

38th Winter School on Vibroacoustical Hazards Suppressions Szczyrk, Poland, March 1-5, 2010

Traditionally I invite you to acquaint with preliminary program and some abstracts of lectures submitted to presentation in 38th Winter School on Vibroacoustical Hazards Suppressions. This national School, organized by Upper Silesian Division of the Polish Acoustical Society and Institute of Physics at Silesian University of Technology, at this year is planned at the first week of March 2010. This conference is organized in different places of Silesian Beskidy Mountains, but this year it is organized in Szczyrk.

The conference is the forum for all environmental vibroacoustics fields. Particularly it concern to traffic noise, industry noise, vibroacoustics of machines, room acoustics, noise protection and similar problems. During the School the theoretical works, experimental, measuring, technical, applied and normative ones are presented.

The School lectures, and other conference materials, will be published in the "Materials of the XXXVIII Winter School on Vibroacoustical Hazards Suppressions" (in Polish) edited by Dr. Roman Bukowski and Dr. Mieczysław Roczniak (chairman of the conference). This publication is intend to participants of the School and for many libraries in Poland.

Other information about XXXVIII WS on VHS you can find at address:

http://ogpta.pols.pl/szzzw

The School traditionally is sponsored by Ministry of Science and Higher Education. At this year we have two another sponsors: ARMSTRONG BUILDING PRODUCTS, CENTRAL EUROPE NORTH Sp. z o.o. (Ltd.) and EC TEST SYSTEMS Sp. z o.o. (Ltd.).

In behalf of Organizers *Roman Bukowski* coordinator of the School



Abstracts

1. Sound levels on stage during performances of rock and jazz music

KOZŁOWSKI Emil, emkoz@ciop.pl ŻERA Jan^{1,2,3}, MŁYŃSKI Rafał

¹ Central Institute for Labour Protection – National Research Institute Czerniakowska 16, 00-701 Warszawa, Poland

² Warsaw University of Technology Institute of Radioelectronics Nowowiejska 15/19, 00-665, Warszawa, Poland

³ The Fryderyk Chopin University of Music Okólnik 2, 00-368, Warszawa, Poland

Equivalent A-weighted, maximum A-weighted and peak C-weighted sound pressure levels (*SPLs*) were measured during concerts of five rock and four jazz groups. Rock concert took place on an open stadium and jazz groups played in a small music club and in a large concert hall. Results showed that musicians were exposed to high levels of noise. Daily noise exposure level ($L_{EX,8h}$) for all 36 musicians exceeded limit of 85 dBA. During rock and jazz music performances 22 and 15 musicians were exposed to sound levels exceeding the limit of 115 dB for maximum A-weighted SPL, and 135 dB for peak C-weighted SPL, respectively. Drum players were exposed to the highest sound levels exceeding 108 dB (L_{Aeq}), 120 dB ($L_{A max}$) and 140 dB (L_{Cpeak}).

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2. Assessment of the influence of calculation metod on quality of a map of traffic noise

KUBOSZEK Artur, Artur. Kuboszek
@polsl.pl $\ensuremath{\mathsf{Rurański}}$ Marek

Silesian University of Technology Faculty of Organization and Management Roosevelta 26/28, 41-800 Zabrze, Poland

Since year 2002 the European Parliament and Council Directive has obliged all the member states of the EU to prepare the strategic maps of noise. Every city on the area of the EU where the number of inhabitants exceeds 250 000 was obliged to create such a map until 30 June 2007. Agglomerations where number of inhabitants varies between 100 000 and 250 000 have time until 30 June 2012 to prepare such maps.

To assess the level of propagation of noise there are used appropriate calculation methods. The EU – in case of traffic noise – recommends using French NMPB method, however some of the member states elaborated own calculation models and apply them for preparation of the maps. Poland does not have own calculation method, therefore in most cases there is used the recommended method when preparing maps.

The aim of presented research was comparison of results of measurements taken by the direct method with the results of simulations made with the use of selected calculation methods in the application CadnaA[®] by DataKustik.

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3. Estimation of L_{DEN} levels of road noise on the basis of short-term measurements

ORZECH Łukasz¹, lorzech@komag.eu LESIAK Krzysztof¹, klesiak@komag.eu WSZOŁEK Tadeusz², twszolek@agh.edu.pl

¹ KOMAG Institute of Mining Technology Research-and-Development Centre Pszczyńska 37, 44-101 Gliwice, Poland

² AGH University of Science and Technology Faculty of Mechanical Engineering and Robotics Department of Mechanics and Vibroacoustics Al. Mickiewicza 30, 30-059 Kraków, Poland

An attempt of estimation of selected components of uncertainty of determination of L_{DEN} day-evening-night index, on the basis of short-term measurements of noise from communication routes, in relation to traffic intensity on those routes, was presented in the paper.

Differences between L_{DEN} index determined by a method of direct measurements of noise with use of sampling, which is included in Decree of the Minister of the Environment dated 2nd October 2007, and index determined by a direct method of continuous measurements in limited time, were determined in the paper.

Results of measurements taken by the method of direct, continuous measurements in limited time, which were taken in reference measuring points, were the input data for calculations.

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