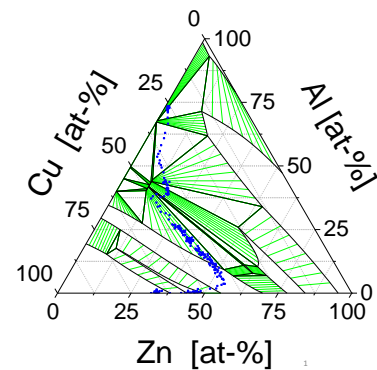
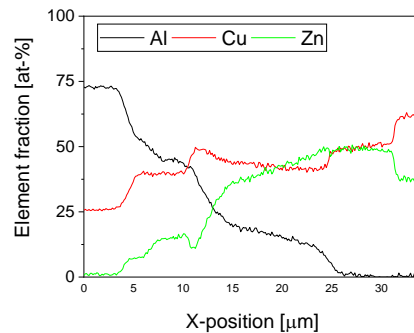
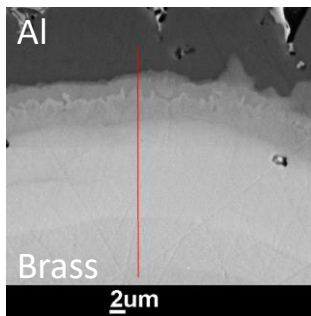


## Continuous compound casting of rotationally symmetrical Cu-Al-alloy based semi-finished products

In this project, in cooperation with utg-TUM, a continuous vertical compound casting process will be developed to produce axisymmetric Brass-Al components. At IMet, we work on the metallurgical characterization of the interface, assisted by SEM image and EDX analysis. We describe the mechanism of intermetallic phase formation to improve the relationship between process parameters and joint quality. The complex interaction between Al alloys and brass is investigated with the thermodynamic description of the Al - Cu - Zn system and kinetic theory. To optimize the process parameters, a numerical model is under development to predict the formation of the interface during the continuous vertical casting.



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