

## Crystallographic Texture of Semi-finished Products

Heinz-Günter Brokmeier<sup>a,b</sup>, <sup>a</sup>*Institute of Materials Science and Engineering, Clausthal University of Technology, Germany.* <sup>b</sup>*GKSS Research Center Geesthacht (GeNF), Geesthacht Germany.* E-mail: brokmeier@gkss.de

Texture measurement is widely used to characterize any type of materials such as metals, ceramics and rocks. In the case of industrial applications not only the texture of the material itself described in the three dimensional orientation space is of importance but also texture gradients in real products. Commonly used techniques are based on sample destruction to prepare a set of ideal samples for a diffraction experiment, see for instance the EBSD orientation stereology by Bunge and Schwarzer [1] or the texture mapping of melt grown YBaCu samples by Jung and Brokmeier [2]. The investigation of semi-finished products or real components has to be carried out sometimes non-destructively. Thus, a beam with a high penetration power is necessary available at neutron or synchrotron sources. A number of experiments have been done at TEX-2 the neutron texture diffractometer at GeNF (GKSS-Research Center Geesthacht, Germany) and at the high energy beam line BW5 at HASYLAB (DESY, Hamburg, Germany). Due to the grains size, the sample geometry and the scattering behavior one has to use hard X-rays or neutrons to investigate tubes, rings, extrusion profiles, turbine blades, implants, etc.

[1] Bunge H.J., Schwarzer R.A., *Advanced Engineering Materials*, 2001, **3**, 25.

[2] Jung V., Brokmeier H.-G., *Crystal Research and Technology*, 2000, **35**, 321.

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