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APPLIED ACOUSTICS AND DESIGN FOR PRODUCT SOUND QUALITY

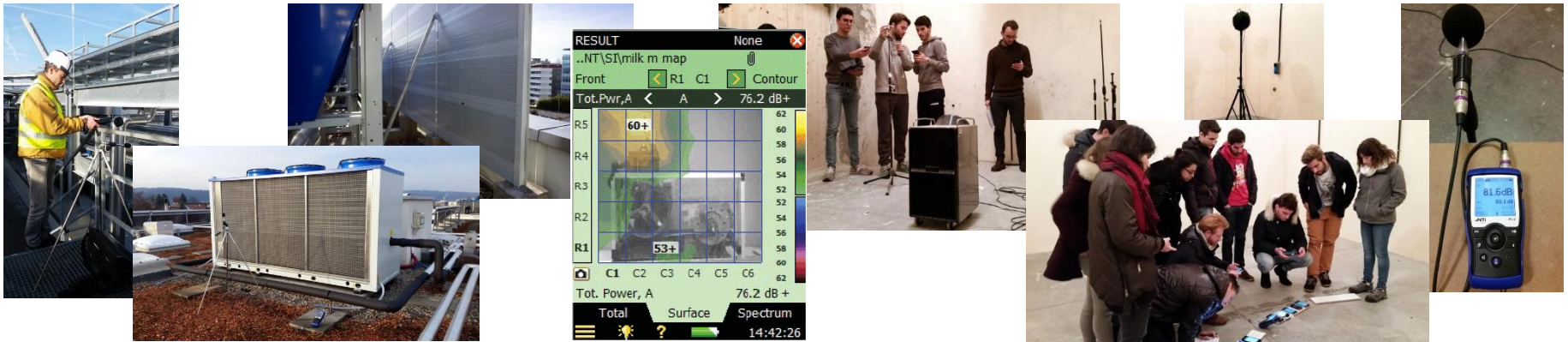
Applied acoustics and design for product sound quality

GOALS: Analysis and problem solving of the generation and propagation of noise in machinery and equipments. Design of systems for the improvement of the acoustic quality of products and for applications in buildings and working environments.

METHODS: Lessons, examples and case studies, exercises and group project.

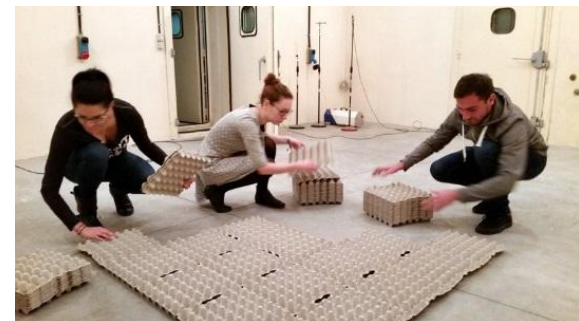
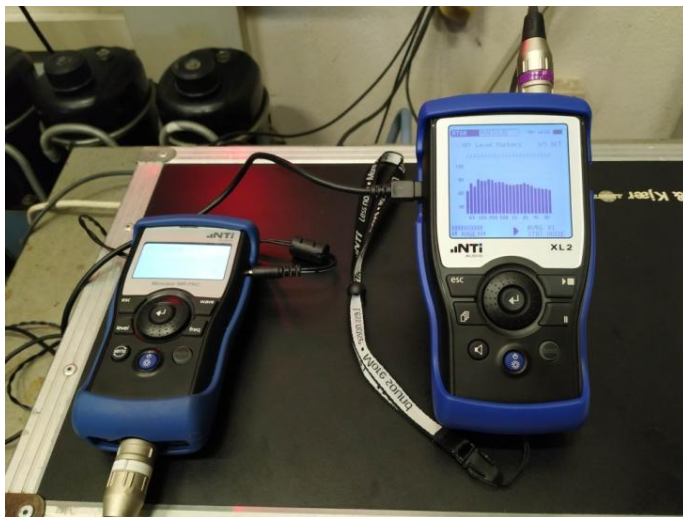
CONTENTS:

- Analysis of the sound emission of machinery and service equipments.
- Characterization, design and optimization of soundproofing and sound absorbing materials and systems for civil and industrial applications.
- Analysis and sizing of acoustic corrections.



Laboratory activities

- Numerous group activities are carried out in the Acoustic Laboratory.
- Standardised methods for machinery sound power evaluation will be applied.
- Experimental activities will be carried out to understand the importance of the different soundproofing techniques.



Noise evaluation

Students will be able to autonomously deepen the knowledge acquired through the experiences of analysis, control and measurement of environmental noise conducted through the use of their smartphone and an open source App specifically studied.

