

Einzelprojekte (rem: Forschungsbericht2010)

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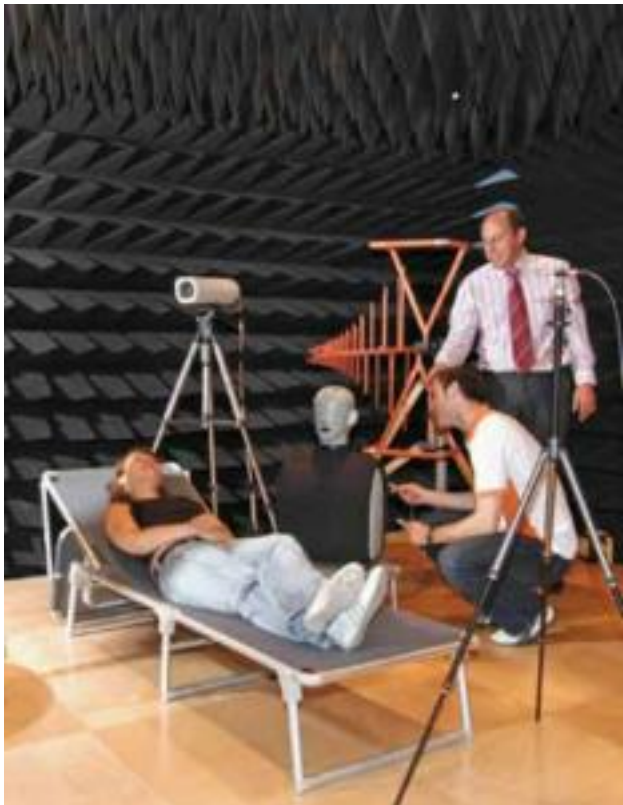
The Tinnitusproject

The Tinnitus project was born in spring 2006, when the special anechoic EMC Acoustic cabin for sound and EMC measurement was shown to visitors at the University of Applied Sciences in Ingolstadt.

Leaving the cabin after 15 minutes only with technical explanations by Prof. Dr.-Ing. Pöppel, a visitor gave the following feedback: Her tinnitus was gone!

Although this effect is so far rare (<5%), that announcement was the starting point of a fascinating project at the Faculty of Electrical Engineering and Computer Science at the TH Ingolstadt concerning the most complex electrical circuit man knows: the brain / nerval system. In following tests it was often reported that the Tinnitus in the cabin – without noise – was first perceived louder, but then trailed off. At times, the subjects fall asleep – a typical response in a quiet sound of the cabin of 27 dBA.

Nearly every third visitor, who steps into this EMC acoustic cabin for the first time, reports that he has felt a pressure on his ears, like when rising or falling. However, the air pressure is unchanged physically, so it's a phantom impression produced by the brain - similar to tinnitus.



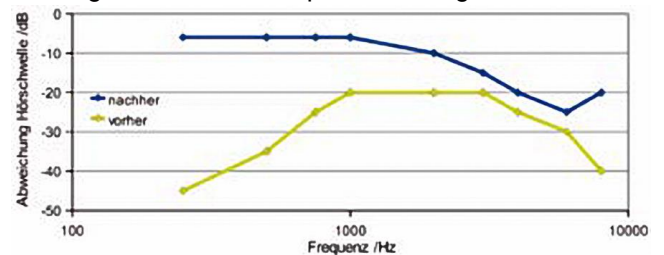
Picture 1:
The EMC-acoustic cabin at the TH Ingolstadt

Serious and so-called local, i.e. only locally perceived Tinnitus has become the focus of the soon cooperation with the ENT doctors Deutscher / Strauss.

For example, an adolescent that had to deal with temporary noise lasting several minutes and a consecutive headache that would last hours, was cured in a few sessions of 1 hour duration (rem.: stable for 5 years now).

A student with a local and a global Tinnitus had been treated in a Tinnitus clinic for two months without success. After a series of sessions in the special cabin, the Tinnitus was gone (rem: no fallback in 5 years now).

Sometimes it can also improve the hearing, as with the hearing loss of a violinist because of a sudden deafness. Five years after that, the visit of the cabin resulted within few sessions in an improvement in hearing in about the complete listening area:



Picture 2: Improvement in hearing before/green and after some sessions/blue – (rem.: stable)
Dr. med. Deutscher/Strauss

After initially only pursuing auditory disorders, positive feedback on other topics, brought the Tinnitus project in very different directions. A subject had little success with Tinnitus.

However, she reported that after a series of meetings, her fingers and, her knee (osteoarthritis since 15 years) did not hurt anymore (rem.: stable for 5 years). After months without pain her orthopedist diagnosed the following: No more inflammatory process in the knee, no more fluid accumulation.

Some other test subjects reported, that their pollen allergy was behaving unusually calm, another interesting effect. (rem: was often responded)

The major feedback from the participants was: One can relax very deeply inside the EMC acoustic cabin. So due to the width of the effects, the thought came into play: the effects were caused by a special kind of relaxation of the brain / nerval system, which could positively influence disease patterns. This led to experiments with cases of obvious disease of the brain / nerval system, such as multiple sclerosis (MS).

Every 4 to 6 weeks, the first test subject with MS had relapses with symptoms such as headache, inflammation of the optic nerves, double vision or feeling failures in the extremities - despite medical treatment.



Due to some daily cabin sessions for 1 year, it has been possible to reduce the relapses without medication. (rem.: stable since 5 years, inflammations since 3 years monthly, since one year slightly).



Picture 3:
MRT-picture with white points (lesions, MS)

Because of positive feedback from treatment of ADS children and children that suffer from auditative perception defects, a project with the speech therapy school of the hospital in Ingolstadt and the Early Intervention Pfaffenhofen was started.

There was one case with ADHS, who was tested with a K-ABC-development test before and after 10 sessions in the cabin. The subject improved significantly from below average to average.

Since 2008, there were over 1200 sessions with more than 130 subjects.

These things were made possible by the commitment of Professor Pöppel, by the willing support from the partner doctors, speech therapy school / Neurology of Ingolstadt Hospital, early intervention Pfaffenhofen and the volume of feedback messages by the subjects concerning now over 30 diseases. Special thanks also to the support of the accompanying technical work of schools, physiotherapists, visitors from the field of complementary medicine as well as the suggestions of the brain researchers of the GRP.

In the future it will be necessary to investigate success rates and combination possibilities with other areas like speech therapy/occupational therapy to understand how things work and to ensure replicability.

A research project is sought, consecutive on the results of these preliminary studies, to confirm the significance of the results.

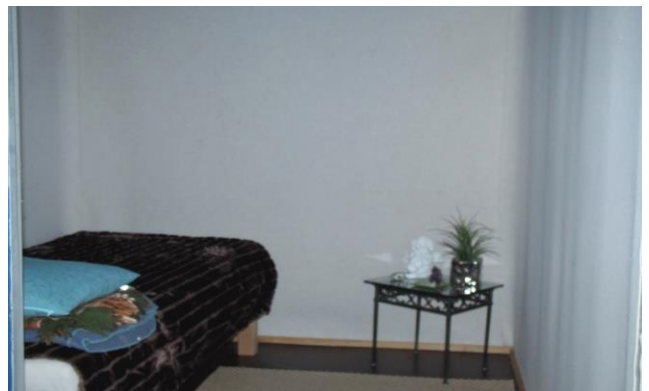
ADS: Attention Deficit Disorder
ADHS: Hyperactive Version of ADS
K-ABC: Kaufmann Assessment Battery for Children

.... Abstract

The Tinnitus Project began in 2006, when a visitor at a student information day at the Ingolstadt University of Applied Sciences commented that her tinnitus was gone, after she had tested the special anechoic chamber displayed there. A research study in collaboration with physicians was born. Positive results in patients after sessions in the chamber include improvements with auditive problems, allergies, and even auto-immune diseases, like multiple sclerosis.

Additional remarks, Prof. Dr.-Ing. J.Pöppel, July 2014:

Further experiments with nowadays 500 subjects and roughly 3000 sessions led to very simple cabins in cellars/sea containers (30 in field in the end of 2014) f. e. for subjects with fall backs like MS, which also gives a Faraday- shield like the EMC- acoustic cabin with precise RF- shield for technical measurements:



nice cabin, based on a usual 8 feet sea container

First responses from subjects in (RF- shielded) MRT-rooms were comparable either in very simply or precise shielded rooms.

So the MRT-rooms in a lots of clinics etc. could be a first start for evaluation-sessions at best for allergies.. Good success should be at least occur at 1/3 of this subjects within some sessions of one hour.

On the other hand, measurements with MRTs or MEGs - based on electromagnetic RF shield - could in some cases lead to observations of relaxing processes but not stable states.

Doctors and students of medical sciences, who were in Ingolstadt remarked, as autoimmunical deseases like MS, Allergics, Asthma, Arthosis etc., could be influenced properly, this would be a very broad and interesting field in the future to help many people live a better life (emotions are influenced positively too).

A lot of thanks to my wife Michaela and my family, who were patient in some hundreds of weekends over 6 years, when I was forcing the project. In addition this public project was only based on small contributes and private engagement. Thanks to all, who believed in the "Tinnitusproject" and supported it in any way.

Josef Pöppel