



UNIVERZITET U ZENICI

UNIVERSITY OF ZENICA

Mašinski fakultet

Faculty of Mechanical Engineering

**ODRŽA
VANJE
2024**

8. naučno - stručna
konferencija sa
međunarodnim učešćem
8TH research -
expert conference
with international
participation

**MAINTENANCE
2024**

Zenica, Bosnia and Herzegovina
20th and 21th of November 2024.



**Faculty of Mechanical Engineering –
University of Zenica (Bosnia and Herzegovina)**

in cooperation with:



**Ministry of Economy of Zenica –
Doboj Canton (Bosnia and Herzegovina)**



**Faculty of Maritime Studies Kotor –
University of Montenegro (Montenegro)**



**Faculty of Engineering,
Harran University, Şanlıurfa (Türkiye)**



**Faculty of Technical Sciences –
University of Novi Sad (Serbia)**



**Mechanical Engineering Faculty –
University of Slavonski Brod (Croatia)**



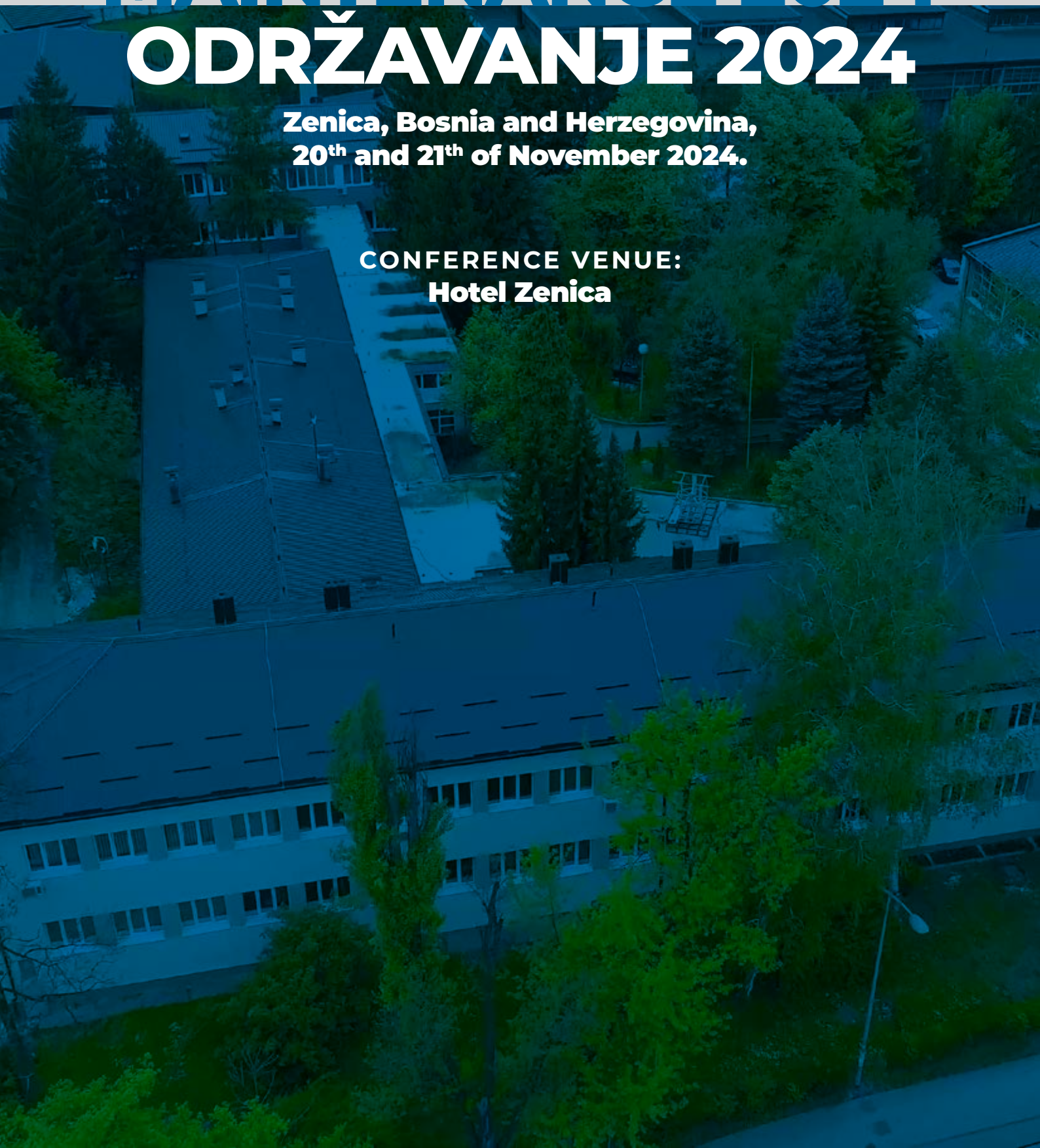
WE KINDLY INVITE YOU

to the 8th research - expert conference with
international participation

MAINTENANCE 2024 **ODRŽAVANJE 2024**

**Zenica, Bosnia and Herzegovina,
20th and 21th of November 2024.**

**CONFERENCE VENUE:
Hotel Zenica**





Hotel Zenica

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IMPORTANT DATES

ACTIVITY	IMPORTANT DATES
Submission of abstracts	15th of September 2024.
Notice of acceptance of abstracts and instructions for the preparation of papers	1th of October 2024.
Submission of the full paper	15th of October 2024.
Registration fee payment	20th of October 2024.
Finalni program	10th of November 2024.

Preparation of abstracts and papers: In English or one of the languages of the Western Balkans region.

CONFERENCE TOPICS

The conference will work in the following way: plenary presentations with panel discussion (introductory and invited papers for contemporary current topics), symposium (papers on the topics of the meeting) and, if necessary, workshops (working meetings). All potential authors are informed that they can prepare papers from the following thematic areas:

1. Maintenance technologies
2. Reliability and maintenance
3. Maintenance logistics
4. Quality and maintenance
5. Supervision and diagnostics
6. Management and maintenance
7. Digitization of maintenance
8. New technologies in maintenance
9. Maintenance education
10. Dual education in the maintenance sector
11. Human resources in maintenance
12. Asset management
13. Facility Management
14. Outsourcing
15. Risk management
16. Ecology and maintenance
17. Inventory Management
18. Maintenance costs
19. Safety at work and fire protection
20. Maintenance performance indicators
21. Trends in maintenance
22. Renewable energy sources and maintenance

CONFERENCE FEE

The conference fee for authors and participants is 150,00 EUR (including members of the Scientific Committee, and session chairmen). For master's and doctoral students the conference fee is 75,00 EUR. The conference fee include: conference proceedings and accompanying materials, admission to all sessions and presentations, refreshments, and welcome drink.

Proceedings are inside EBSCO database



BRIEFLY ABOUT ZENICA

It is not easy to describe Zenica. A city of laboratories in the land of eternal experiments. The overworked beauty of the landscape degraded by industry, which in exchange for beauty and health provided security of work and survival. It will be shown, however, that neither work nor survival is completely dependent on that industry. Because, even when its fires were extinguished, life continued, mercilessly and inexorably like fate. And it was okay to live without her. Just like our ancestors did. A choice had to be made. Without a factory, or with it reduced to a real measure and the inexorable numbers of simple balance sheets that manage the scales of what is spent and what is earned. The factory has marked Zenica too much for them to give it up. But at the same time, we should not have allowed it to obscure our horizon with its size and cloud the colorfulness of still unexplored possibilities. In other words, Zenica woke up from the dream in which she fell in the giant's arms, but also from the dream from which the tight grip of that Goliath did not allow her to explore the big colorful world around her. Zenica is a city of moderate and pleasant proportions, neither too big to stifle closeness between people, nor too small to reduce the possibility of choice. Splashed by the waters of its three rivers, like an ever-washed girl, Zenica offers the pleasure of being, even when the unbearable heat burns elsewhere, the wind blows or the torrents begin to swell and carry everything before them. Zenica is also a city of safety. They took refuge from the wars in the safety of Zenica, here many people in trouble found refuge and started a new life. We are proud of that, because the civility of the community is reflected in the city, and our city has shown both humanity and civility in difficult times.

Before World War II, the city had 15,000 inhabitants, in the 1990s it had 145,000 inhabitants, and today it has about 130,000. In the structure of the population of Zenica, members of different nations, cultures, religions and customs connected by deep traditions of harmonious life are registered. Zenica is a city located in the basin of the Bosna River at an altitude of 316 meters above sea level. It is the economic center of Bosnia and Herzegovina. Zenica is 70 kilometers from Sarajevo, to the north, along the Bosna river valley. The nearest airport is in Sarajevo, which can be reached by road along the Bosna river via Stupska petlje. Area 505.4 km². Latitude and longitude 44° 12' and 17° 56'. Altitude 316 m.



BRIEFLY ABOUT UNIVERSITY OF ZENICA

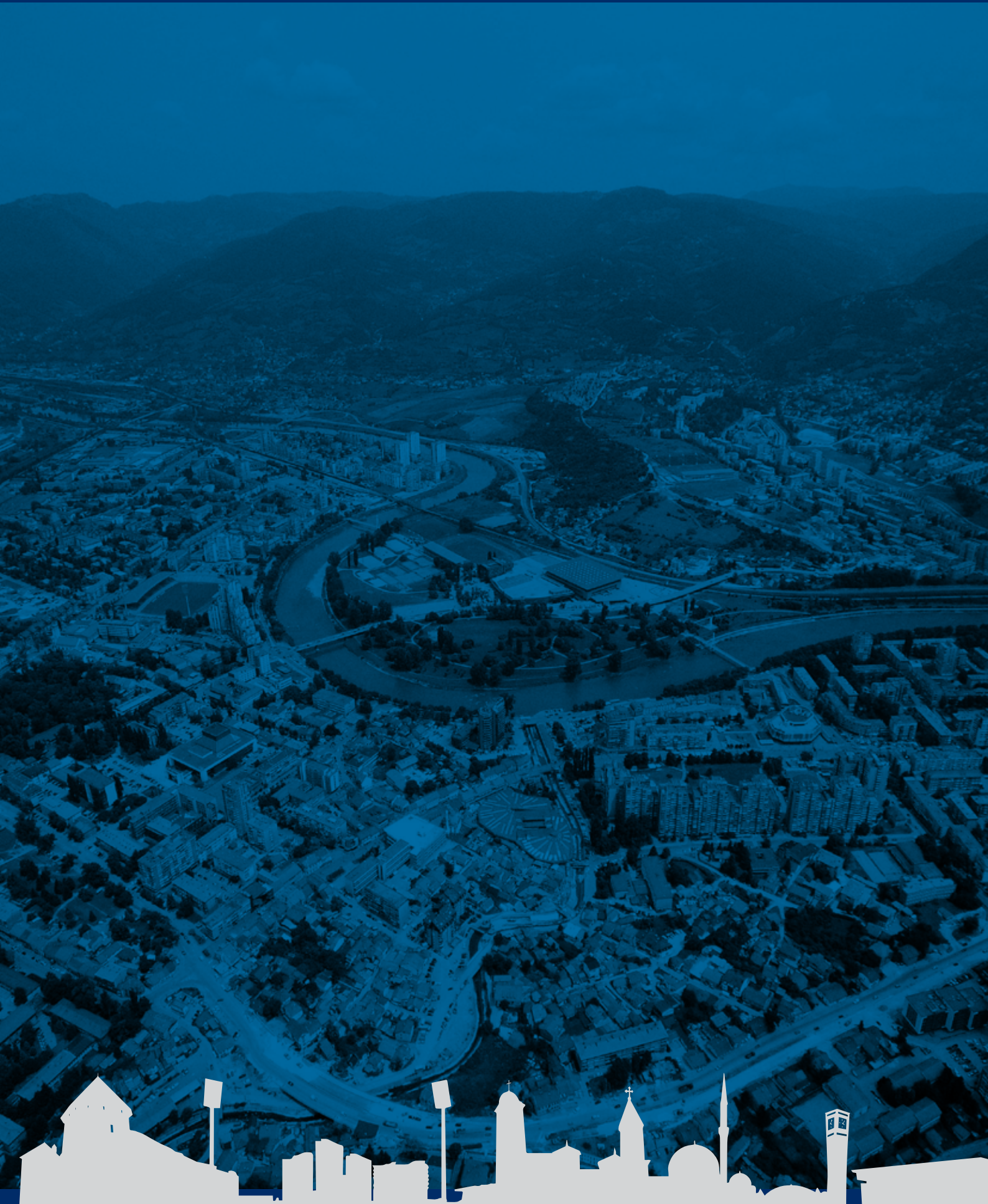
The history of higher education in Zenica begins in 1959, when the Higher Technical School of Metallurgy was founded. During 1959 and 1960, intensive work was done on the establishment of the faculty, and with the decision of the People's Committee of the Zenica County and the confirmation of this decision by the Executive Council of the PRBiH in 1961, the Technical College grew into the Faculty of Metallurgy in Zenica as part of the University of Sarajevo. The next step in the development of scientific thought and the development of higher education in Zenica was the founding of the Metallurgical Institute "Hasan Brkić" (now "Kemal Kapetanović") on October the 1th of 1961. The establishment of the second faculty in Zenica was awaited until 1977. On March 31 of that year, by the decision of the Workers' Council of the Association of Basic Organizations of the Zenica Ironworks and the Zenica Municipality Assembly on the separation of specialist mechanical departments at the Faculty of Metallurgy in Zenica into an independent faculty, the Faculty of Mechanical Engineering in Zenica was established. For a number of years, the two mentioned faculties were the backbone of higher education in Zenica, and they trained a large number of professionals who were the mainstay of industry in the Zenica area and beyond. In accordance with the needs of the development of science and its practical application at the Faculty of Mechanical Engineering, the Department of Mechanical Engineering was established in 1981, which in 1989 grew into the Institute of Mechanical Engineering of the Faculty of Mechanical Engineering in Zenica. In the period of 1992., departments of the faculties of Sarajevo were opened in Zenica (Economy, Law, ...), but these departments did not last, so they were soon closed. At the beginning of 1992. in Bosnia and Herzegovina, a very difficult period began for higher education in Zenica, as well as for society as a whole. Basic existential conditions were threatened, and a large number of students and teaching staff actively joined the defense of the homeland. However, despite all the problems, higher education institutions in Zenica do not stop working. What's more, new departments, faculties and academies are being established. For a time, outpost departments of the Faculty of Electrical Engineering and Medicine from Tuzla, then the department of criminology studies, etc., operated in Zenica. After the end of the war, all the aforementioned departments stopped working. By decision of the Presidency of the Republic of Bosnia and Herzegovina, and in accordance with the very expressed need for classroom teachers, teachers in the widest area of Bosnia and Herzegovina, on March 10, 1994. In Zenica, the Pedagogical Academy was founded within the University of Sarajevo. Parallel to the founding of the Pedagogical Academy, the Islamic Pedagogical Academy was founded in Zenica, and the final decision on its foundation was made by the highest body of the Islamic Community in Bosnia and Herzegovina on September 30, 1993. In addition to the aforementioned departments and academies in Zenica, the departments of the Faculty of Economics and Law from Sarajevo also started working, and as the need for educated professionals in these fields grew, these departments are still operating today. Zenica also includes the Public Library with a reading room and its departments, whose literature from the professional collection is available to all students of Zenica's faculties. The University of Zenica was established on October 18, 2000 by the Decision of the Assembly of the Zenica-Doboj Canton. Today, the University of Zenica has 10 organizational units (8 Faculties + Institute 'Kemal Kapetanović' + Student Center), 50 departments, 35 study programs of the first cycle, 33 study programs of the second cycle and 10 study programs of the third cycle. The number of students is about 4,000. The vision and mission of the University is directed, through the areas of student education in all III study cycles, the scientific research area and connection with public institutions and the economy, to the achievement of an internationally recognizable brand through activities: development, quality promotion, staff development, intensification of international cooperation and mobility. teachers, associates and students, participation in international projects, lifelong learning, strengthening of university infrastructure, etc.

BRIEFLY ABOUT THE TRADITION OF THE 'CONFERENCE'

The conference 'MAINTENANCE' has a tradition of being held since 2010, and up to now, every other year, 7 previous conferences have been held continuously. At the previous 7th conferences, appreciating the contribution of all the deserving ones, more than 400 papers were presented by more than 500 authors. All works, by the way, are subject to an adequate review procedure. Published and presented papers at this conference are printed in the Proceedings, which has its own printed and electronic version (<http://www.odrzavanje.unze.ba/zbornici/index.php>).

Proceedings of the conference 'MAINTENANCE' are included in EBSCO Host Engineering Source. In the organization of the Faculty of Mechanical Engineering of the University of Zenica with partner institutions, the Ministry of Economy of the Zenica-Doboj Canton, partner faculties: the Maritime Faculty of Kotor University of Montenegro (Montenegro), the Faculty of Engineering of the Harran University in Şanlıurfa (Türkiye), the Faculty of Technical Sciences of the University of Novi Sad (Serbia), the Faculty of Mechanical Engineering of the University in Slavonski Brod (Croatia), it is planned to hold the 8th scientific and professional conference with international participation 'MAINTENANCE 2024' this year in Zenica.

THE GOALS OF THE CONFERENCE are: the gathering of experts who deal with the maintenance of work equipment from various aspects and their structural organization, the exchange of research results in the field of maintenance, both theoretical and practical, the exchange of experiences from practical maintenance activities, the transfer of knowledge from the field of maintenance, stronger connecting the academic and business sectors.



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