

## Texture Observation of Bending by XRD and EBSD Method

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**Abstract :** The crystal orientation is a factor that affects the microscopic material properties. Crystal orientation determines the anisotropy of the polycrystalline material. And it is closely related to the mechanical properties of the material. In this paper, for pure copper polycrystalline material, two different methods; X-Ray Diffraction (XRD) and Electron Backscatter Diffraction (EBSD); and the crystal orientation were analyzed. In the latter method, it is possible that the X-ray beam diameter is thicker as compared to the former, to measure the crystal orientation macroscopically relatively. By measurement of the above, we investigated the change in crystal orientation and internal tissues of pure copper.

**Keywords :** bending, electron backscatter diffraction, X-ray diffraction, microstructure, IPF map, orientation distribution function

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