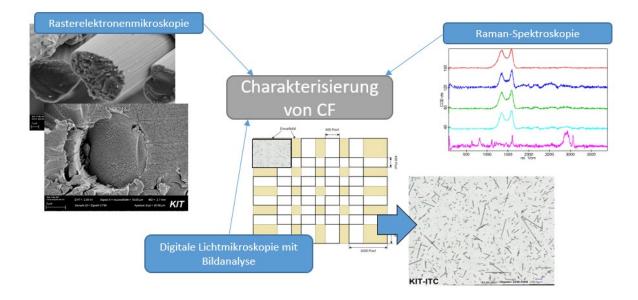
## **Field of activity**

Particle & Fiber Characterization



During mechanical or thermal processes of production, processing or utilization of materials containing carbon fibers, respirable fiber fragments (WHO fibers) may be generated and released. In the method developed and validated by us for the determination of the size distribution of particles and fibers, the analysis of the objects is carried out with a commercial image analysis software, starting from an image generation by means of digital light microscopy,

The objects are subsequently automatically classified into the categories "fiber", "WHO fiber" and "particle" and statistically evaluated. The routine developed by us can process up to 15,000 objects per sample with little time expenditure.

The fiber structure on the surface and the fiber cross-section is determined by scanning <u>electron</u> <u>microscopy; the degree of graphitization is determined</u> by Raman spectroscopy on the fiber surface or over the fiber cross-section.

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