The acoustic and psychoacoustic considerations in open-plan offices

Date: Wednesday 20th June 2018
Venue: Lecture Theatre 2 (ALT 2), School of Architecture, Design and Planning,
148, City Road, The University of Sydney (See map at:
https://sydney.edu.au/architecture/about/location-and-contacts.html)
Time: 6:00 pm for 6:30 pm start
Refreshments prior to talk
Speaker: Dr Manuj Yadav, School of Architecture, Design and Planning,
The University of Sydney
RSVP: Thursday, 14th June to Mattia Tabacchi by email
Mattia.Tabacchi@renzotonin.com.au
Open to AAS members and guests.

In one form or another, open-plan designs in offices are here to stay. This is despite the acoustics of the open-plan work environment consistently being reported as distracting by office workers, leading to productivity decline, workplace dissatisfaction, and several other associated issues. Recent times have seen a surge in the awareness and appreciation of the acoustics issues by office workers, researchers, and more importantly the media, property owners, and businesses. Most notably for this talk, there is now an international standard for measuring the acoustics of open-plan offices (ISO 3382-3: 2012). This talk will cover the ISO 3382-3 in detail; report on the results of ISO-compliant measurements conducted in Australian offices, along with measurements that can be seen as complementary to the standard measurements; and highlight some issues in the standard. The latter aspect has been studied in several experiments in the Indoor Environmental Laboratory, The University of Sydney, which will also be discussed. Overall, the aim is to cover several approaches of characterizing the acoustics and psychoacoustics of open-plan offices, which has both theoretical implications and practical applications.

Manuj Yadav is a Postdoctoral Research Associate in Architectural Science in the School of Architectural Design and Planning, The University of Sydney. Manuj did his PhD in musical psychoacoustics at the University of Sydney. Currently he is employed under an Australian Research Council funded project titled, “Solving the problem of speech distraction in open-plan offices”. Previously he was involved in teaching and several research projects at the University of Sydney. The research projects that he has been involved in have focused mainly on characterizing and simulating the sound of one’s own voice in rooms for speech and singing; and also room acoustics, signal processing and psychoacoustics in general.