

IEEE Signal Processing Cup 2019 Dataset Documentation by AGH Team

We created a similar setup as in competition that consists in a microphone array attached to the quadcopter. The recordings were made in an anechoic chamber with a cubeshaped 8-channel low cost electret microphone array and one additional condenser microphone (AKG C451 B) (Fig. 2). The array was mounted on the bottom of the drone which was placed the center of the chamber (Fig. 3) and the sound source positions were designated with specialized measurement tools. The dataset consists of static, static with ego-noise and ego-noise only recordings. In case of the static recordings two types of source signals were used - white noise and speech. The ego-noise was captured in two setups and with varying speed - all rotors (recorded with the microphone array) and single rotors (recorded with the condenser microphone). Detailed description of the database is in Microsoft Excel file.



Fig. 2: Microphone array attached to the drone and additional Microphone

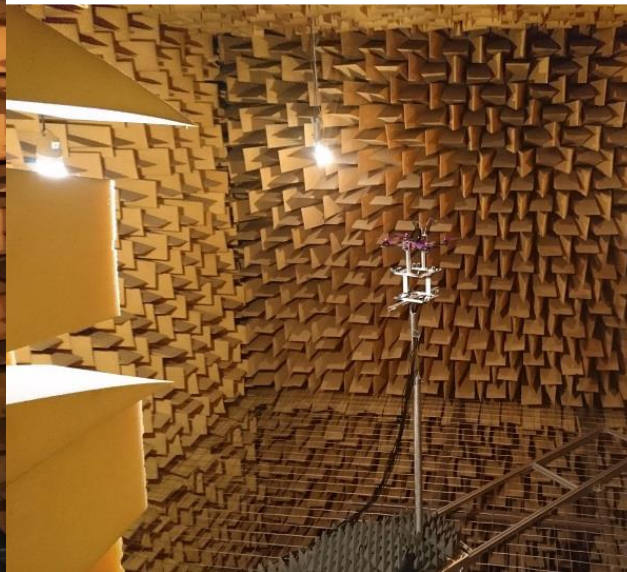


Fig. 3: Measurement in anechoic chamber