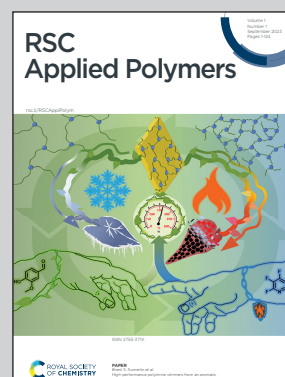


Showcasing research from Professor Konkolewicz's laboratory, Department of Chemistry and Biochemistry, Miami University, Ohio, United States of America.

Dynamic polymer nanocomposites towards strain sensors and customizable resistors

Dynamic polymer materials with thermoresponsive dynamic covalent bonds were developed and reinforced with carbon nanotubes to create strong and flexible conductive materials. Tailoring the polymer microstructure for higher mechanical performance was a focus of the work. Carbon nanotubes reinforcement increased the mechanical strength of the networks, especially at higher strains. Taking advantage of the electrical conductivity of the carbon nanotubes allowed applications such as strain sensing. Finally, combining the dynamic polymer matrix to conductivity of the nanotubes allowed customizable resistors.

As featured in:



See Dominik Konkolewicz *et al.*, *RSC Appl. Polym.*, 2023, 1, 30.