

PROGRAM



UNIVERSITY OF NIŠ
FACULTY OF OCCUPATIONAL SAFETY
Department of Preventive Engineering
Noise and Vibration Laboratory



"POLYTECHNICA" UNIVERSITY OF TIMISORA
FACULTY OF MECHANICAL ENGINEERING
Department of Mechanics and Vibration
Noise and Vibration Laboratory



BULGARIAN ACADEMY OF SCIENCES
Institute of Mechanics

28th INTERNATIONAL CONFERENCE



NOISE & VIBRATION

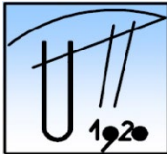
24 - 25, October 2024.
Niš, Serbia

**ORGANIZER
ORGANIZATOR**



University of Niš
Faculty of Occupational Safety in Niš
Department of Preventive Engineering
Noise and Vibration Laboratory

www.znrfak.ni.ac.rs



"Politehnica" University of Timisoara
Faculty of Mechanical Engineering
Department of Mechanical Engineering
Noise and Vibration Laboratory

[www. http://www.mec.upt.ro](http://www.mec.upt.ro)



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INFORMATION INFORMACIJE

The 28th International Conference "Noise and Vibration" will be held in Niš from October 24 to October 25, 2024. The opening ceremony, as well as other sessions, will take place at the Faculty of Occupational Safety, Čarnojevića str. 10a, Niš. In addition to the Conference, an exhibition of equipment and materials related to noise and vibration control will also be organized.

28. Međunarodna konferencija "Buka i vibracije" održaće se u Nišu od 24. do 25. oktobra 2024. Svečano otvaranje kao i ostale plenarne sednice održaće se na Fakultetu zaštite na radu u Nišu, Čarnojevića 10a, Niš. U okviru Konferencije će biti održana izložba opreme i materijala za zaštitu od buke i vibracija.

PAPER PRESENTATION - PREZENTACIJA RADOVA

Papers will be presented orally in either English or Serbian, with English being the preferred language. All presentations must be in the form of PowerPoint slides and in English. The time allocated for presenting each paper is 10 minutes, followed by 2 minutes for discussion. However, invited papers will be given 20 minutes for presentation. All papers presented at the Conference will be published in a special issue of the journal Facta Universitatis, series: Working and Living Environment Protection, after the peer-review process, provided the registration fee is paid by the first author.

Radovi koji su uvršćeni u program biće saopšteni usmeno na engleskom ili srpskom jeziku, ali je poželjno korišćenje engleskog jezika. Sve prezentacije radova moraju biti u obliku ppt slajdova na engleskom jeziku. Vreme za predstavljanje rada je ograničeno na 10 minuta i 2 minuta za diskusiju, osim za radove po pozivu gde je vreme za predstavljanje rada 30 min. Ukoliko je plaćena kotizacija za prvog autora rada, svi saopšteni radovi na Konferenciji će nakon završenog procesa recenziranja radova biti objavljeni u specijalnom broju časopisa Facta Universitatis, serija: Zaštita radne i životne sredine.

REGISTRATION FEE KOTIZACIJA
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The registration fee is 100 Euros and must be paid for each accepted paper. The registration fee includes admission to all conference sessions, conference proceedings, and a cocktail reception.

Participants who did not pay the early registration fee are advised to complete their payment at the registration desk. Bank transfer is the preferred payment method.

For details regarding payment in euros, please see the instructions for payment on

<http://www.znrfak.ni.ac.rs/NOISE2024/Fees.html>

Kotizacija za učešće na Konferenciji iznosi 12.000,00 dinara. U kotizaciju je uračunato učešće na Konferenciji, zbornik radova i sve ostale prateće manifestacije. Označeni iznos treba uplatiti na račun Fakulteta zaštite na radu u Nišu:

840-1747666-77 sa pozivom na br. 28-2024

Učesnici koji nisu blagovremeno uplatili kotizaciju mogu to učiniti prilikom registracije. Poželjna je uplata kotizacije na račun Fakulteta.

ACCOMMODATION SMEŠTAJ

The participants of the conference can book accommodation at the hotels in the vicinity of the Faculty:

Učesnici Konferencije mogu rezervisati smeštaj u hotelima koji se nalaze u neposrednoj blizini Fakulteta:

Rile Man Hotel

Vojvode Mišića 111, 18000 Niš

Tel. +381 18 528 522, Mobtel: +381 60 5065067

<http://www.rilemen.com>, info@rilemen.com

Panorama Lux

Svetolika Rankovića 51, 18000 Niš, Srbija

Tel/faks: + 381 18 561-214, 560-907

info@panoramalux.co.rs; www.panoramalux.co.rs

Hotel Marica

Njegoševa 81a, 18000 Niš, Srbija

Tel: + 381 18 3210323, Mobtel: +381 63 562333

info@hotel-marica.com, <https://hotel-marica.com/>

Tami Residence Hotel

Durmitorska prilaz 1, 18000 Niš, Srbija

Tel: +381 18 50 58 00, Mobtel: +381 62 8041950

recepcija@tamiresidence.com; www.tamiresidence.com

TOPICS OF INTEREST

- ⇒ Noise generation and propagation
- ⇒ Noise control
- ⇒ Environmental noise
- ⇒ Vibration generation and propagation
- ⇒ Vibration control
- ⇒ Effects of noise and vibrations
- ⇒ Analysis of noise and vibration
- ⇒ Requirements

TEMATSKE OBLASTI

- ⇒ Generisanje i prostiranje buke
- ⇒ Kontrola buke
- ⇒ Buka u životnoj sredini
- ⇒ Generisanje i prostiranje vibracija
- ⇒ Kontrola vibracija
- ⇒ Efekti buke i vibracija
- ⇒ Analiza buke i vibracija
- ⇒ Standardi i propisi

SCHEDULE OF EVENTS SATNICA

Thursday	24. 10. 2024.	Četvrtak
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09.00 - 10.00	Registration - Registracija
10.00 - 10.30	Opening ceremony <i>Svečano otvaranje</i>
10.30 - 11.00	Coffee break - <i>Kafe-pauza</i>
11.00 – 12.00	Presentation of invited papers - <i>Prikaz radova po pozivu</i>
12.00 - 12.15	Break - <i>Pauza</i>
12.15 – 14.00	Presentation of papers - <i>Prikaz radova</i>
14.00 – 16.00	Break - <i>Pauza</i>
16.00 – 18.00	Presentation of papers - <i>Prikaz radova</i>
19.30	Dinner party - <i>Večera</i>

Friday	25. 10. 2024.	Petak
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10.00 - 12.00	Presentation of papers - <i>Prikaz radova</i>
12.00 - 12.30	Coffee break - <i>Kafe-pauza</i>
12.30 - 13.00	Summary and closing remarks - <i>Usvajanje zaključaka i zatvaranje</i>

PROGRAMME PROGRAM

Thursday

24. 10. 2024.

Četvrtak

11.00 - 12.00

Presentation of invited papers
Prikaz radova po pozivu

Meeting place: Amphitheater

Mesto održavanja: Amfiteatar

Miomir Mijić, Dragana Šumarac Pavlović

Sound insulation paradox of double rigid walls in buildings

**Ivana Kovacic, Zeljko Kanovic, Ljiljana Teofanov,
Vladimir Rajs**

*Vibration mitigation-based machine learning-driven design of
metastructures*

Branko Radičević

Models for predicting sound absorption of porous materials

12.15 - 14.00

1st session - I. sekcija

Meeting place:

Room 7 - Sala 7

Mesto održavanja:

Dragan Cvetković

*The contribution of standards and standardization in achieving
acoustic comfort*

**Roumen Iankov, Momir Prašćević, Milan Rashevski,
Abed Nodira**

Finite element modelling of impedance tube test

**Alexander Alexiev, Sergey Bukharov, Darko Mihajlov, Nodira
Abed, Aminjon Bozorov**

*Experimental study on the dynamic mechanical properties of
epoxy based acoustic composites containing silicate and carbon
nano-additives using Oberst beam method*

Nikola Holeček

A case study of low frequency noise

Koleta Zafirova, Elena Tomovska

Polyester apparel cutting waste as sound insulation material

Đurdina Rančić , Miomir Vasov

Application of contemporary materialization of interior partition in industrial buildings as an acoustic challenge

Marko Janković, Dejan Ćirić, Maro Puljizević, Aleksandar Pantić

Multi-slope energy decay curves generated by moving average approach

Damir Savković, Aleksandar Milenković, Danica Boljević, Stevka Baralić

Effectiveness of the construction of sound barriers on two highly busy roads in Belgrade

Violeta Stojanović, Zoran Milivojević

The polar characteristic of an acoustic parabolic reflector

Tanja Dulović, Branko Radičević, Mišo Bjelić, Marina Ivanović

Optimization of acoustic parameters of fibrous materials using biologically inspired algorithms

Biljana Beljić Durković, Jovan Miočinović

Case study: prediction of the effect of performed acoustic insulation on machine parts on reducing occupational noise exposure

16.00 - 18.00	2nd session - 2. sekcija
Meeting place:	Room 7 - Sala 7
Mesto održavanja:	

Emir Ganić, Aleksandar Gajicki, Bojana Mirković, Matija Sindik

Strategic noise map for Belgrade Nikola Tesla airport

Ingrid LeGriffon, Elise Ruaud, Emir Ganić, Tatjana Krstić Simić, Bojana Mirković, Miguel Baena, David Mocholi, Marta Alonso, Cristina Barrado, Jovana Kuljanin

Evaluating urban air mobility noise impacts

Snežana Jovanović, Milica Ivić Nikolić, Martin Jovanović, Dragan Stojadinović

Noise review of reconnaissance drones

Marina Donić, Emir Ganić, Jelena Ruso

Comparative analysis of ISO 3744 and ISO 5305 standards for UAS noise measurement

Momir Prašcević, Darko Mihajlov, Petar Jovanović

Methodology for uncertainty estimation of short-term total environmental noise measurements

Jelena Malenović-Nikolić, Bojana Zlatković, Uglješa Jovanović

Application of indicators in noise control

Darko Mihajlov, Momir Prašević, Petar Jovanović

Environmental noise in vicinity of the brewery - a case study

Danica Boljević, Damir Savković, Aleksandar Milenković

Noise level measurements of road traffic at different heights in relation to the noise source

Anica Randelović, Jelena Malenović-Nikolić, Branko Radović, Predrag Ilić

Measurement of noise levels in the environment around the „Stanari“ mine

Branko Radović, Predrag Ilić, Anica Randelović, Bojana Zlatković

Examination of the noise level in the environment in the area of the Stanari municipality thermal power plant

Ljubica Stojković, Dragoslav Pavlović, Gradimir Cvetanović, Saša Pavlović, Milan Grozdanović, Nikola Krstić, Filip Filipović

Measuring the noise level of municipal vehicles during waste disposal at the Niš landfill

Jovan Miočinović

Proposal of the rule for rating levels of industrial impulsive noise regarding the risk of hearing damage

Friday	25. 10. 2024.	Petak
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10.00 - 12.00	3rd session - 3. sekcija
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Meeting place:	Room 7 - Sala 7
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Mesto održavanja:	
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Nicolae Herisanu, Bogdan Marinca, Vasile Marinca

Nonlinear vibration of a beam subjected to mechanical impact and winkler-pasternak foundation

Bogdan Marinca, Nicolae Herisanu, Vasile Marinca

Dynamic analysis of a nanobeam under the influence of an electromagnetic actuator and a mechanical impact

Milena Mančić, Dragan Jovanović, Miomir Raos, Marko Mančić

Vibrations measurements in industrial plants and their influence on machines

Tihomir Trifonov, Yavor Boychev, Ivan Ivanov

Advantages and disadvantages of vector sensors compared to classical acoustic sensors and acoustic antennas

Mladena Lukić, Katarina Đorđević, Žarko Čojbašić,

Dragan Markushev

Sensing with sound: furthering gases and solid analysis by photoacoustic spectroscopy

Vasile Bacria, Nicolae Herisanu

Ensuring an acoustically unpolluted living environment

Mihaela Picu

A study of the hearing health of ambulance drivers

Milica Ivić Nikolić, Snežana Jovanović, Branislav Djordjević,

Aleksandar Sedmak

Application of ultrasound in different purposes with examples

Slobodanka Galović, Katarina Đorđević, Mladena Lukić,

Dalibor Chevizovich

Vibration phenomena induced by pulsed laser heating of micromechanical structures

12.30 - 13.00	Summary and closing remarks - <i>Usvajanje zaključaka i zatvaranje</i>
Meeting place:	Room 7 - Sala 7
Meeting place:	Room 7 - Sala 7
Mesto održavanja:	



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