Noise Theory and Practice

Scientific Journal

Vol. 9 No. 2

The founder

Limited liability company 'Acoustic Design Institute' (LLC 'ADI') in cooperation with Baltic State Technical University 'VOENMEH' named after D. F. Ustinov

The Online Scientific Journal 'Noise Theory and Practice'

has been published since 2015. The founder of the journal is Nikolay Igorevich Ivanov, Doctor of Engineering Sciences, Professor of the department of Ecology and Industrial Safety of the Baltic State Technical University 'VOENMEH' named after D. F. Ustinov, the founder of the transport acoustics in Russia.

'Noise Theory and Practice' is devoted to the fundamental problems in the field of vibroacoustics and accepts papers in the following areas:

- 29.00.00 Physics
- 29.37.00 Acoustics
- 43.00.00 General and complex issues of natural and exact sciences 87.00.00 Environmental protection. Human ecology.

All articles submitted to the editorial office are subject to mandatory review. The journal is an open network resource and published four times a year.

Location address of the Editorial office

Bldg. 7'A', 138 Obvodny Canal emb., office 11-N, room 2-2 +7 (812) 495-77-97 www.noisetp.com e-mail: secretary@noisetp.com

Executive Secretary Khrapko Natalya

ЭЛ № ФС 77-74057

Journal is registered in Federal service for supervision of communications, information technology, and mass media **The certificate of registration**

Contents

Bykov N.V.

RUS

Stopbands of sound waves propagation construction in a corrugated duct by determining the stability of a solution pp. 12-18

Svetlov V.V.

RUS

Noise generation of the plate in the field of turbulent pressure pulsations

pp. 19-28

RUS

Kezik V.I.

On the possibility of implementing an isothermal gas process in a Helmholtz resonator

pp. 29-39

RUS

Ardashev I.O., Kartyshev M.O., Kartyshev O.A.

Evaluation of the impact of aircraft horizontal deviations from nominal flight paths defined in the AIP on noise levels at monitoring sites

pp. 40-51

Polyanskiy V.A., Smirnova N.A.

RUS

RUS

Modal control for damping of elastic vibrations: bound and perspective

pp. 52-64

Eliseev A.V., Kuznetsov N.K., Mironov A.S.

Systematic approach to assessing the states of vibration fields of technical objects in problems of dynamics of transport and technological machines

pp. 65-81

Tsukernikov I.E., Shubin I.L., Nevenchannaya T.O., Tikhomirov L.A.

RUS

Prediction of rail transport vibration in the premises of residential and public buildings

pp. 82-93

Noise Theory and Practice

Scientific Journal

Vol. 9 No. 2

The founder

Limited liability company 'Acoustic Design Institute' (LLC 'ADI') in cooperation with Baltic State Technical University 'VOENMEH' named after D. F. Ustinov

The Online Scientific Journal 'Noise Theory and Practice'

has been published since 2015. The founder of the journal is Nikolay Igorevich Ivanov, Doctor of Engineering Sciences, Professor of the department of Ecology and Industrial Safety of the Baltic State Technical University 'VOENMEH' named after D. F. Ustinov, the founder of the transport acoustics in Russia.

'Noise Theory and Practice' is devoted to the fundamental problems in the field of vibroacoustics and accepts papers in the following areas:

- 29.00.00 Physics
- 29.37.00 Acoustics
- 43.00.00 General and complex issues of natural and exact sciences
- 87.00.00 Environmental protection. Human ecology.

All articles submitted to the editorial office are subject to mandatory review. The journal is an open network resource and published four times a year.

Location address of the Editorial

Bldg. 7'A', 138 Obvodny Canal emb., office 11-N, room 2-2 +7 (812) 495-77-97 www.noisetp.com e-mail: secretary@noisetp.com Executive Secretary

Khrapko Natalya

Journal is registered in Federal service for supervision of communications, information technology, and mass media The certificate of registration ЭЛ № ФС 77-74057

Contents

Pimenov I.K., Kuznetsova A.D.

RUS

Evaluation of direct and indirect sound transmission paths from the operation of roller gates of an underground parking lot pp. 94-102

Tupov V.B., Mukhametov A.B.

RUS

The influence of the supporting surface on the acoustic efficiency of the barrier pp. 103-114

RUS

Abramov A.N., Gogiberidze O.E., Elkin Yu.I.

The influence of noise reduction in the highway areas of road service on the risks of accidents

pp. 115-126

Dmitriev P.P., Butorina M.V.

RUS

Suitability of laser Doppler velocimetry (LDV) for calibration of pressure microphone

pp. 127-134

Kartyshev M.O., Kartyshev O.A., Ardashev I.O.

RUS

Use of aircraft noise monitoring system Ecoflight Monitoring data to form an aircraft flight scenario in order to assess the noise pollution

pp. 135-148

Krivun K.V., Timushev S.F.

RUS

Effect of the hexacopter propellers' mutual position on the emitted sound power

pp. 149-160

Noise Theory and Practice

Scientific Journal

Vol. 9 No. 2

The founder

Limited liability company 'Acoustic Design Institute' (LLC 'ADI') in cooperation with Baltic State Technical University 'VOENMEH' named after D. F. Ustinov

The Online Scientific Journal 'Noise Theory and Practice'

has been published since 2015. The founder of the journal is Nikolay Igorevich Ivanov, Doctor of Engineering Sciences, Professor of the department of Ecology and Industrial Safety of the Baltic State Technical University 'VOENMEH' named after D. F. Ustinov, the founder of the transport acoustics in Russia.

'Noise Theory and Practice' is devoted to the fundamental problems in the field of vibroacoustics and accepts papers in the following areas:

- 29.00.00 Physics
- 29.37.00 Acoustics
- 43.00.00 General and complex issues of natural and exact sciences
 87.00.00 Environmental protection. Human ecology.

All articles submitted to the editorial office are subject to mandatory review. The journal is an open network resource and published four times a year.

Location address of the Editorial office

Bldg. 7'A', 138 Obvodny Canal emb., office 11-N, room 2-2 +7 (812) 495-77-97 www.noisetp.com e-mail: secretary@noisetp.com **Executive Secretary** Khrapko Natalya

Journal is registered in Federal service for supervision of communications, information technology, and mass media

The certificate of registration

ЭЛ № ФС 77-74057

Contents

Zaripov A.F., Pavlov G.I., Gorbunova O.A.

RUS

Experimental study of the effect of gas bubbles on the level of sound pressure in a liquid, the natural frequencies of which are close to the frequencies of sound vibrations

pp. 161-168

RUS

Glazkov A.O.

The effect of the turbocharger operation mode of a high-powered engine on its aerodynamic noise pp. 169-177