Ávila has completed his PhD at the age of 32 years from Institute of Chemistry (University of São Paulo,

Brazil). She is professor in the Anhanguera University of São Paulo and member of Chemistry Education Commission of The Regional Council of Chemistry. She has published more than 10 papers in reputed journals and has been serving as article reviewer of reputed journals. She is the creator of The Best Professor. It is an on line platform that provides content of Chemistry Education for college students, teachers and professors of Chemistry.

Speaker Publications:

1. Incorporation of monoethanolamine (MEA), diethanolamine (DEA) and methyldiethanolamine (MDEA) in mesoporous silica: An alternative to CO₂ capture
2. Optimisation of SBA-15 properties using Soxhlet solvent extraction for template removal
3. Kinetic study of the thermal decomposition of monoethanolamine (MEA), diethanolamine (DEA), triethanolamine (TEA) and methyldiethanolamine (MDEA)
4. Seasonal distribution of airborne trace elements and water-soluble Ions in São Paulo megacity, Brazil

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