

## Modeling and measuring the linear viscoelasticity of vitrimer melts

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Dr. Ralm G. Ricarte is an Assistant Professor at the Florida A&M University-Florida State University College of Engineering. He earned a BS in Chemical Engineering from The University of Texas at Austin, and a PhD in Chemical Engineering from the University of Minnesota. After his doctorate, he served as a Marie Curie and PRESTIGE Postdoctoral Fellow at ESPCI Paris. His laboratory investigates the influence of molecular structure on dynamic polymer networks, with a specific focus on vitrimers and polymerization-induced self assembly. To study these complex systems, his laboratory employs a combination of synthesis, characterization, and theoretical modeling techniques.



### Abstract;

Vitrimers are a new class of cross-linked materials with an associative bond exchange mechanism in the network. The bond exchange enables the great relaxation and diffusion of network strands, which realizes the sustainable functions, such as recyclability and healability. Understanding of rheological properties of vitrimers is an important issue for regulating the macroscopic functions. In this presentation, some essences and tutorial guides for modeling and measuring the linear viscoelasticity of vitrimer melts will be demonstrated.

結合交換性架橋樹脂（ビトリマー）研究分野において活躍中の Ralm G. Ricarte 博士（Florida A&M University-Florida State University）の来日を機に、学術的成果を講演して頂く。講演では、特にビトリマーのレオロジー的性質について詳細に説明いただく。

開催日：令和 6 年 12 月 23 日（月）16:30-18:00

会場：名古屋工業大学 2 号館 11 階 ラウンジ（名工大ウェブサイト内の「キャンパスマップ」参照 <http://www.nitech.ac.jp/access/campusmap.html>）

Host: 名古屋工業大学 林幹大（E-mail: [evh70675@ict.nitech.ac.jp](mailto:evh70675@ict.nitech.ac.jp)）

参加登録フォーム：<https://forms.gle/fBHMB08p89YX75A6A>

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