

# Experimental Study of the Transfer Function of Replicas of Pinnae of Individuals Manufactured with Alginate

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The goal of this work is to compare the quality of replicas of ears (pinnae) for acoustic purposes. We present a method that creates replicas of ears used in acoustic instrumentation, from dummy heads, based on a process of negative molds of alginate and plaster positive molds. The quality of the process is verified by two methods; i) physical and ii) acoustic, the first consisting of visual inspection and comparison of distances and lengths of the original and the replicas and the second in comparative acoustic measurements. The results show that the mold methods deliver results of very good quality and that it allows to use it for acoustic applications. © 2003-2012 IEEE.

Acoustics

acoustic transfer function

HRTF

physiological acoustics

pinna

Molds

Acoustics

Acoustic application

Acoustic measurements

Acoustic transfer functions

Dummy head

HRTF

pinna

Visual inspection

Transfer functions