











Summary

Antisolvent Crystallization



	Target age	
	Age 13 and over	
	Level of difficulty	
	<input type="checkbox"/> Easy <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	
	Key words: Raw Materials; Recycling; Hydrometallurgy; Chemical Engineering; Crystallization	
	Abstract of the activity: In this laboratory activity, students will investigate antisolvent crystallization. The laboratory can either be carried out as a demonstration of antisolvent crystallization or as an investigative laboratory / high school project where different solvents and / or salts are examined.	
	Learning Goals <ul style="list-style-type: none"> • Learn about separation processes applied for recycling of waste. • Understand the principle of antisolvent crystallization. • Know how to carry out antisolvent crystallization practically. • Be aware of the importance of recycling of everyday-life devices. 	

Summary

	<p>Specific Abilities - <i>At the end of the activity the student will be able to:</i></p> <ul style="list-style-type: none"> To know the principle of antisolvent crystallization, how it can be applied and pros and cons of the technology from an industrial perspective. Understand the importance of recycling and recovering resources from waste streams.
	<p>Cross-curricula Links</p> <ul style="list-style-type: none"> Technology Circular Economy
	<p>Prerequisites - <i>Knowledge and skills necessary for carrying out the activity:</i></p> <ul style="list-style-type: none"> Basic knowledge in chemistry
	<p>Time requirement</p> <ul style="list-style-type: none"> At least 1 h <p>Instruments: Standard laboratory equipment and chemicals (see toolkit).</p>
	<p>Learning and Teaching Support Materials - What you can find in the toolkit</p> <ol style="list-style-type: none"> A description of the separation technology and possible industrial applications focusing on resource recovery from waste. Instructions for carrying out the lab and study questions.
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