**Personalized Soundscape Could Help People with Dementia with Time, Place Recognition**

*Acoustical environments can prevent, reduce behavioral and psychological symptoms.*

\*\*\* EMBARGOED UNTIL JUNE 9, 2021 AT 9:30 A.M. \*\*\*

MELVILLE, N.Y., June 9, 2021 -- Designing a soundscape to improve the quality of life for an individual is centered on putting their perception at the heart of the process. It becomes trickier for people who have diminished cognitive capacities.

During the 180th Meeting of the Acoustical Society of America, which will be held virtually June 8-10, Arezoo Talebzadeh, from Ghent University, will show how a personalized soundscape can help those with dementia by providing clues regarding time of day and place. The session, "Soundscape design for people with dementia; the correlation between psychoacoustic parameter and human perception," will take place Wednesday, June 9, at 9:35 a.m. Eastern U.S.

Using a system called AcustiCare, a personalized soundscape is created with a customized algorithm that plays scheduled sounds at specific moments throughout the day. Through feedback, the system can refine the sounds to be played the next day, helping to reinforce time and space for dementia patients.

"The sounds consist of a collection of natural sounds, birdsongs, outdoor sounds, water/rain sounds and kitchen sounds, music, bell sound, and similar," Talebzadeh said. "From these sounds, psychoacoustic parameters and metadata is used to obtain similarity information between the different sounds. This information is used to suggest a new sound related to the feedback findings."

Talebzadeh said his research aims to discover the correlation between psychoacoustic environments and mood change, hoping to trigger responses that elicit feelings of safety. The soundscape could improve the quality of life of people with dementia by improving sleep quality, reducing agitation, anxiety, and distress and reduce behavioral and psychological symptoms of dementia, the use of psychoactive drugs, and stress on caregivers and staff.

"One of the environmental factors is the infrastructure of care facilities," Talebzadeh said. "Various modifications are possible to support a dementia-friendly environment that can also contribute to preventing or reducing behavioral and psychological symptoms of dementia. Sound is one of the environmental factors."

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**----------------------- MORE MEETING INFORMATION -----------------------**

**USEFUL LINKS**

Main meeting website: <https://acousticalsociety.org/asa-meetings/>

Technical program: <https://acousticalsociety.org/technical-program-and-special-sessions/>

Press Room: <http://acoustics.org/world-wide-press-room/>

**WORLDWIDE PRESS ROOM**

In the coming weeks, ASA's Worldwide Press Room will be updated with additional tips on dozens of newsworthy stories and lay language papers, which are summaries of presentations written by scientists for a general audience and accompanied by photos, audio and video. You can visit the site during the meeting at <http://acoustics.org/world-wide-press-room/>.

**PRESS REGISTRATION FOR MEETING SESSIONS**

We will grant free registration for credentialed and professional freelance journalists who wish to attend the meeting sessions. If you are a reporter and would like to attend, contact the AIP Media Line at [media@aip.org](mailto:media@aip.org). We can also help with setting up interviews and obtaining images, sound clips or background information.

**VIRTUAL MEDIA BRIEFINGS**

Press briefings will be held virtually during the conference. Credentialed media can register in advance by emailing [media@aip.org](mailto:media@aip.org) and including your full name and affiliation in the message. The official schedule will be announced as soon as it is available, and registered attendees will be provided login information via email.

**ABOUT THE ACOUSTICAL SOCIETY OF AMERICA**

The Acoustical Society of America (ASA) is the premier international scientific society in acoustics devoted to the science and technology of sound. Its 7,000 members worldwide represent a broad spectrum of the study of acoustics. ASA publications include The Journal of the Acoustical Society of America (the world's leading journal on acoustics), Acoustics Today magazine, books, and standards on acoustics. The society also holds two major scientific meetings each year. For more information about ASA, visit our website at [http://www.acousticalsociety.org](http://www.acousticalsociety.org/).

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