



*1 Meeting of the alliance partners at FH Aachen.*

## WIR!-Bündnis LASER.region.AACHEN

### What is the Bündnis LASER.region.AACHEN?

The WIR!-Bündnis LASER.region.AACHEN is an alliance funded by the Federal Ministry of Education and Research to promote structural change in Europe's largest lignite mining region. The production and use of new laser-based production solutions will create sustainable jobs and economic success for the LASER.region.AACHEN. The WIR!-Bündnis LASER.region.AACHEN brings together numerous fields of knowledge, sectors and technologies. More than 50 industrial partners from all areas of laser technology, Fraunhofer ILT, RWTH Aachen University and FH Aachen cooperate as research institutions as well as educational, funding and social partners to offer optimal conditions for this transformative change.

### Which innovation projects are being carried out as part of the alliance?

In the LASER.region.AACHEN alliance, the partners create and develop new processes and products, joint technology platforms, service concepts and new training and continuing education concepts within various projects. In the "Strategy development" project, the partners define and translate strategic goals of the alliance into a strategy. Research topics for joint projects are defined in workshops and meetings between research and industry partners. In the "Combined laser processes (KoLa)" project, they systematically detect interfaces for

different laser-based processes and seek solutions for improved data-based linking to develop a continuous digital laser-based process chain. The "Accessible laser material processing through explainable artificial intelligence (ZuLeKi)" project involves testing AI approaches for laser material processing that enable non-specialized experts to use AI in SMEs, e.g. to use machine status data and process data for quality assurance of laser-based processes. The aim of the "Advanced optical elements for adapted beam shaping (FortOP)" project is to harness new, innovative optical components for adapted laser beam shaping. In particular, easily integrated concepts for laser material processing are a focus of this project.

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