

EPIC Workshop on Optical Adhesives

Hosted by



Wednesday 28th June 2017, during LASER World of PHOTONICS
9.30-12:30, Conference Room B22 at Messe München

Programme

- 9.30 Welcome coffee
- 10.00 Welcome by EPIC and AMS Technologies
- 10.05 Keynote: **Precision joining of optical elements by adhesive bonding**, Matthias Mohaupt, Fraunhofer Institute for Applied Optics and Precision Engineering IOF
- 10.30 Keynote: **Optical adhesives from an industrial perspective: requirements and technical outline**, Miwako Fujii, NTT Advanced Technology Corporation (NTT-AT)
- 10.55 **Introduction to micro dispensing technology**, Kaoru Okuyama, Musashi engineering Europe
- 11.10 **Transition of UV curing process from lamp to LED**, Romain Guillaume, UWAVE
- 11.25 End of workshop
- 11.30 Light lunch

Precision joining of optical elements by adhesive bonding

Mr. Matthias Mohaupt

Research Fellow, Fraunhofer Institute for Applied Optics and Precision Engineering IOF

The precision joining of optical elements requires handling, mounting and alignment before the fixation process. The fixation process of adhesive bonding will be illustrated on special integration tasks. Different types of adhesive bondings will be shown, e.g. the precise alignment of laser optics. The requirements and results of bonding joints are presented by examples of micro-optical, automotive and space applications. The benefits of different types of adhesives will be discussed in relation to the chosen process parameters (curing time, curing temperature, etc.).

Optical adhesives from an industrial perspective: requirements and technical outline

Ms. Miwako Fujii

Assistant manager, Global Sales Section, Global Business Headquarters, NTT Advanced Technology Corporation (NTT-AT)

Mr. Yutaka Murakoshi, Senior Engineer, Optical Product Business Unit, Global Business Headquarters, NTT Advanced Technology Corporation (NTT-AT)

The requirements for optical adhesives are as wide as their applications. For the commercialization of high reliability optical parts, an adhesive is required which has excellent durability, in addition to application-specific optical characteristics and various other features. To meet requirements of individual applications, NTT-AT supplies various types of adhesives, such as those with a specific refractive index, a capability of fixing with high precision, high heat resistance, high elasticity and low moisture permeation.

Introduction to micro dispensing technology

Mr. Kaoru Okuyama

Managing Director, Musashi engineering Europe GmbH

A presentation of various micro dispensing methods.

Transition of UV curing process from lamp to LED

Mr. Romain Guillaume

Sales Manager, UWAVE

In an effort to provide a better understanding of UV-LED technology, this presentation provides a general picture of key principles and the radiometry behind UV-LED.