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**TMS 2025**  
154<sup>th</sup> Annual Meeting & Exhibition



**March 23–27, 2025**  
MGM Grand Las Vegas  
Hotel & Casino  
Las Vegas, Nevada, USA  
#TMSAnnualMeeting



**SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2025 SYMPOSIUM:**

**ELECTRONIC, MAGNETIC, AND ENERGY MATERIALS**

## **Revitalization of Materials through Upcycling: The 2025 Student-Led Symposium**

Upcycling is the process of converting products, parts, by-products and waste into useful materials, potentially with enhanced properties. Advances in upcycling offer a means of transforming the immense amount of waste produced by humans into an accessible and sustainable resource while simultaneously mitigating major ecological issues. This makes developments in any aspect of the upcycling of materials crucial for the preservation of the planet and continued advancement of society.

This symposium is dedicated to discussing modern innovations in the upcycling of materials. Methods for enhancing structural and functional properties through the upcycling of waste materials are of interest, as are innovations in processes and techniques for upcycling, e.g., additive manufacturing, catalytic upcycling, chemical upcycling, and mechanical upcycling. Finally, use cases of upcycled materials in technology, e.g., architectural materials, nano-materials, electronics, will be discussed.

### **ORGANIZERS**

**Dylan Miley**, University of California, Davis; **Ayeman Nahin**, University of California, Davis; **Tamanna Zakia**, University of California, Davis

### **SYMPOSIUM SPONSORS**

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**QUESTIONS?**

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