



## **BOOK OF ABSTRACTS**

# INTERNATIONAL CONFERENCE OF APPLIED SCIENCES

KONFERENCË NDËRKOMBËTARE E SHKENCAVE TË ZBATUARA МЕЃУНАРОДНА КОНФЕРЕНЦИЈА НА ПРИМЕНЕТИ НАУКИ

> ARCHITECTURE CIVIL ENGINEERING

8-9 May 2015 Tetova, Macedonia CIP - Каталогизација во публикација Национална и универзитетска библиотека "Св. Климент Охридски", Скопје

6 (062) (048.3)

INTERNATIONAL conference of applied science - ICAS 2015 (2015) (1; Tetovo)

Book of abstracts: ICAS 2015: Architecture, Civil Engineering, Mechatronics / First International Conference of Applied Science - ICAS 2015 = Konferenca e parë ndërkombëtare e shkencave të zbatuara = Прва меѓународна конференција на применети науки, organized by State University of Tetova 8-9 May 2015, Tetova, Macedonia. - Tetovo State University of Tetovo, 2015. - 92 стр.; 21 см

#### ISBN 978-608-217-026-8

I. = Konferenca e parë ndërkombëtare e shkencave të zbatuara 2015, Tetovë види International conference of applied science - ICAS 2015, Tetova II. Меѓународна конференција на применети науки 2015; Тетово види International conference of applied science - ICAS 2015, Tetovo

а) Применети науки - Собири - Апстракти

COBISS.MK-ID 98645002

# FIRST INTERNATIONAL CONFERENCE OF APPLIED SCIENCES - ICAS 2015

# BOOK OF ABSTRACTS ICAS 2015

KONFERENCA E PARË NDËRKOMBËTARE E SHKENCAVE TË ZBATUARA

ПРВА МЕЃУНАРОДНА КОНФЕРЕНЦИЈА НА ПРИМЕНЕТИ НАУКИ

Organized by: State University of Tetova 8-9 May 2015 Tetova, Macedonia

#### HONORARY PRESIDENT / KRYEATAR NDERI / ПОЧЕСЕН ПРЕТСЕДАТЕЛ

#### Prof. Dr. Vullnet AMETI

Rector of State University of Tetova / Rektor i Universitetit Shtetëror të Tetovës Ректор на Државниот Универзитет во Тетово/Македонија

#### KOORDINATOR I KONFERENCËS | CONFERENCE COORDINATOR КООРДИНАТОР НА КОНФЕРЕНЦИЈАТА

#### Doc.Dr. Enis JAKUPI

#### SCIENTIFIC COUNCIL OF THE CONFERENCE / KËSHILLI SHKENCOR I KONFERENCËS / НАУЧЕН COBET НА КОНФЕРЕНЦИЈАТА

- Prof. Dr. Kujtim Elezi, SUT /Tetova/Macedonia
- Doc. Dr. Nderim Zeqiri, SUT / FAS-Tetova/Macedonia
- Prof. Dr.-Ing. Thomas Bier, TU Bergakademie Freiberg/Freiberg/Germany
- Prof. Dr. Vullnet Palloshi, SUT / FAS-Tetova/Macedonia
- Prof. Dr.-Ing. Peter Hubner, Hochschule Mittweida/Mittweida/Germany
- Prof. Dr. Abdul Koleci, SUT / FAS-Tetova/Macedonia
- Prof. Dr. Zeqirja Idrizi, SUT / FAS-Tetova/Macedonia
- Prof. Dr. Rrahim Maksuti, SUT /Tetova/Macedonia
- Doc. Dr. Ferit Idrizi, SUT / Tetova/Macedonia
- Prof. Dr. Elena Dumova-Jovanoska, UKIM /GF-Skopje/Macedonia
- Prof. Dr. Martin Guleski, UKIM /AF-Skopje/Macedonia
- Prof. Dr. Jovan Stefanovski-Zhan, FON/Skopje/Macedonia
- Prof. Dr. Musa Stavileci, UP/FNA-Prishtina/Kosovo
- Prof. Dr. Violeta Nushi, UP/FNA-Prishtina/Kosovo
- Prof. Dr. Andrea Maligari, UT/FAU-Tirana/Albania
- Prof. Dr. Florian Neprevishta, UT/FAU-Tirana/Albania
- Dr. Sc. Binak Beqaj, UBT/ Prishtina/Kosovo
- Prof. Dr. Luljeta Bozo, UPT/Albania
- Prof. Dr. Farruk Kaba, Tirana/Albania
- Prof. Dr. Goran Mijovski, UKIM /GF-Skopje/Macedonia
- Prof. Dr. Fejzulla Krasnigi, akademik UP/FIM-Prishtina/Kosovo
- Prof. Dr. Hamit Mehmeti, UP/FM-Mitrovica/Kosovo
- Prof. Dr. Hysni Osmani, UP/FIM-Prishtina/Kosovo
- Prof. Dr. Ahmet Shala, UP/FIM-Prishtina/Kosovo
- Prof. Dr. Jorgaq Kacani akademik, FIM/UP-Tirana/Albania
- Prof. Dr. Petrika Maraga, FIE/UP-Tirana/Albania
- Prof. Dr. Angjelin Shtjefni UP-Tirana/Albania
- Prof. Dr. Mark Palnikaj UP-Tirana/Albania
- Prof. Dr. Sazan Guri UP-Tirana/Albania
- Dr.sc. Mirjana Miletic, Belgrade/ Serbia

### ORGANIZING COMMITTEE / KËSHILLI ORGANIZUES / ОРГАНИЗАЦИСКИ ОДБОР

Doc. Dr. Enis JAKUPI Ma. Merita Maksuti Prof. Dr. Kujtim Elezi Mugni Arifi Sabedin Emini Dr. Shazim Memeti Dr. Ragip Hadri Besian Memeti Mr. Shinazi Zejneli Ma. Egzona Zendeli Mr. Idaver Useini Ma. Kaltrina Elezi Dr. Asan Idrizi Ma. Gremina Elmazi Mr. Semijal Hasani-Ziberi Ma. Ajla Limani Mr. Armir Ferati Ma. Aurora Saidi Mr.art. Burim Ukuçi Nexhibe Musa

Ma. Lindihana Goxha

#### CONFERENCE SECRETARIES / SEKRETARET E KONFERENCËS / СЕКРЕТАРИ НА КОНФЕРЕНЦИЈАТА

Mr. Nuran Saliu Ulvie Memeti

### TABLE OF CONTENTS

#### **ARCHITECTURE**

THE CONTRIBUTION OF ARCHITECT BASHKIM FEHMIU IN ARCHITECTURE OF PRISHTINA
AFTER THE SECOND WORLD WAR
ARBER SADIKI15
[RE] CONSTRUCTING IDENTITY THROUGH CONTEMPORARY CITY
ADELINA TAHIRI 16
DETERMINING THE SOCIOLOGICAL FACTOR AS A QUALITY THAT SHOULD BE
IMPLEMENTED IN A CONTEMPORARY SPACE FOR EDUCATION THROUGH THE EXAMPLE OF
ELEMENTARY SCHOOL JOHAN HAJNRIH PESTALOCI
ANASTASIJA NIKOLOVSKA, VANGJEL DUNOVSKI17
REGENERATION OF PUBLIC URBAN SPACES VS. PUBLIC POLICIES
BINAK BEQAJ19
MASSIVE CONSTRUCTION SYSTEM OF UPPER REKA HOUSES
ENIS JAKUPI, ULVIE MEMEDI, VIOLETA NUSHI 20
Prishtina E scape
ELIZA HOXHA21
THE IMPACT OF SOCIAL AND DEMOGRAPHIC CHANGES IN ARCHITECTURE AND URBAN
DEVELOPMENT OF CITIES IN KOSOVO - PRISTINA CASE
FERHAT BEJTULLAHU, VIOLETA NUSHI, ENIS JAKUPI 22
THE EFFECT OF EARTHQUAKE IN IDENTITY OF THE ARCHITECTURE OF SKOPJE
GRANIT HAXHIMUSTAFA, ENIS JAKUPI, NATALIJA PULEJKOVA 23
ARCHITECTURAL RESEARCH IN THE FIELD OF TRANSFORMATIVE TYPOLOGY AND
DEFINING NEW PROGRAM-SPATIAL SOLUTIONS OF INTEGRATED ARCHITECTURAL
CONCEPTS ON THE EXAMPLE OF CITY OF GOSTIVAR
IVONA KRSTESKA
SHOPPING CENTER: CONCEPT, DEVELOPMENT AND SOCIAL ROLE
VANGEL DUNOVSKI, JASEMIN HODJA 26
Modern trends of the 21st country way of looking at the
DESIGN DURING ADOLESCENCE
KATERINA DESPOT, VASKA SANDEVA 27
MACEDONIA AND ITS TWO ARCHITECTURAL MYTHS, THE DIFFERENCE AND THE
ANALOGY BETWEEN
KUJTIM ELEZI, NURAN SALIU, SABEDIN EMINI, ULVIJE MEMEDI-USEJNI 28
URBAN SPACE FROM THE PERSPECTIVE OF PEOPLE WITH DISABILITIES
MIRJANA MILETIC
A REVIEW ON FLOOR LAYOUT PLANNING — AUTOMATED DESIGN METHODS IN INITIAL
STAGES OF DESIGN
NURAN SALIU <sup>1</sup> , ANDREA MALIQARI <sup>2</sup> , ULVIE MEMEDI-USEJNI <sup>1</sup> 30

ENVIRONMENTAL AESTHETICS OF THE BALKAN VERNACULAR
ARCHITECTURE
RADMILA TOMOVSKA, VESNA LOVEC, NATALIJA PULEJKOVA RADESKA 31
LANDSCAPE STRATEGIES FOR A SUSTAINABLE DEVELOPMENT-
THE CASE OF KASHAR, TIRANE
SOKOL DERVISHI, INA DERVISHI
SUSTAINABILITY CRITERIA FOR BUILDING DESIGN DOUBLE SKIN FAÇADE
PERFORMANCE IN OFFICE BUILDING IN TIRANA
SOKOL DERVISHI, BRIXHIDA DEDA
READAPTION OF ACOUSTICAL SYSTEMS OF "EBU-BEKER" MOSQUE, SHKODER
SOKOL DERVISHI AND IMIR BORICI
COMPOSITION OF FUTURISM IN LANDSCAPE ARCHITECTURE
VASKA SANDEVA, KATERINA DESPOT
BIM FOR THE PERFORMANCE OF PUBLIC BUILDINGS
VIOLETA NUSHI, ENIS JAKUPI, FERHAT BEJTULLAHU36
CIVIL ENGINEERING
THE USE OF SMART COMPONENTS AND SYSTEMS IN BUILDING CONSTRUCTIONS AND
ARCHITECTURAL APPLICATIONS
ADHURIM HOXHA, ALTIN GJEVORI, BASHKIM ZIBERI39
MODERN METHODS OF OPTIMIZATION OF THE STREAMLINING AREAS OF EXPLOITATION
SURFACE MINING
AHMET BYTYÇI, NEXHMI KRASNIQI, IDAVER HUSEINI 40
AN ANALYSIS OF INTERNAL FACTORS WHICH AFFECT BUILDERS WORK
BASHKIM ALILI41
PROPERTIES OF SELF-COMPACTING CONCRETE CONTAINING DIFFERENT MINERAL
ADMIXTURES
DENIS ASKUSHAJ, ADHURIM HOXHA, TATJANA MULAJ42
TYPES OF STEEL BRACED SYSTEMS AND DIFFERENCES AMONG THEM RESEARCH ABOUT
THE EFFECTIVENESS OF THESE SYSTEMS IN A 12 AND 7 STORY BUILDING
EGLA LUCA43
NEW CONCEPTS IN THE FIELD OF SEISMIC ENGINEERING - PUSHOVER ANALYSIS
FESTIM ADEMI, ENIS JAKUPI44
PRINCIPLES OF ROAD SAFETY AUDIT, AS A TECHNICAL CONTENT OF THE ROAD
DESIGNING AND AUDIT PROCESS
FETA SINANI, PERO STEFANOVSKI, ZLATKO V. SOVRESKI, SEDAT
ARUCI45
CONSIDERATIONS ON ANALYSIS AND DESIGN PRINCIPLES FOR CONNECTIONS OF STEEL
STRUCTURAL MEMBERS
ISAK IDRIZI 46
MULTI PROPOSAL WATERS USAGE OF THE SHARRI MOUNTAINS
KUJTIM ZENA47

INVESTIGATION OF MECHANICAL PROPERTIES OF THE ZINC LAYER COATING OF
STAINLESS STEEL
LUAN KOLA, NESET IZAIRI, BASHKIM ZIBERI, ALTIN GJEVORI 48
CONSTRUCTION AND ENVIRONMENT
LULJETA BOZO49
CRITERIA FOR ENVIRONMENTAL NOISE ASSESSMENT
MARIJA HADJI-NIKOLOVA, DEJAN MIRAKOVSKI, NIKOLINKA
DONEVA50
CONTROL AND MANAGEMENT OF ENVIRONMENTAL NOISE
MARIJA HAJI-NIKOLOVA, DEJAN MIRAKOVSKI, NIKOLINKA
DONEVA 51
STUDY ON THE QUARTER SAWN COEFFICIENT OF UTILIZATION OF SESSILE OAK LUMBER
(QUERCUS PETRAEA L) WITH THICKNESS 33MM
MUHARREM SEJDIU, ARBEN BEJTJA, ALIEVSAT HASKU 52
PROPER PLACEMENT AND MAINTANENCE OF TRAFFIC AS A FACTOR IN ENHANCING ROAD
SAFETY
PERO STEFANOVSKI, FETA SINANI, ZLATKO SOVRESKI, SEDAT
ARUCI, ZORAN JOSEVSKI53
RESEARCE WORKS AND BEARING CAPACITY OF THE SOIL ACORDING EUROCODE (EC7)
ALEKSANDRA ANGELOVA, RADMILA KARANAKOVA
STEFANOVSKA, RISTO POPOVSKI,54
RESEARCE WORKS AND BEARING CAPACITY OF THE SOIL ACORDING EUROCODE (EC7)
ALEKSANDRA ANGELOVA, RISTO POPOVSKI, ZORAN PANOV,
RADMILA KARANAKOVA STEFANOVSKA, MARIJAN DELIPETREV . 55
A SURVEY OF VOLUME, SPECIES AND ORIGIN OF DRY TIMBER CONSUMED BY THE WOOD
PROCESSING INDUSTRY IN FERIZAJ REGION
RRAHIM SEJDIU, ARBEN BEJTJA, LULZIM IDRIZI, AGRON
BAJRAKTARI56
NEEDS FOR WOOD PROCESSING ENGINEERS IN MANUFACTURING ENTITIES IN THE CITY OF
TIRANA
RAMADAN TOPUZI, ARBEN BEJTJA57
CALCULATION OF DRILING AND BLASTING PARAMETERS IN BLASTING PERFORMANCE
RISTO DAMBOV, RADMILA KARANAKOVA STEFANOVSKA, ILIJA
DAMBOV
DISTANCE SAFETY IN BLASTING
RISTO DAMBOV, RADMILA KARANAKOVA STEFANOVSKA, ILIJA
DAMBOV 59 V
THE ASSESSMENT OF NOISE AND VIBRATION IMPACT IN THUMANA-RROGOZHINA
HIGHWAY AND THEIR MINIMISATION
SAZAN GURI
ALBANIA, NATURAL CORRIDOR OF WEST TOWARDS EAST OR VICE-VERSA
SAZAN GURI 61

¢

THE IMPORTANCE OF ROAD INFRASTRUCTURE FOR THE ECONOMIC DEVELOPMENT - THE
CASE OF THE REPUBLIC OF MACEDONIA
SEDAT ARUCI, PECE NEDANOVSKI, FETA SINANI
TARGET DISPLACEMENTS ANALYSIS OF REINFORCED CONCRETE FRAME STRUCTURES
SHPRESIM IBRAIMI 63
URBAN PLANNING AND ITS IMPACT IN CITY TRAFFIC - PLANNING AND REGULATION OF
SPACES, CITY TRAFFIC AND SAFETY
VISAR PALLOSHI, ENIS JAKUPI, VULLNET PALLOSHI, SHINASI
ZEJNELI
THE IMPACT OF COMBINED TRANSPORT ON THE ENVIRONMENT IN THE REPUBLIC OF
MACEDONIA
ZLATKO SOVRESKI, FETA SINANI, SEDAT ARUCI, PERO
STEFANOVSKI
MEGNATION
MECHATRONICS
MODERN TRENDS OF THE DEVELOPMENT OF BATTERIES FOR APPLICATION IN
AUTOMOTIVE INDUSTRY
ALI SADIKU, MURSEL RAMA, MILAJETE SHALA-MEHMETI, MALSORE
PLLANA 69
INFLUENCE OF AUXILIARY PLASMA SOURCE ON THIN FILMS GROWTH BY MEPIIID
ALTIN GJEVORI, ADHURIM HOXHA, NESET IZAIRI, BASHKIM ZIBERI 70
METHODS AND CONTROL OF MATERIALS WITH NON-DESTRUCTIVE TESTING (NDT)
ARBEN ISUFI, HAMIT MEHMETI, MILAJETE MEHMETI, RRAHIM MAKSUTI.71
INTEGRATED MANAGEMENT OF SOLID WASTE
ASAN IDRIZI, BLERTA IDRIZI, IDAVER HUSEINI, IBRAIM JONUZI, RRAHIM
MAKSUTI
THE FUZZY CONCLUSION SYSTEM BASED ON THE POSITION DEVIATION OF THE SYSTEM.
FERIT IDRIZI, JORGAQ KACANI73
ANALYSIS OF INPUT AND OUTPUT PARAMETERS IN TWO THERMAL STATIONS OF
COGENERATION SYSTEM
FISNIK OSMANI
ATTEMPTS FOR THE APPLICATION OF TERMS IN THE FIELD OF MATERIALS ENGINEERING
IN THE ALBANIAN LANGUAGE
HAMIT MEHMETI, MILAJETE SHALA-MEHMETI, RRAHIM MAKSUTI, IRFAN
QAMILI, ZEQIR ISMAILI, YLLZA SHABANI, ARBËR SPAHIU75
HIGH TEMPERATURE CORROSION
MILAJETE SHALA-MEHMETI, HAMIT MEHMETI, VEDAT PECI,
LAZIME ALIMI, ARA KËRLIU 76
MICROSTRUCTURE, PROPERTIES AND MAGNESIUM BASE MATERIALS APPLICTION
HILMI LOSHI, HAMIT MEHMETI, MILAJETE SHALA-MEHMETI, MURSEL
RAMA77

Managing the challenges of TPP "Oslomej" for protection and preservation
OF THE ENVIRONMENT
IMER ZENKU78
ANALYSIS OF RELIABILITY OF COMPLEX TECHNICAL SYSTEMS IN FUNCTION TO
MAINTENANCE THE EQUIPMENT
ISEIN AJDARI, FERIT IDRIZI79
PERSPECTIVE AND ADVANTAGES OF RECYCLING OF ALUMINIUM WASTE
LAZIME ALIMI, HAMIT MEHMETI, MILAJETE SHALA-MEHMETI, ASAN
IDRIZI 80
THE CONFORMITY OF PROPERTIES OF FLY ASH OF KOSOVO B TPP WITH EUROPEAN
Standard EN 450-1 and EN 450-2
MEVLAN QAFLESHI, DRITON R. KRYEZIU, LULEZIME ALIKO 81
CHANGES IN MICROSTRUCTURE AND MECHANICAL PROPERTIES DURING
RECRYSTALLIZATION ANNEALING OF COLD DEFORMED STEEL
MIMOZAKOVAÇI, HAMIT MEHMETI, MURSEL RAMA, MILAJETE
MEHMETI, ISA KOVAÇI, HABIBE MISIMI 82
COMMUNICATIONS SYSTEM, THE DEFINITION OF THE MODEL AND PROBABILITY OF
ERROR IN DATA TRANSMISSION
NDERIM ZEQIRI 83
DEVELOPMENT OF MECHANICAL PROPERTIES IN NANOSTRUCTURED MATERIALS BY
SEVERE PLASTIC DEFORMATION
NESET IZAIRI, FADIL AJREDINI, ALTIN GJEVORI, LUAN KOLA,
AFËRDITA VEVECKA – PRIFTAJ, MIMOZA RISTOVA 84
RECYCLING OF CONSTRUCTION MATERIALS
NEXHMI KRASNIQI , AHMET BYTYÇI .IDAVER HUSEINI 85
TRENDS IN DEVELOPMENT OF WELDING TECHNOLOGY
RRAHIM MAKSUTI, HAMIT MEHMETI, HYSNI OSMANI, MURSEL
RAMA, ASAN IDRIZI 86
INCREASING ENERGY EFFICIENCY ON CASCADE "BLACK DRIN"
URAN TUDA 87
SUITABILITY FOR USE IN MEDICINE OF TITANIUM BASE BIOMATERIALS
VEDAT PECI, FATMIR KELMENDI, HAMIT MEHMETI, MILAJETE
SHALA-MEHMETI, MURSEL RAMA 88







Name and Surname: Prof. d-r Risto Dambov,

m-r ass. Radmila Karanakova Stefanovska, m-r Ilija Dambov

University "Goce Delcev,,- Stip, Faculty of natural and technical science

Institutionand address: Bul. Goce Delcev, 89, Stip

E-mail address: ristodam@gmail.com, risto.dambov@ugd.edu.mk,

radmila.karanakova@ugd.edu.mk,

Telephone number: 075 499 923, 032 550 563

Title of the paper: CALCULATION OF DRILING AND BLASTING PARAMETERS IN BLASTING PERFORMANCE

#### **Abstract:**

In all mining technology drilling and blasting parameters and works are one of the main production processes at each mine. The parameters of drilling and blasting and explosives consumption per ton of blasting mass are define economic indicators of any blasting no matter for what purpose and where mining is performed.

The calculation of rock blasting should always have in mind that the methodology of calculation of all drilling and blasting parameters in blasting performance are performed for certain average conditions.

For a particular locality (mine, block or bench) the calculation of the parameters is the initial value that practically have to be verified, monitored, checked and corrected to achieve better results. The positive effects of any blasting are assessed through: getting blasting mass with a granulation suitable for transport and processing then stable bench slopes, not deformed working areas around blast series, minimum seismic effects etc.

**Keywords:** blasting, parameters, mine, effects, rocks