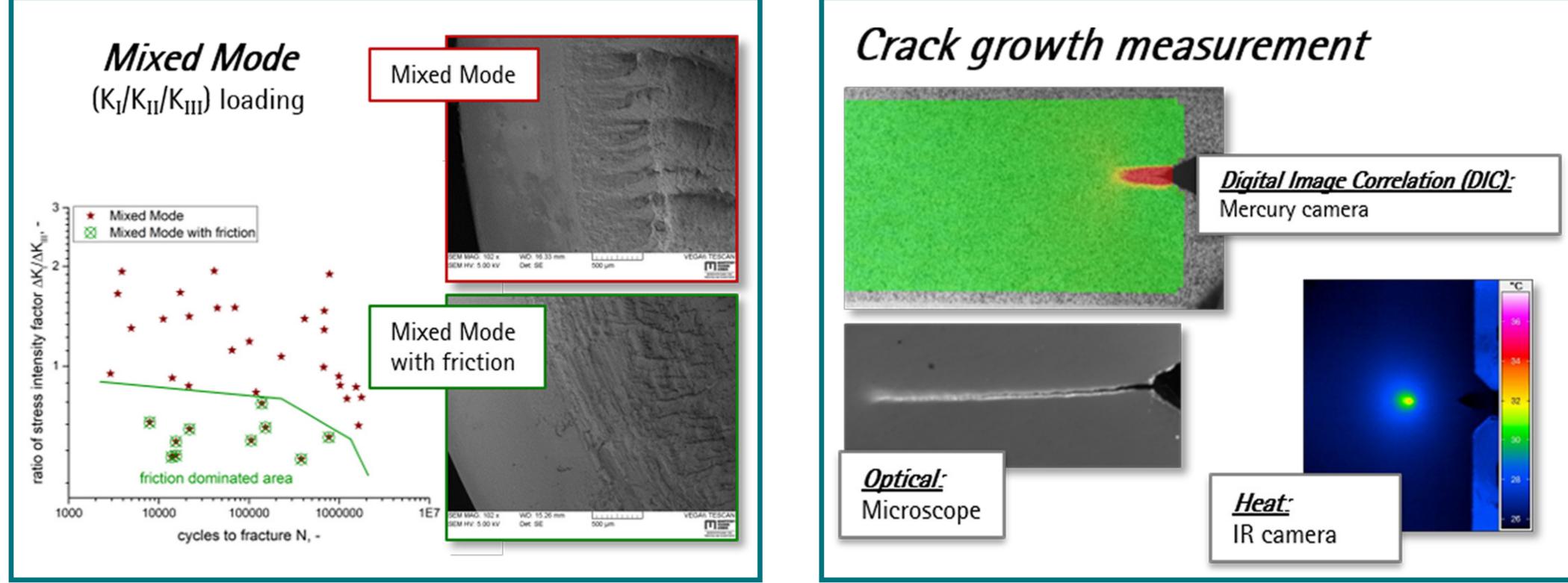
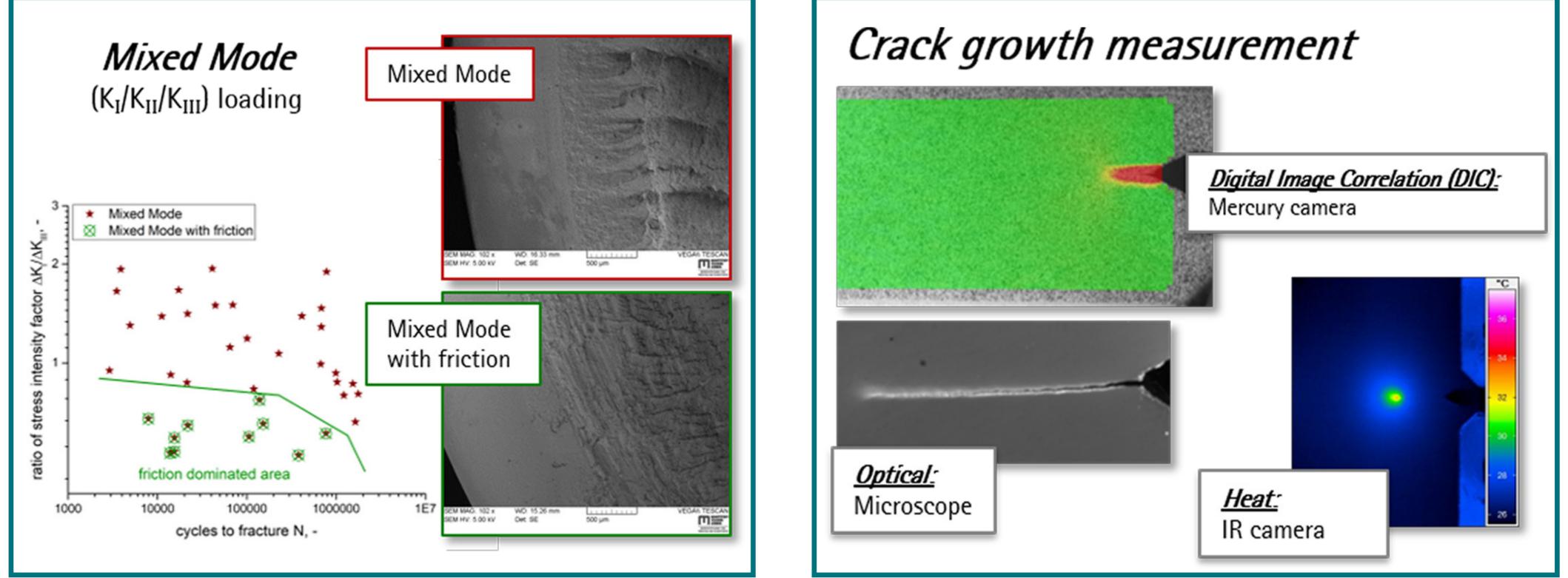


Reliable component design via advanced fracture mechanics

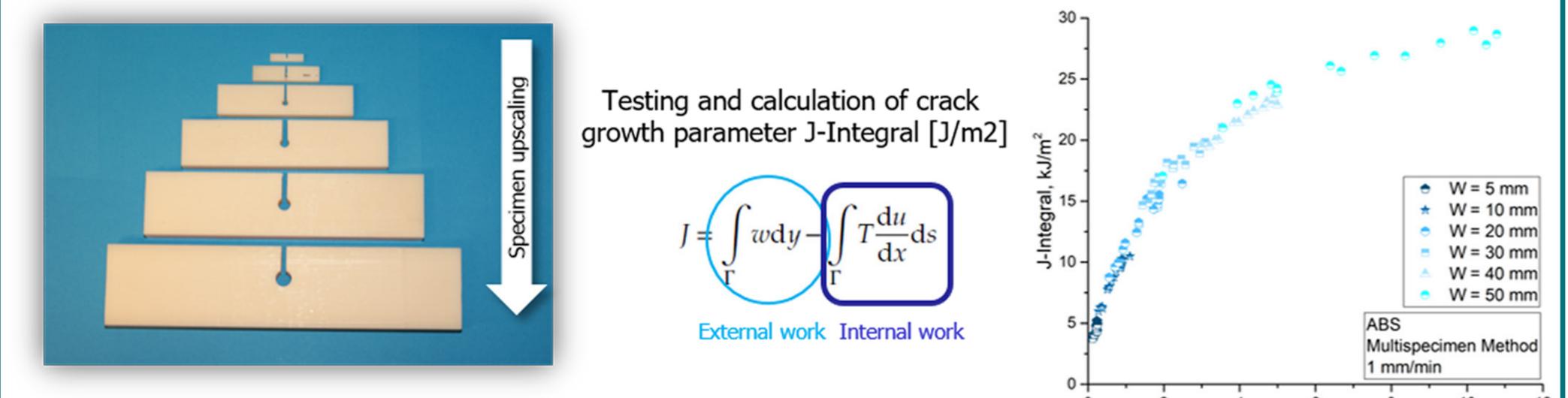
Anja Gosch

Why do we need parameters like J-Integral, K_{II}/K_{III} and crack growth detection?





Geometry-dependency of **J-Integral**



crack length ∆a, mm



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RESEARCH FOCUS: elastic plastic fracture mechanics, fracture mechanics for soft polymers, cyclic mode II and mode III testing

PROJECT: Fracture mechanics concepts extended to shear dominated crack growth and soft materials

PROJECT PARTNERS: Materials Science and Testing of Polymers (MUL), Polymer Competence Center Leoben GmbH (PCCL), Institute of Physics of Materials (IPM)/Academy of science of the **Czech Republic**

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