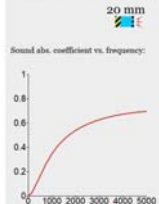


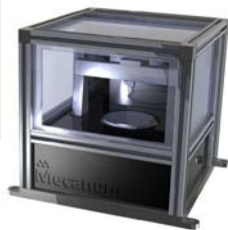
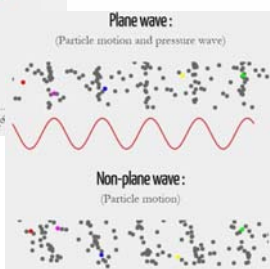
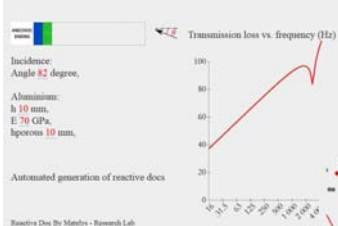
**Influence of a perforated plate on an air-gap**

The next figure presents the sound absorption coefficient of a 20 mm-thick perforated plate (or facing screen) with a perforation rate of 20 % and a perforation radius of 2 mm, backed by an air-gap (or plenum) of 20 mm-thick.

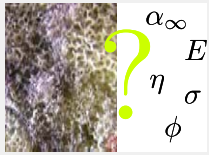
An optimal set of parameters (thickness, perforation rate and radius) for the perforated plate (or facing screen) can be identified.



**Illustration of coincidence frequency**

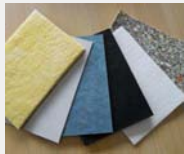


Prepare to be MATELYS approved !



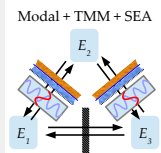
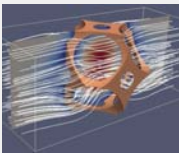
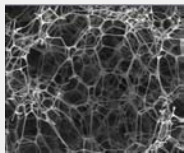
## Characterization

We characterize the intrinsic acoustic and elastic parameters of porous materials. We also characterize intrinsically the sound sources.



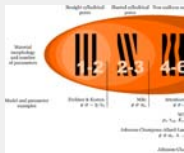
## Prescription

At the interface between suppliers and customers, we prescribe noise control solutions and assist you to meet multi-functional specifications.



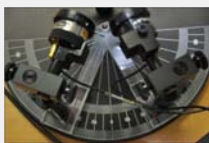
## Research

We lead R&D projects in materials, acoustics, mechanics, thermodynamics and flow.



## Training

We provide training sessions and design specific tools to disseminate your expertise : porous materials, perforated plates, micro-macro approaches, building acoustics, automotive acoustics...

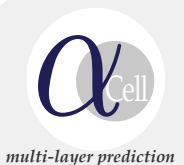


## Products

We provide turnkey test rigs for porous material characterization and for acoustic & vibration measurements.

## Software

We develop original software products. As we are first users and developers, we offer a responsive and skilled support.



multi-layer prediction



Micro-Macro models



porous, screens & liners charac



material database



impedance tube meas



ISO 10140 & ISO 354 meas



piping meas & analysis