

**Flora Mirzoyan, M.A. und Roman Golovkov**  
migohead Flora Mirzoyan & Roman Golovkov GbR

## **Biocompatible earmold materials for allergies: a medical necessity in hearing system fitting**

According to the Federal Environment Agency, the number of people with allergies and sensitization in Germany has risen to over ten million. Older patients in particular are increasingly affected by allergic reactions - also in the context of hearing system fittings. Conventional plastics for earmolds can trigger contact allergies, skin irritation and a rejection of hearing aid fittings in sensitized people - with serious consequences for health and quality of life.

In this presentation, biocompatible materials such as ceramics, hypoallergenic metals and high-performance polymers will be presented from the perspective of a specialized earmould laboratory with expertise in materials science. In addition to typical reactions to standard plastics, the properties and benefits of biocompatible materials will be highlighted. Clinical indications and suitable treatment options will be discussed. Based on current data (e.g. from dental medicine) and practical experience, the use of these materials in hearing acoustics is classified - also from a health policy perspective as a medically necessary treatment option.