



# Proceedings of the 1<sup>st</sup> Doctoral Colloquium on Sustainable Development”, DOC-ME’2022

[web version]

22<sup>nd</sup> and 23<sup>rd</sup> September 2022, Kotor, Montenegro

**Editor**

Prof. dr Radovan Stojanović

**Organized by**

University of Montenegro and MARDS Consortium

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**Symposium web page**

[www.doc-me.com](http://www.doc-me.com)

Proceedings web page

<https://www.mards.ucg.ac.me/PhD/Proceedings2022>

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## Chairman's message

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*On the 22<sup>nd</sup> and 23<sup>rd</sup> September 2022 "The 1st Doctoral Colloquium on Sustainable Development", DOC-ME'2022, has been organised in Montenegro, in Kotor, Maritime Faculty. The main organised was ERASMUS+ MARDS project, 598465-EPP-1-2018-1-ME-EPPKA2-CBHE-SP, funded by EU, more precisely, its EACEA department.*

*Doctoral Colloquium or Doctoral Symposium is an event aimed in developing and mentoring PhD students. It provides a unique opportunity for Montenegrin, Albanian, Western Balkan and International PhD students to receive in-depth feedback on their (ongoing) research from fellow PhD students, leading academicians and researchers as well as from non-academic sector representatives. Additionally, the Colloquium provides students with a unique opportunity to master the methodology of presenting scientific paper or research proposal toward target groups and stakeholders.*

*All contributions were prepared according to strong publication standards and template instructions. They are revised by competent reviewers, corrected, defended and finally published in Colloquium Proceedings.*

*It is the first time that such a Symposium is organized, not only in Montenegro, but also in the Western Balkans Region. We are honored to have been pioneers in such initiative and idea and we hope that it will become a tradition and it will continuously grow both in quality and quantity.*

*This year we accepted 25 papers, out of 30, whose authors come from different universities and other scientific institutions from more than 5 countries. The Organizing and Editorial Committee are satisfied with the quality of the works and the presentation skills of the PhD students.*

*I would like to thank everyone who contributed to the organization and success of this Symposium, and I am convinced that it will be even better next year.*

Yours,



*Prof. dr Radovan Stojanović, Chairman and Coordinator of MARDS Project*

## Regular contributions

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### **Synthesis, physicochemical characterisation, and bio-activity of new pyrazole with transitional metals**

Ana Radović<sup>1</sup> Željko Jaćimović<sup>2</sup>

<sup>1</sup>Accreditation Body of Montenegro, Department of Accreditation, Džordža Vasiingtona 79. Podgorica, Montenegro

<sup>2</sup>Faculty of Metallurgy and Technology, University of Montenegro, Cetinjski put b.b. Podgorica, Montenegro



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### **Fungicide resistance in phytopathogenic fungi: A critical point of successful and sustainable viticulture (case of *Botrytis cinerea* Pers.)**

Anita Martić<sup>1</sup>, Nedeljko Latinović<sup>2</sup>

<sup>1</sup>University of Montenegro, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro

<sup>2</sup>Biotechnical faculty, University of Montenegro, Mihaila Lalića 15, Podgorica, Montenegro



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### **Towards a reliable memristor for advancing biologically-inspired computing**

Arso Ivanović<sup>1</sup>

<sup>1</sup>University of Montenegro, Department of Physics, Cetinjski put b.b. , Podgorica, Montenegro



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### **Cyber Security standards for the Industrial Internet of Things (IIoT)**

Atdhe Buja<sup>1</sup>, Marika Apostolova<sup>1</sup>, Artan Luma<sup>1</sup>, and Ylber Januzaj<sup>2</sup>

<sup>1</sup>University of South East European, Faculty of Contemporary Sciences and Technologies, Tetovo, N. Macedonia

<sup>2</sup>University "Haxhi Zeka", Faculty of Business, Peja, Kosova



### **Green Infrastructure as a Means of Combating Climate Change in the City of Podgorica**

Branka Knežević

University of Montenegro, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro



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### **Synthesis, physicochemical characterisation and bio-activity of new amoxicillin and pyrazole-based complex compounds**

David Kočović<sup>1</sup> Željko Jaćimović<sup>2</sup>

<sup>1</sup>Institute for Medicines and Medical Devices of Montenegro, Laboratory, Bulevar Ivana Crnojevića 64A. Podgorica, Montenegro

<sup>2</sup>University of Montenegro, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro



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### **Analysing the quality and measurement accuracy of 3D reconstruction for small object generated from Meshroom using different software, a case study.**

Anduel Kuqi and Indrit Enesi

Electronic and Telecommunication Department, Polytechnic University of Tirana, Tirana, Albania



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### **Marine litter categorization on two Montenegro beaches**

Ivana Bulatović<sup>1</sup> Milica Mandić<sup>2</sup>, and Slađana Gvozdenović<sup>2</sup>

<sup>1</sup>University of Montenegro, MARDS Department, Cetinjski put bb, Podgorica, Montenegro

<sup>2</sup>University of Montenegro, Institute for Marine Biology, Dobrota bb, Kotor, Montenegro



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### **Transition of tourism in Montenegro – from sustainable development to sustainable tourism**

Marica Melović<sup>1</sup>

<sup>1</sup>University of Montenegro, Faculty of Tourism and Hospitality, Stari Grad br. 320, Kotor, Montenegro



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### **Emergence of LSD in Montenegro in 2016 – an example of strengths and weaknesses of Veterinary Sector and potential for sustainable public health in the country**

Maša Jovanović<sup>1</sup> Marko Nikolić<sup>2</sup>

<sup>1</sup>University of Montenegro, MARDS Department, Bulevar Džordža Vašingtona b.b. Podgorica, Montenegro

<sup>2</sup>Department for Microbiology and Parasitology, Diagnostic Veterinary Laboratory, Bulevar Džordža Vašingtona b.b. Podgorica, Montenegro



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### **Green insurance as a determinant of sustainable development**

Milan Raičević<sup>1</sup>

<sup>1</sup>University of Montenegro, Faculty of Economics, Podgorica, PhD studies



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**Microplastics presence in aquatic environments in Montenegro: A review on methods, occurrence and sources**

Neda Bošković

University of Montenegro, PhD studies in Sustainable Development, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro



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**THE SIGNIFICANCE OF MACROINVERTEBRATES FOR BIOMONITORING OF THE BOJANA RIVER**

Osman Šurla<sup>1</sup>,

<sup>1</sup>University of Montenegro, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro



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**Physical potential of the photovoltaic system**

Sanja Pavičević<sup>1</sup>, Klemen Sredenšek<sup>2</sup>, Sebastijan Seme<sup>2,3</sup>

<sup>1</sup>University of Montenegro, PhD studies in Sustainable Development, Cetinjski put 2, 81000 Podgorica, Montenegro

<sup>2</sup>University of Maribor, Faculty of Energy Technology, Hočevarjev trg 1, 8270 Krško, Slovenia

<sup>3</sup>University of Maribor, Faculty of Electrical Engineering and Computer Science, Koroška cesta 46, 2000 Maribor, Slovenia



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**Implementation of the curriculum of Education for sustainable development in elementary and high schools teachers' work in Montenegro**

Snežana Lješnjak<sup>1</sup>, Andrej Šorgo<sup>2</sup>, Vida Lang<sup>2</sup> and Danka Caković<sup>3</sup>

<sup>1</sup>University of Montenegro, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro

<sup>2</sup>University of Maribor, Faculty of Natural Sciences and Mathematics, Koroška cesta 160, Maribor, Slovenia

<sup>3</sup>University of Montenegro, Faculty of Natural Sciences and Mathematics, Cetinjski put b.b. Podgorica, Montenegro



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**Energy efficient construction**

Stefanela Žarković<sup>1</sup>, Zdravko Praunseis<sup>2</sup>

<sup>1</sup>University of Montenegro, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro

<sup>2</sup>University of Maribor, Faculty of Energy Technology, Hočevarjev trg 1, 8270 Krško, Slovenia



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**Emotional Design in Digital User Experience**

Tanja Radovanović<sup>1</sup>, and Dijana Kovačević<sup>2</sup>

<sup>1</sup> University of Montenegro, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro

<sup>2</sup> University of Donja Gorica, Faculty of International Economics, Finance and Business, Donja Gorica b.b. , Podgorica, Montenegro



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#### **EXTENDED PRODUCER RESPONSIBILITY - GOOD PRACTICE AND NEW PARADIGM**

Vesna Pavlović

University of Montenegro, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro



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#### **Towards Open Government Data Quality Improvements through an Assessment Framework**

Vigan Raca<sup>1</sup>, Betim Cico<sup>2</sup>, Goran Velinov<sup>1</sup> and Margita Kon-Popovska<sup>1</sup>

<sup>1</sup>Ss Cyril and Methodius University, Faculty of CSE, Skopje, North Macedonia

<sup>2</sup>Epoka University, Department of Computer Engineering, Tirana, Albania



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### **Other contributions**

**These contributions have not been presented or have not passed proofreading**

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#### **Land management in Montenegro – new sustainable approach**

Mladen Femic<sup>1</sup>.

<sup>1</sup>University of Montenegro, MARDS Department, Cetinjski put b.b. Podgorica, Montenegro



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#### **Biopomological and biochemical characteristics of autochthonous olive varieties and olive processing waste**

Marija Markoč<sup>1</sup>

<sup>1</sup>University of Montenegro, Biotechnical Faculty, Bulevar Mihaila Lalića 1, Podgorica, Montenegro



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#### **Growing OF PLUMS (Pruns domestica L.) IN BIJELO POLJE, MONTENEGRO (2000 – 2020)**

Dejan Zejak<sup>1</sup>

<sup>1</sup> Faculty of Agriculture, University of Belgrade, Nemanjina 6, 11000 Belgrade, Serbia



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#### **Biological potential and phytochemical characterization of extracts of the species genus Pinus L. (Pinaceae) from Montenegro**

Alma Kurtiš<sup>1</sup>

<sup>1</sup>University of Montenegro, Biology Department, Bulevar Džordža Vašingtona, Podgorica, Montenegro



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**The impact on entropy of improving the learning  
management systems Fisher information approach**

Virtyt Leshia

v

Faculty of Organization and Informatics

University of Zagreb, Varaždin, Croatia



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**Privacy Protection techniques for PII protection according to The GDPR**

Ndricim Topalli

Metropolitan University of Tirana, Business Informatics Department, Tirana, Albania

