



Joint Meeting

137th regular meeting of the Acoustical Society of America
2nd convention of the EAA: Forum Acusticum
- integrating the 25th German Acoustics DAGA Conference

Conference Secretariats:

BERLIN:

T U Berlin, Institut für Technische Akustik, BERLIN99, S. Bärndal, Einsteinufer 25, 10587 Berlin, GERMANY
Fax: +49 30 314 251 35, e-Mail: forum99@mach.ut.tu-berlin.de

USA:

Acoustical Society of America, E. Moran, 500 Sunnyside Boulevard, Woodbury, NY 11797, USA; Fax: +1 516 576 2377, e-Mail: asa@aip.org

Perception and meaning of warning signals in urban contexts. Corsin Vogel, Jean-Dominique Polack, Michele Castellengo (Laboratoire d'Acoustique Musicale, CNRS-UPMC-Min. Cult., 11 rue de Lourmel, F-75015 Paris, France), and Daniele Dubois (CNRS-INaLF, LCPE, 1 rue Maurice Arnoux, F-92120 Montrouge, France)

Perception of warning signals in urban context points out the question of their efficiency with regard to the citizens. Efficiency of warning signals can be described in terms of their meaning for persons who are concerned with. Indeed, subjects can adequately react to the signals only if these latter are identified, that is, only if the signals make sense to the subjects. Therefore, information about mental representations of citizens exposed to warning signals is necessary. An experiment was realized involving 15 signals mixed with two different urban contexts: steady traffic noise and public park ambience. Results show that the two contextual constraints influence the perceptual thresholds of the warning signals as well as their identification. Warning signals can be classified with respect to their different meanings in different urban contexts. Especially, it appeared that signals having an identical semantic description nevertheless may present very different acoustical properties. The classes of signals obtained with the psychological description are a way to determine new acoustical features related to the meaning of warning signals, and so, to their efficiency.