FUTURE BATTERY MATERIALS. THE WAY TO SUSTAINABILITY

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The demand for renewable energy is rising due to the environmental concerns and higher energy demands or perhaps for economical energy production*. However, due to fluctuating energy output, renewables require some source to store energy and battery technology is found to be the considerable. The current batteries are based on Lithium-ion and though the cost of these batteries is falling drastically, they are still considered as expensive to use in large scale. The battery technology is increasingly interested in recent times and enormous amount of money and research is going on to develop safe and cost-effective alternatives. Scientists around the world are experimenting with various materials such as metals, ceramics and incorporating organic active materials into polymers and tuning them to bring desired results. The purpose of my talk is to share my literature research on the possibilities and the potential materials for the future batteries.

The beauty of material science is the possibility of manipulating and altering materials to the needs, such advancements are promising to bring the better battery technologies that makes sustainability a reality.



Biography I am currently pursuing my masters in product refinement at Hochschule Kaiserslautern. I am interested in automobiles, sustainability and future transformations which are happening rapidly. Currently at our University, I am researching on bio based composites for various applications in electro mobility. As a science student, it's my duty to be a part of this transformation and leave a sustainable environment for future generations.

* International Renewable Energy Agency (IRENA)
https://www.irena.org/publications/2016/Jun/The-Power-to-Change-Solar-and-Wind-Cost-Reduction-Potential-to-2025