Plastic Optics from Aachen at Fakuma 2018

The relentless advance in the digitalization of production is making inroads into the manufacture of premium quality optical plastic components: More and more frequently, digital applications help to model production processes more dependably and more predictably and to produce plastic optical components more swiftly and accurately. This is enabling plastic optical components to be produced with greater precision and reliability. At the Fakuma International Trade Fair for Plastics Processing which takes place 16 - 20 October 2018 in Friedrichshafen, the Fraunhofer Institutes IPT and ILT in Aachen along with the IKV at RWTH Aachen University will be providing an insight into new technologies and applications for the manufacture of optical elements made of a range of plastic materials in Hall B4 at the joint Kunststoffland-NRW e.V. Booth (Booth 4404).

Optics, as an area of research and development has a long tradition at the research institutes in Aachen. Over the past few years in particular, plastics have emerged as groundbreaking materials for optical components such as lenses for a diverse range of technological fields of application which can be processed economically in an industrial production environment.

Under the banner “Plastic Optics from Aachen” the Aachen-based institutes will present the latest developments to appear all along the optical plastic components production chain: from optics design through tool and die production to the manufacture of the optics themselves.

During the fair, the institutes will team up with their partners Innolite GmbH from Aachen and Arburg GmbH from Loßburg to present live production of plastic optics. Visitors to the fair will see an Arburg injection molding machine used to produce a demonstrator with a range of optical functions: Light-diffracting micro-structures and a freeform lens to project a logo. In addition to the optical mold inserts, components and tools, the engineers from Aachen will also be presenting the production of optical and functional sheet materials in roll-to-roll processes.

The booth in Friedrichshafen will provide visitors with a taster of the jointly-hosted “Aachen Polymer Optics Days” conference, which will run for the fourth time 21 and 22 April 2020.