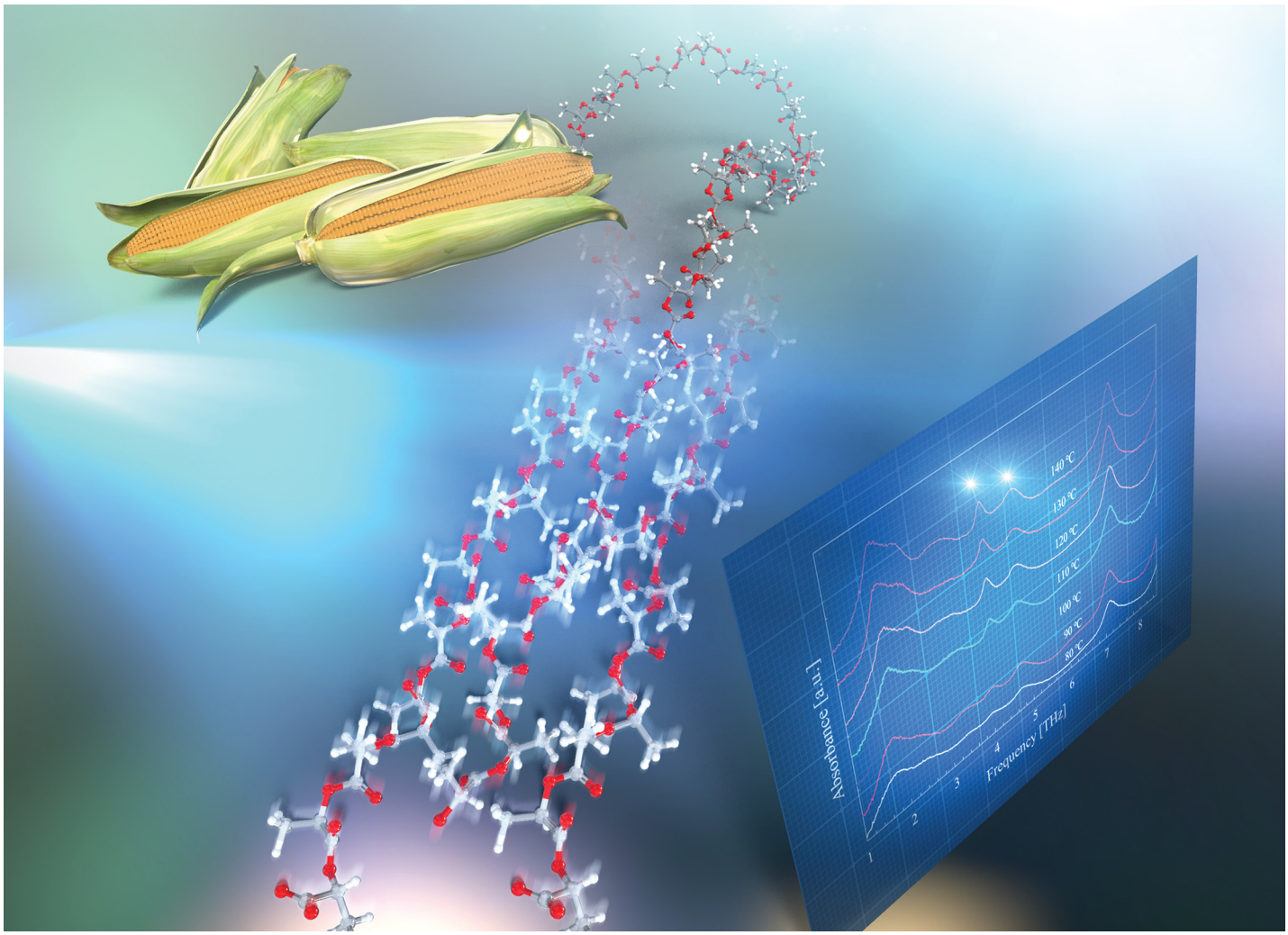

Showcasing research from Associate Professor Ariyoshi's laboratory, Toyohashi University of Technology, Aichi, Japan, and Associate Professor Hiroshiba's laboratory, Osaka Institute of Technology, Osaka, Japan.

Temperature dependent poly(L-lactide) crystallization investigated by Fourier transform terahertz spectroscopy

Temperature dependent poly(L-lactide) (PLLA) crystallization was investigated by Fourier transform THz spectroscopy. Characteristic PLLA absorption peaks were identified at 1.8, 4.0, 4.7, and 7.1 THz for 80 °C sample. The higher two peaks (4.7 and 7.1 THz) were attributed to the intermolecular vibration of the PLLA chain. The 4.0 THz peak was attributed to a novel intramolecular vibration and intrinsically in α-form. Broadband THz spectroscopy is a powerful tool for biodegradable polymers.

As featured in:

See Seiichiro Ariyoshi, Nobuya Hiroshiba *et al.*, *Mater. Adv.*, 2021, **2**, 4630.

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