

Session Program

8–12 Sept 2026

Forum Acusticum 2026

A10.10 Sustainable Materials for Acoustic Applications

Thursday 10 September

14:20

A10.10 Sustainable Materials for Acoustic Applications: S068

Session | Location: Messe Congress Graz, Galerie A | Conveners: Philippe Glé, Francesco Pompoli

14:20–14:40

Orientation-dependent acoustic behaviour of foam-formed reed and lupine fibre absorbers: limitations of homogeneous porous modelling

Speaker

Janis Heldmann

14:40–15:00

Impact of a bio-based flame retardant treatment on the sound absorption performance of vegetal wools

Speaker

Clément PIEGAY

15:00–15:20

Modeling the Sound Absorption of Polydisperse Plant-Based Wools: Evaluation of Self-Consistent Homogenization Methods

Speaker

Clément PIEGAY

15:20–15:40

Development and Characterization of Hemp Fiber Biocomposites with Biopolymer Binders for Acoustic and Thermal Insulation Applications

Speaker

Thomas Frater

15:40

15:00

A10.10 Sustainable Materials for Acoustic Applications: P499

Session | Location: Messe Congress Graz, Messehalle (Poster+Exhibition) | Conveners: Francesco Pompoli, Philippe Glé

15:00–18:00

Design And Evaluation of New Sound Absorbing Panels in Perforated Honeycomb Cardboard and Cellulose Fibers

Speaker

Lucia Magnini

15:00–18:00

Evaluation of Grape Stem-Based Porous Materials for Advanced Sound Absorption Applications

Speaker

Hajizah Azmi Siregar

15:00–18:00

Experimental Analysis of Sound Absorption And Flow Resistivity of Pulper Waste

Speaker

Lucia Magnini

18:00

16:20

A10.10 Sustainable Materials for Acoustic Applications: S360

Session | Location: Messe Congress Graz, Galerie A | Conveners: Philippe Glé, Francesco Pompoli

16:20–16:40**Acoustic Characterization of Bonded Oak-Apple Panels by Normal-Incidence Measurements and Inverse Equivalent-Fluid Modeling****Speaker**

Rui Ribeiro

16:40–17:00**A Comparative evaluation of Sound Absorption Coefficient (SAC) in textile based Acoustic Panels****Speaker**

Hanna Bibi

17:00–17:20**Investigating the effect of soil properties on the acoustic behaviour of earthen constructions****Speaker**

Philippe Glé

17:20–17:40**Analytical Modelling of the Thermoacoustic Performance of Sustainable Fibrous Materials: An Integrated Characterization of Posidonia Oceanica Fibers****Speaker**

Denilson Ramos

17:40–18:00**Acoustic metamaterial window sustainable design: a preliminary approach to implement LCA of metamaterials****Speaker**

Gioia Fusaro

18:00