

Notice : Joint workshop with Fraunhofer IFAM

On October 25-26 (Tue-Wed), 2016, Adhesion and Interfacial Phenomena Research Laboratory (AIRL) hosted a joint workshop on adhesion technology at Fraunhofer IFAM, a globally recognized adhesion technology base in Bremen, Germany (below, IFAM). Central role in organizing the symposium played Shin Horiuchi, AIRL researcher with close ties to IFAM. More than 20 Japanese companies, or more than 40 participants from Japan, responded to the participation call by AIRL director Chiaki Sato. With so many participants regardless of the venue being as far as in Germany, the symposium was a great success. In the background of this success is the development of transportation equipment such as Boeing 787 and BMW i3, which utilizes CFRP (Carbon Fiber Reinforced Plastics) and resin materials. Within this field, there is especially growing need for adhesive bonding technology of dissimilar materials such as metals and resins, as a major bonding method comparable in its importance with welding.

On the first day, we introduced AIRL's and IFAM's technology seeds. In particular, there was an introduction of IFAM's unique training program of adhesion technicians. Many engineers who completed the program now play an active role in numerous companies in Europe. On the second day, we had IFAM lab tour as well as group discussions in which we tried to identify the challenges and future direction of current technologies. During the lab tour, participants could see various types of large-size equipment related to adhesion technology. Many participants were surprised by the very scale of it. There is a common understanding that unlike mechanical bonding, in the field of adhesive bonding of dissimilar materials the key challenge is ensuring safety and reliability. With this shared recognition, we closed the symposium with a discussion on a continuous collaboration between industry, academia and the government.



Chiaki Sato Lecture by AIRL director