**SUMMARY**

Micas from České středohoří mts. have been studied by X-ray difractometry, ICP-MS and electron microprobe. The measurements of trace elements and REEs revealed very low tendency by normalization of chondrite reservoir and primitive mantle. The micas classifications were determined by Tischendorf (2007) and Rieder (1998) as Fe- or Fe-Ti phlogopites. The abundances of Ti are very high up to 0,46 (a.p.f.u.). X-ray powder diffraction revealed double layered polytype $2M_1$ with space group *C/2c*.