

Tehnički institut / Technical Institute of Bijeljina

ZBORNİK RADOVA / BULLETIN OF
Godina / Year XIII – No. 25.

UDC: 62

DOI: 10.7251

ISSN 1840-4855
e-ISSN 2233-0046

A R H I V
ZA TEHNIČKE NAUKE
Archives for Technical Sciences



Bijeljina 2021

A R H I V
ZA TEHNIČKE NAUKE
Archives for Technical Sciences

Founder and publisher:
Technical Institute of Bijeljina

Editor in Chief:
Academician prof. Ph.D. Nedo Đurić
Academy of Sciences and Arts of the Republic of Srpska, Bosnia and Herzegovina

Editorial Board

Acad. prof. Ph.D. Aleksandar Grubić
Academy of Sciences and Arts of the Republic of Srpska, Bosnia and Herzegovina, Serbia
Prof. Ph.D. Svetlana Stevović
Innovation Center of the Faculty of Mechanical Engineering, Belgrade, Serbia
Prof. Ph.D. Isik Yilmaz
Faculty of Engineering, Department of Geological Engineering, Sivas, Turkey
Prof. dr Vojislav V. Mitić
Electronic Engineering, University of Nis, Serbia
Prof. Ph.D. Miroslav Bešević
Civil Engineering Subotica, Serbia
Robert Sain Ph.D. Scientific adviser
Geological Survey of Slovenia
Prof. Ph. D. Arash Ranjbaran
Mechanical Engineering, Islamic Azad University–Ilkhchi branch, Iran
Prof. Ph.D. Josip Halamić
Natural Sciences and Mathematics Faculty Zagreb, Croatia
Prof. Ph.D. Milan Kekanović
Civil Engineering Subotica, Serbia
Prof. Ph.D. Aleksandar Prokić
Civil Engineering Subotica, Serbia
Prof. Ph.D. Milovan Pecelj
Geographical Faculty of Belgrade, Serbia
Prof. Ph.D. Jovan Djuković
Technology Faculty Zvornik, Republic of Srpska, Bosnia and Herzegovina
Prof. Ph.D. Dragan Lukić
Civil Engineering Subotica, Serbia

Prof. Ph.D. Svjetlana Radmanović
Faculty of Agriculture Belgrade, Serbia
Prof. Ph.D. Karolj Kasaš
Civil Engineering Subotica, Serbia
Prof. Ph.D. Dragan Marković
Facultu for Applied Ecology, Belgrade Serbia
Prof. Ph.D. Radu Bancila
University Politehnica Timisoara, Romania
Prof. Ph.D. Miloško Lazić
Faculty of Mining and Geology of Belgrade, Serbia
Prof. Ph.D. Hazim Hrvatović
Mining, Geology and Civil Engineering Tuzla, Bosnia and Herzegovina
Prof. Ph.D. Bozo Kolonja
Faculty of Min. and Geol. Belgrade, Serbia
Prof. Ph.D. Wolfgang Francke
Fakulty od Civil Engineering, University of Applied Sciences Konstanz, Germany
Prof. Ph.D. Petar Santrač
Civil Engineering Subotica, Serbia
Prof. Ph.D. Mirko Ivković
Mining Faculty Prijedor, Republic of Srpska, Bosnia and Herzegovina
Prof. Ph.D. Vladimir Malbašić
Mining Faculty Prijedor, Republic of Srpska, Bosnia and Herzegovina
Edita Lazarova Ph.D, Scientific adviser
Instituute of Geotechnics Slovak Academy of Sciences, Slovakia

Technical Editor:
Dr. sci. Dijana Đurić

Lector for English
School of Foreign Languages “Cerovac” Bijeljina

Address:
Tehnički institut Bijeljina, Starine Novaka 25
Tel./fax +387 (55) 203 – 022, 211 – 701
E. mail: tehnicki@tehnicki-institut.com; arhiv@arhivzatehnickenaube.com
www.arhivzatehnickenaube.com

Press:
Mojčić d.o.o. Bijeljina

Circulation:
300 copies

CONTENTS

GEOLOGY

<i>Forčaković Dževad, Dervišević Rejhana</i> Paleozoic quartzite of the Smrčevica in the Central Bosnia	1
---	---

GEOTECHNICS

<i>Čomić Jasenko, Hrustić Aida</i> Engineering geological and geotechnical characteristics of landslide in Gornji Hrgovi, municipality of Srebrenik	9
---	---

MINING

<i>Malbašić Vladimir</i> The strategy of management and utilization of mineral raw materials in the Republic of Srpska through the globalization era	17
<i>Kostić Srđan, Nikolić Nebojša, Malbašić Vladimir</i> Development of a methodology for stability monitoring of a defense embankment loaded with frequent traffic: the example of the Kovin mine	29

CONSTRUCTION

<i>Firouzi Karamjavan Abbas, Hashempour Hojjat</i> The mechanism of the effects of increasing the length of the piles under lateral loads in sand	43
<i>Bašić Zahid, Džananović Amir, Tabaković Elmedin</i> Analysis of the influence of fresh asphalt mixture temperature on asphalt comparison during installation	53
<i>Malešević Zoranka, Đeković-Šević Milica, Jovović Mirjana</i> Recycling of waste sludge from wwtp "Gorić" Valjevo using the process of stabilization and solidification	59

ENVIRONMENT

<i>Đurić Dijana</i> Thermal comfort defined by utci for the month august of 2017 in the City of Bijeljina	65
---	----

<i>Gladkova Olga Victorovna, Gladkov Evgeny Aleksandrovich</i> Deicing reagents in urban ecosystems, using the example of Moscow	71
<i>Gladkov Evgeny Aleksandrovich, Gladkova Olga Victorovna</i> Plants and maximum permissible concentrations of heavy metals in soil	77

SUPPLEMENT

ANALYTICAL PROCESSION OF ARTICLES / published in the National and university library of Republika Srpska / Archives for Technical Sciences, No. 25.