

演題: **Chemical Upcycling of Polyolefins; Current Day Challenges and Exciting Future Material Opportunities**

講師: **Prof. E. Bryan Coughlin**

Department of Polymer Science and Engineering
University of Massachusetts Amherst, the U.S.A.



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場所: 工学部 フロンティア応用科学研究棟2階 セミナー室

要旨:

Polymer-to-polymer transformations via chemical upcycling have important advantages for addressing plastic waste issues compared to polymer deconstruction. Maintaining polymer molecular weights during these transformations reduces energy consumption and thereby greenhouse gas emissions. Our approach endeavors to transform polyolefins, including polyethylenes with various chain architectures and isotactic polypropylene, into higher valued polyolefins. Commercially important functionalized polyolefins typically have just 2-6 mol% of functionalized monomeric units with hydroxyl, carboxylic acid, or ester functionality. We are targeting similar polymers, as well as creating novel polymers.

連絡先: 工学研究院応用化学部門 高分子化学研究室 磯野 拓也
(Email: isono.t@eng.hokudai.ac.jp 内線: 2290)