

The ball-pen probe is a unique probe recently developed at the Institute of Plasma Physics in Prague. It has been designed for direct measurement of plasma potential at the CASTOR tokamak. It has also been successfully tested on several other high-temperature plasma devices in Europe. The aims of the bachelor work are primarily experimental. A ball-pen probe has been constructed from available materials, which is suitable for measurement in the low-temperature plasma of a cylindrical magnetron. Although its parameters are much different from those in high-temperature plasma devices, the main principle of measurement with ball-pen probe has been proven to apply also in these brand-new conditions.