Topic: Materials for Microelectronics Packaging: Electrically and Thermally Conductive Adhesives

Abstract:

Electrically and thermally conductive adhesive materials are critical components in microelectronics packaging. They have been used in almost all electronic systems for electrical and thermal interconnects in signal transmission, thermal management, etc.

This short course will cover the fundamentals of electrically and thermally functional polymers from a materials, characterizations and processes perspective. Participants are not expected to have any background in semiconductor materials or processes to attend this course. At the end of this short course, we expect the participants to have a better understanding of the fundamentals of the functional polymer composite materials in electronic packaging and their processes along with future trends including their applications and developments for heterogeneous integration technology.

Bio of Kyoung-sik (Jack) Moon:

Jack Moon received his Ph.D. MS and BS degrees in Materials Science and Engineering from Korea University, Seoul in South Korea in 1999, 1995 and 1993, respectively. Jack had worked with Prof. C.P. Wong, regent's professor at School of Materials Science and Engineering of Georgia Tech, as postdoc and research engineer. Jack is currently materials and assembly engineer at 3D Packaging Research Center of Georgia Tech. His current research interests include advanced materials, assembly and process for packaging and energy storage devices with a focus on heterogeneous integration targeting applications.