

ICSD 2020

6TH INTERNATIONAL CONFERENCE ON
SUSTAINABLE DEVELOPMENT

Book of Abstracts

November 06, 2020 Online

**EUROPE
CONGRESS**
www.europecongress.org

W
WESTERN MICHIGAN



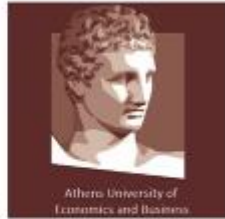
**TURKISH
AIRLINES**

CNRGROUP

www.icsd.eu



WESTERN MICHIGAN
UNIVERSITY



Research Team on
Socio-Economic
and Environmental
Sustainability
(ReSEES)



Bosna
Bank
International

EUROPE
CONGRESS
www.europecongress.org

CNRGROUP

6th INTERNATIONAL CONFERENCE ON SUSTAINABLE DEVELOPMENT (ICSD)

ISBN 978-605-81426-3-3

BOOK OF ABSTRACTS OF THE
6th INTERNATIONAL CONFERENCE ON SUSTAINABLE DEVELOPMENT (ICSD)
NOVEMBER 04,–08 2020, NORTH MACEDONIA

Edited by

Prof. Dr. Özer Çınar

Published, 2020

info@icsd.eu
www.icsd.eu

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned. Nothing from this publication may be translated, reproduced, stored in a computerized system or published in any form or in any manner, including, but not limited to electronic, mechanical, reprographic or photographic, without prior written permission from the publisher.

info@icsd.org

The individual contributions in this publication and any liabilities arising from them remain the responsibility of the authors.

The publisher is not responsible for possible damages, which could be a result of content derived from this publication.

SCIENTIFIC COMMITTEE

1. Prof.Dr. Adisa Parić – University of Sarajevo - Bosnia & Herzegovina
2. Prof.Dr. Adnan Çelik - Selçuk University - Turkey
3. Prof.Dr. Alfonso Vargas-Sanchez - University of Huelva - Spain
4. Prof.Dr. Ana Vovk-Korže - University of Maribor - Slovenia
5. Prof.Dr. Archie Carroll - University of Georgia - USA
6. Prof.Dr. Birol Kovancilar - Celal Bayar University - Turkey
7. Prof.Dr. Blerim Reka - South-East European University - Macedonia
8. Prof.Dr. Dragan Vinterhalter - University of Belgrade - Serbia
9. Prof.Dr. Dragutin T. Mihailović - University of Novi Sad - Serbia
10. Prof.Dr. Edina Muratović – University of Sarajevo - Bosnia & Herzegovina
11. Prof.Dr. Esad Prohic - University of Zagreb - Croatia
12. Prof.Dr. Flutura Kalemi - Agricultural University of Tirana - Albania
13. Prof.Dr. Ilia Ninka - Tetova State University - Macedonia
14. Prof.Dr. Ismail Bakan - Kahramanmaras Sutcu Imam University - Turkey
15. Prof.Dr. Janusz Slodczyk - Opole University - Poland
16. Prof.Dr. Lindita Milo (Lati) - University of Tirana - Albania
17. Prof.Dr. Lukman Thalib - Qatar University - Qatar
18. Prof.Dr. M. Asghar Fazel - University of Environment - Iran
19. Prof.Dr. M. M. Sulphy - University of Kerala - India
20. Prof.Dr. Muammer Koç - Hamad bin Khalifa University - Qatar
21. Prof.Dr. Mustafa Erdoğan - Marmara University - Turkey
22. Prof.Dr. Mustafa Özbilgin - Brunel University - UK
23. Prof.Dr. Phoebe Koundouri - Athens University of Economics and Business - Greece
24. Prof.Dr. Refika Bakoğlu - Marmara University - Turkey
25. Prof.Dr. Rifat Skrijelj - University of Sarajevo - Bosnia & Herzegovina
26. Prof.Dr. Seniye Umit Firat - Marmara University - Turkey
27. Prof.Dr. Seval Kardeş Selimoğlu - Anadolu University - Turkey
28. Prof.Dr. Suzana Guxholli, University of New York in Tirana - Albania
29. Prof.Dr. Tanay Sıtkı Uyar - Marmara University - Turkey
30. Prof.Dr. Thankom Arun - Lancashire Business School - UK
31. Prof.Dr. Wiboon Kittilaksanawong - Saitama University - Japan
32. Prof.Dr. Yahia Zoubir - KEDGE Business School - France
33. Prof.Dr. Yousef Haik - Hamad bin Khalifa University - Qatar
34. Prof.Dr. Zehra Semra Can - Marmara University - Turkey
35. Assoc. Prof.Dr. Agim Mamuti - Mother Teresa University - North Macedonia
36. Assoc. Prof.Dr. Alaa Al Hawari - Qatar University - Qatar
37. Assoc. Prof.Dr. Asma Salman - The American University in the Emirates - UAE
38. Assoc. Prof.Dr. Christina Anne Stringer - The University of Auckland - New Zealand
39. Assoc. Prof.Dr. Mirko Perano - University of Salerno - Italy
40. Assoc. Prof.Dr. Mostafa Jafari - Research Institute of Forests and Rangelands - Iran
41. Assoc. Prof.Dr. Nusret Drešković - University of Sarajevo - Bosnia & Herzegovina
42. Assoc. Prof.Dr. Raman Ismaili - Tetova State University - Macedonia
43. Assist. Prof.Dr. Ahmad Talebi - University of Environment - Iran
44. Assist. Prof.Dr. Fouzi Tabet - German Biomass Research Center - Germany
45. Assist. Prof.Dr. Konstantinos Chalvatzis - University of Anglia - UK
46. Assist. Prof.Dr. Mark R. Murphy - The University of Scranton - USA
47. Assist. Prof.Dr. Mehmet Ganić - International University of Sarajevo - Bosnia & Herzegovina
48. Assoc. Prof.Dr. Minura Lucia Nachescu - West University of Timiosara - Romania
49. Assist. Prof.Dr. Mostafa Panahi - Islamic Azad University - Iran
50. Assist. Prof.Dr. Sasan Rabieh - Shahid Beheshti University - Iran
51. Assist. Prof.Dr. Ševkija Okerić - University of Sarajevo - Bosnia & Herzegovina
52. Assist. Prof.Dr. Ivana Plazonić - University of Zagreb - Croatia
53. Assist. Prof.Dr. J. Amudhavel - VIT Bhopal University - India
54. Dr. Leszek Cichobłaziński - Częstochowa University of Technology - Poland

ORGANIZATION COMMITTEE

Chairman of the Conference

Prof. Dr. Özer Çınar – Yıldız Technical University - Turkey

Members of the Committee

Assoc.Prof.Dr. Agim Mamuti (Co-Chairman) - Mother Teresa University - North Macedonia

Assoc.Prof.Dr. Mirko Perano - University of Salerno - Italy

Alma Ligata - Zenith Group - Bosnia and Herzegovina

Ismet Uzun - Zenith Group - Bosnia and Herzegovina

Mahira Causevic - Bosnia and Herzegovina

WELCOME TO ICSD 2020

On behalf of the organizing committee, we are pleased to announce that the 4th International Conference on Sustainable Development (ICSD-2020) is held from November 04-08, 2020 in Skopje, North Macedonia. ICSD 2020 provides an ideal academic platform for researchers to present the latest research findings and describe emerging technologies, and directions in Sustainable Development issues. The conference seeks to contribute to presenting novel research results in all aspects of Sustainable Development. The conference aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results about all aspects of Sustainable Development. It also provides the premier interdisciplinary forum for scientists, engineers, and practitioners to present their latest research results, ideas, developments, and applications in all areas of Engineering and Natural Sciences. The conference will bring together leading academic scientists, researchers and scholars in the domain of interest from around the world. ICSD 2020 is the oncoming event of the successful conference series focusing on Sustainable Development. The scientific program focuses on current advances in the research, production and use of Engineering and Natural Sciences with particular focus on their role in maintaining academic level in Engineering and Applied Sciences and elevating the science level. The conference's goals are to provide a scientific forum for all international prestige scholars around the world and enable the interactive exchange of state-of-the-art knowledge. The conference will focus on evidence-based benefits proven in clinical trials and scientific experiments.

Best regards,

Prof. Dr.Özer ÇINAR



ICSD SKOPJE

VI INTERNATIONAL CONFERENCE ON
SUSTAINABLE DEVELOPMENT
November 04-08 2020 | North Macedonia

CONTENT	COUNTRY	PAGE
Production Of Biodiesel With Heterogeneous Catalysts In Enhanced Microwave System	Turkey	1
Preparation Of Thermal Modified Carbon Cathode To Eliminate Dye In Aqueous Medium Using On-Line Electro-Fenton System	Turkey	2
A Niche Sustainable Tourism Product: Stakeholder Perceptions On Sustainable Conference Tourism In Cyprus	Cyprus	3
The Ui Greenmetric Ranking System: Analyzing Impacts Of Categories On Overall Results	Turkey	4
Education Effects On Participant's Awareness: Zero Waste Management Education In Istanbul Technical University (Itu) Ayazaga Campus	Turkey	5
The Effect Of Acids On The Chemical Stability Of Uv Inkjet Prints On Papers With Straw Pulp	Croatia	6
Analysis Of Natural And Artificial Aging Influence On Uv Inkjet Prints On Printing Substrates With Straw Pulp	Croatia	7
The Use Of Blockchain Technology In Sustainable Supply Chain Management	Greece	8
The Impact Of Information Systems On Hospitality Business Branding - The Strategic Role Of Sustainability	Greece	9
A Preliminary Evaluation Of The Endemic And Relict Flora In Important Plant Area Of Drenovë-Nikolicë, Albania	Albania	10
Sustainable Development In Textile Dyeing And Printing - A Study At Jodhpur	India	11



ICSD SKOPJE

VI INTERNATIONAL CONFERENCE ON
SUSTAINABLE DEVELOPMENT
November 04-08 2020 | North Macedonia

PRODUCTION OF BIODIESEL WITH HETEROGENEOUS CATALYSTS IN ENHANCED MICROWAVE SYSTEM

Basak Temur Ergan^{a*}, Gizem Yilmazer^a, Mahmut Bayramoglu^a

^aGebze Technical University

*btemur@gtu.edu.tr

Abstract:

The importance of alternative fuels is increasing with the depletion of fossil fuels day by day. Biodiesel, an alternative fuel, is monoalkyl esters obtained from vegetable or animal oils with long fatty acid chains by various methods and catalysts. On the other hand, today, in chemical industry, the use of different non-traditional energy sources such as microwave (MW) energy is being investigated intensively to reduce the processing time and energy consumption and improve product quality. MW irradiation has several advantages over conventional heating, such as instantaneous and rapid bulk heating, high temperature homogeneity, selective heating and energy saving. However, in most of the MW-supported synthesis studies in the literature, MW power under isothermal conditions cannot be continuously supplied to the reaction medium. Because this is the opposite situation. The continuous MW power increases the reaction temperature non-linearly. Therefore, the effect of intermittent MW power on the reactions is generally investigated. Due to this deficiency, Enhanced MW systems (EMS) have gained importance in recent years. However, EMS are generally small scale and monomode MW systems in these studies.

In this study, the production of biodiesel with canola oil and methanol in a multimode EMS in the presence of heterogenous catalysts (dolomite, anionic ion exchanger catalyst) were examined. The amount catalyst (% wt of oil) and the temperature (T, °C) variables were examined with “one variable at a time” method and optimum process conditions for maximum biodiesel yield was determined with minimum energy consumption. Then, the experiment carried out under these optimum conditions was repeated with the conventional heating method (CH) under the same conditions and the positive effect of MW was examined comparatively.

Keywords: Enhanced MW System, Heterogenous Catalyst, Biodiesel, Canola Oil

*None



PREPARATION OF THERMAL MODIFIED CARBON CATHODE TO ELIMINATE DYE IN AQUEOUS MEDIUM USING ON-LINE ELECTRO- FENTON SYSTEM

Basak Temur Ergan^{a*}, Erhan Gengec^b, Mert Soybelli^b

^aGebze Technical University

^bKocaeli University

*btemur@gtu.edu.tr

Abstract:

Many industrial processes discharge organic chemicals into water, and some of these chemicals are not only toxic but also have limited biodegradability. Thus, it is necessary to develop effective methods for degrading these pollutants.

Azo dyes are the largest group of the synthetic colorants which consists of azo groups ($-N=N-$) in association with aromatic systems and auxochromes ($-OH$, $-SO_3$, etc.) A typical example of azo dyes, Acid Orange 7 (AO7) is widely used in many industries such as pulp, textile, printing, leather and cosmetic. AO7 dyes may cause serious environmental problems because of their toxic and/or carcinogenic effects. At this point, biological conventional methods are often not sufficient. Therefore, there is great interest in the advanced oxidation processes (AOPs). The most popular AOP is the electro-fenton (EF) process based on formation of hydroxyl radicals ($\bullet OH$) in the presence of Fe^{2+}/Fe^{3+} as catalyst and H_2O_2 as an oxidant.

On the other hand, the most important point in the EF process is the electrode selection. At this point, carbon felt electrodes are an important alternative to other carbon-based electrodes due to their advantages.

In this study, the efficiencies of thermal modified carbon felts as working electrode were tested in an on-line EF system with Ti/RuO₂-IrO₂-TiO₂ plate anode and SCE reference electrode for dye and TOC removals of AO7 solution (0.1 mM). To test the effectiveness of dye and TOC removal, the modification temperature (400-900°C -1h) under N₂ atmosphere were investigated in cathodic potential (0.8V), pH (3), Fe²⁺(0.3mM) and Na₂SO₄ (50mM). Finally, the modification temperature was selected as 900°C due to maximum dye and TOC removal efficiencies

Keywords: On-Line Electro-Fenton System, Carbon Felt, Thermal Modification, Acid Orange 7,

*KOCAELI UNIVERSITY, BAP Project Number: 2019/024



A NICHE SUSTAINABLE TOURISM PRODUCT: STAKEHOLDER PERCEPTIONS ON SUSTAINABLE CONFERENCE TOURISM IN CYPRUS

Xenia I. Loizidou^{a*}, Kyriaki Demetriou^a, Anthi Gavriel^a, Demetra Petsa^a, Stephanie Hadjiprocopiou^a

^aAkti Project And Research Centre

*project@isotech.com.cy

Abstract:

The tourism industry is a significant contributor to Cyprus's GDP. However, as the main tourism product is 'sun and sea', and with approximately 90% of tourists concentrated in coastal areas over a short period of time, the industry is significantly unsustainable. Conference and event tourism is an ideal product for the diversification of the Cypriot tourism industry and the elongation of the touristic season. This paper presents the results of research conducted in January-March 2020 in Cyprus, with key stakeholders of the conference and event tourism sector. The work consisted of a survey and semi-structured interviews to determine the current level of sustainability within the conference tourism sector, the main barriers to the sector's development, and key stakeholder insights and suggestions for improving the sector's sustainability. The results suggest that there is a general lack of understanding of the negative economic, environmental and social impacts associated with the organization of conventional conferences/events, compared to the positive impacts of sustainable conferences/events. This is compounded by a lack of awareness of actions that can be taken to make the conference/event sector more sustainable. Incentives, marketing, branding, and training are identified as some of the effective means to improve the sustainability of the sector, as is the development of a country-wide sustainability policy and a review and enforcement of national waste management legislation. The research outputs will be utilized for the development of toolkits, training, and awareness-raising activities that will drive Cyprus towards becoming an international sustainable tourism destination.

Keywords: Conference, Event, Sustainability, Tourism.

**This study was funded by the RESTART 2016-2020 Programme of the Research and Innovation Foundation of Cyprus*



THE UI GREENMETRIC RANKING SYSTEM: ANALYZING IMPACTS OF CATEGORIES ON OVERALL RESULTS

Kadriye Elif Macin^{a*}, Osman Atilla Arikan^a, Ibrahim Demir^a

^aIstanbul Technical University

*macin@itu.edu.tr

Abstract:

The UI GreenMetric Ranking system celebrates tenth year anniversary in 2020. The UI GreenMetric has six categories which are; “Setting & Infrastructure” (SI), “Energy & Climate” (EC), “Waste” (WS), “Water” (WR), “Transportation” (TR) and “Education” (ED). The SI category has 15% of the total point while EC category has 21%, WR category has 10%, WS, T and E categories have %18. However, there is still missing points about the exact impacts of categories on overall results. Thus, the aim of this study is to exam previous years ranking results to understand details of category impacts on the UI GreenMetric ranking. The ranking data for the study were taken from the UI GreenMetric’s official website. According to results; the EC category determines which university has the higher ranking if two university have the same total point. The WS, TR and ED categories are possible second effective categories however very rarely SI category has second place after EC. Ranking results were also examined for each continent and strong relationship between existence of developed countries in a continent and success of the UI GreenMetric performance of a continent was found. New certificates for categories such as “energy efficient campus of the year”, “zero waste producer of the year”, “water-saver of the year”, “green path of the year” and “green producer/consumer of the year” are recommended for embracing categories and increasing their recognition. Besides the updates and change in the category indicators fee-free applications to the UI GreenMetric ranking system should be continued and details of the scoring system should be clarified in the guidelines.

Keywords: Green Campus, UI Greenmetric, Higher Education Institutions (Heis), Sustainability, Sustainable Development Goals (Sdgs).

**the Research Fund of the Istanbul Technical University Project ID: 42255 (Project Code: MGA-2019-42255)*



EDUCATION EFFECTS ON PARTICIPANT'S AWARENESS: ZERO WASTE MANAGEMENT EDUCATION IN ISTANBUL TECHNICAL UNIVERSITY (ITU) AYAZAGA CAMPUS

Kadriye Elif Macin^{a*}, Osman Atilla Arikan^a, Ibrahim Demir^a

^aIstanbul Technical University

*macin@itu.edu.tr

Abstract:

Turkey Ministry of Environment and Urbanization was published Zero Waste (ZW) Regulation in July 2019. "Zero Waste Management Act" (ZWMA) was started in Istanbul Technical University (ITU) Ayazaga Campus as a part of a larger scale project called as "Green Campus". Education is first and crucial step to success in the sustainability acts. The aim of this study was to determine ZW management education effects on participant's knowledge. In this scope; ZW educations were given to administrative staff in 2019-2020 academic year. This study was conducted by using online questionnaires. The questionnaires included questions related to educational content and instructor, participant's willingness to ZW management and technical aspects of ZW approach. The results showed that 82.4 % of the participants understood waste management (WM) hierarchy priority clearly and 93.3% understood recycling containers classification in the new ZWMA. However, they were confused about current WM practices in Turkey, totally 52% of participants chose recycling, composting and recovery as most frequently applied WM practices instead of landfilling. Based on the results it is understood that education has a significant positive effect on participant's knowledge. This study contributes to existing knowledge of WM by providing data about participant's awareness and it would be pioneer to further sustainability activities in the campus.

Keywords: Education, Higher Education Institutions (Heis), Sustainability, University, Zero Waste.

**the Research Fund of the Istanbul Technical University Project ID: 42255 (Project Code: MGA-2019-42255)*



THE EFFECT OF ACIDS ON THE CHEMICAL STABILITY OF UV INKJET PRINTS ON PAPERS WITH STRAW PULP

Ivana Plazonić^{a*}, Katja Petric Maretić^a, Irena Bates^a, Maja Rudolf^a, Valentina Radić Seleš^a,
Jakov Radovčić^a

^aUniversity Of Zagreb Faculty Of Graphic Arts

*ivana.plazonic@grf.unizg.hr

Abstract:

The bonding potential of pulp fibers is reduced by paper recycling process. To recover this lost potential of secondary fibers, upgrading the recycled pulp by blending with a virgin softwood pulps is mostly used. In this research the possibility of using straw pulp as reinforcing fibers in recycled papers proposed for UV inkjet printing was assessed through print stability on acid agents. For that purpose, printing substrates were formed on the Rapid Kothern device from pulp obtained by blending different proportions of straw pulp and pulp of recycled fibers. Each printing substrate was printed in full tone with cyan, magenta, yellow, and black inks by digital technique of UV inkjet printing. Printed substrates were treated with various inorganic and organic acids under the conditions defined in the international standard ISO 2836:2004. Based on the measured spectrophotometric values of the untreated and acid-treated prints the Euclidean color difference (ΔE_{00}) was defined respectively the stability of prints was assessed. The results of spectrophotometric measurements indicate small to medium color differences of the prints due to the action of all acids ($\Delta E_{00max} < 2.4$) and it can be concluded that straw pulp in printing substrates from recycled fibers contributes to good chemical stability of prints. This research opens the possibility that straw as an annual renewable resource, along with wood that currently dominates the raw materials supply together with waste paper, gains greater importance as a raw material for paper and graphic industry.

Keywords: Acids, Chemical Stability, Paper, Straw Pulp, UV Inkjet Printing

**This work has been supported in part by Croatian Science Foundation under the project UIP-2017-05-2573*



ICSD SKOPJE

VI INTERNATIONAL CONFERENCE ON
SUSTAINABLE DEVELOPMENT
November 04-08 2020 | North Macedonia

ANALYSIS OF NATURAL AND ARTIFICIAL AGING INFLUENCE ON UV INKJET PRINTS ON PRINTING SUBSTRATES WITH STRAW PULP

Irena Bates^{a*}, Katja Petric Maretic^a, Maja Rudolf^a, Ivana Plazonic^a, Valetina Radic Seles^a,
Stella Jungwirth^a

^aUniversity Of Zagreb, Faculty Of Graphic Arts

*irena.bates@grf.unizg.hr

Abstract:

Paper substrate, as the most common used substrate for printing labels or packaging, is traditional produced from cellulose fibres derived from wood. The growth of a large number of industries has led to a significant increase in the use of such substrates, which consequently led to a global awareness of the possibility of forest exploitation and the importance of reusing waste paper as a source of fibres. Hence, paper fibres can be recycled up to seven times and it is important to enrich paper pulp with virgin fibres during paper production. In such a way, the characteristics of the paper and the quality of the printed elements are improved. In this paper, cereal straw as an alternative resource of virgin fibres was turned into pulp and mixed with recycled wood pulp to conduct printing substrates using laboratory equipment. Since aging is an inevitable process of any printing substrates and prints, and the degradation of print quality due to aging largely depends on the properties of the printing substrate, ink and type of printing. This research was focused on analysing optical stability of prints made on printing substrates with straw pulp by UV inkjet technique after natural and artificial aging. From a comparison of the aging processes based on the Euclidean difference results, it was observed that natural aging of UV inkjet prints yields less color changes compared to artificial aging. Greater or equal optical stability after aging was perceived for prints on printing substrates with wheat, barley and triticale pulp compared to prints on substrates made with recycled wood pulp.

Keywords: Aging, Optical Stability, Printing Substrate, Straw Pulp, UV Inkjet Printing

**This work is supported by Croatian Science Foundation under the project UIP-2017-05-2573*



THE USE OF BLOCKCHAIN TECHNOLOGY IN SUSTAINABLE SUPPLY CHAIN MANAGEMENT

Asterios Stroumpoulis^{a*}, Evangelia Kopanaki^a

^aUniversity Of Piraeus

*stergiostrou@hotmail.com

Abstract:

This paper discusses the potential impact of Blockchain Technology on sustainable supply chain management. The research area of this study incorporates Sustainability, Supply Chain Management (SCM) and Blockchain Technology (BT). Sustainability concerns the protection of the environment and the social-economic development. According to Seuring and Muller (2008), sustainable SCM refers to the management of materials, information and capital flows, as well as to the cooperation of supply chain partners, addressing goals from all three pillars of sustainable development. It enables companies to increase their business performance, develop an environmentally friendly business profile and potentially gain competitive advantage. These outcomes are also greatly supported by the use of Information Technology. Blockchain is a new technology, providing a decentralized, distributed and secure scheme for information flow and sharing, with potential implications in logistics and supply chain management. Blockchains are distributed, immutable, transparent, shared by a community, and can facilitate collaboration and interaction in supply chain networks. It enables people or organisations to collectively agree on the accuracy of the exchanged information, without the need of a third-party authority. Although they offer significant advantages, their impact on Sustainable SCM is poorly investigated and still unclear. To address this gap, this paper conducts an extensive literature review, firstly to clarify the meaning of Sustainable SCM and secondly to examine the use of Blockchain Technology in SCM. Combining the obtained knowledge, it then aims to analyze the relationship between blockchain technology and Sustainable SCM practices.

The paper argues that the application of Blockchain Technology can improve the efficiency and effectiveness of resources management by tracking faulty materials and products accurately. This process could enable the reduction of rework and recall, leading to less consumption and greenhouse gas emissions. Blockchain Technology could further contribute to sustainable SCM by enabling the detection of unethical partners and fake products. Last but not least, its application could lead to disintermediation (Saber et al. 2018) resulting to smaller chains with reduced transaction costs and fewer delays.

By addressing these issues, the paper provides insight into Sustainable SCM, makes propositions on how Blockchain Technology could support it and forms the base for future research.

Keywords: Blockchain Technology, Supply Chain Management, Sustainable Development

**University of Piraeus Research Center*



THE IMPACT OF INFORMATION SYSTEMS ON HOSPITALITY BUSINESS BRANDING - THE STRATEGIC ROLE OF SUSTAINABILITY

Sotirios Varelas^{a*}, Panagiota Karvela^a, Nikolaos Georgopoulos^a

^aUniversity Of Piraeus

*svarelas@webmail.unipi.gr

Abstract:

This research discusses the impact of Information Systems in the industry of Hospitality Business Branding regarding the strategic role of the sustainability. The study area of this research concerns Sustainability, Information Systems and Hospitality. There are many approaches regarding the definition of Sustainable Hospitality, most of them are developed around the concept of business efficiency and competitive advantage. It enables companies to increase their business performance by developing sustainable strategies, develop an environmentally friendly business profile and potentially gain competitive advantage. These outcomes are strongly supported by Information Systems. Purpose of this research is to fulfill the gaps in the literature review on how Information Systems and Sustainable Development could help the Hospitality Branding and to be the prologue for a further investigation on a case study to determine the potential strategies. A positive correlation between the green operations of the hotels and the customer behavior and branding perceptions has been detected and this relation could lead the company to a better business performance, but there is gap in the literature review about the digitization of the performance. Information Systems could also contribute to the Sustainable Hospitality by providing better and more accurate data regarding the social pillar of sustainability, which are very difficult to quantify and also, what strategies should be followed in order to achieve that. Moreover, there is a gap in the literature review about what strategies a hotel should follow in order to transit to the sustainable development and improve its brand image. To address all these gaps, current research conducts an extensive literature review, firstly to clarify the connection of Sustainable Development and Hospitality Business Branding and secondly to examine the impact of Information Systems in Sustainable Hospitality and how this combination increase the business performance. Combining and understanding the obtained knowledge, gives us a better chance to analyze the relationship between Information Systems, Sustainability and Hospitality Business Branding.

Keywords: Strategic Management, Information Systems, Hospitality, Branding

*



ICSD SKOPJE

VI INTERNATIONAL CONFERENCE ON
SUSTAINABLE DEVELOPMENT
November 04-08 2020 | North Macedonia

A PRELIMINARY EVALUATION OF THE ENDEMIC AND RELICT FLORA IN IMPORTANT PLANT AREA OF DRENOVË-NIKOLICË, ALBANIA

Robert Damo^a, Pirro Icka^{a*}

^aUniversity Fan Noli

*pirroicka@yahoo.com

Abstract:

Important Plant Area of Drenovë-Nikolicë is located in southeast of Albania, in Korca region and covers 1890 ha. The study of the endemic and relicts species of this area is performed for the first time. In the present study, 57 endemic and relict species were recorded, belonging to 46 genera and 33 families. The most species-rich families are Salicaceae and Pinaceae by 7 and 5 species respectively, while the genera with the largest number of species are Salix and Populus. Studied flora comprises 15 endemic species, 4 endemic-relict and 38 relicts plants. There are 2 Albanian endemic species, 13 Balkan endemic species, 1 Balkan subendemic species and 2 Apenine-Balkan subendemic species in the flora of investigated area. Out of studied relict species 39 are Tertiary relicts, 2 are Quaternary glacial relicts are 2 taxa (*Arabis alpine* L. and *Gentiana verna* L.) and only one is Quaternary interglacial relicts (*Morina persica* L). The results of the analysis of life forms show that the most abundant are Phanerophytes (54.39%) followed by Hemicryptophytes (35.09%). The spectrum of biological types shows prevalence of herbaceous perennials (42.11%), followed by tree species (31.58%). The most of the species are European-Asiatic floristic elements (14.03%), followed by Balkan floristic elements (12.28%) and sub-Mediterranean floristic elements (8.77%). The high number of endemics and relicts taxa shows that studied territory requires special attention for plant conservation.

Keywords: Important Plant Areas, Serpentine Endemics, Biological Type, Relict Taxa, Floristic Element, Life Forms

*



ICSD SKOPJE

VI INTERNATIONAL CONFERENCE ON
SUSTAINABLE DEVELOPMENT
November 04-08 2020 | North Macedonia

SUSTAINABLE DEVELOPMENT IN TEXTILE DYEING AND PRINTING - A STUDY AT JODHPUR

Shalini Mathur^{a*}, Vandana Bhandari^a

^aNational Institute Of Fashion Technology

*shalini.mathur@nift.ac.in

Abstract:

Sustainable development has become a global aspect and a major concern for textile industry. As described by the Brundtland Commission's Report, Our Common Future, sustainable development is "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

As Cepolina (2012) suggested that to overcome the damages of the industrial economy, the ecological approach should be adopted for transformation in the manufacturing efficiency, and organizations can increase profits by following the sustainable manufacturing model. Yet some of the research states otherwise, like Florida and Davison (2001), that business benefits are important motivations for adopting innovative environmental practices.

Analyzing the financial and environmental performances of the firms will help in exploring the relation between sustainable environmental practices of firms and their business benefits, or, financial performance.

Financial and environmental performance data of selected textile dyeing and printing MSMEs was collected and analyzed to test the hypothesis that better environmental performance leads to a better financial performance. Data was collected from 30 MSMEs, and quantitative analysis was performed using multiple linear regressions. The result shows that Environmental Performance of a firm impacts its Financial Performance measures, like Gross margin (GM), Operating Margin (OM), Return On Capital Employed (ROCE).

This study provides critical understanding of the relation between financial and environmental performance and hence could be an important input for the policy making and incentivizing the MSMEs in appropriate ways to get commitment for sustainable environmental practices.

Keywords: Sustainability, Textile, MSME, Environmental

*

ICSD 2020

6TH INTERNATIONAL CONFERENCE ON
SUSTAINABLE DEVELOPMENT



**EUROPE
CONGRESS**
www.europecongress.org

W
WESTERN MICHIGAN



**TURKISH
AIRLINES**



CNRGROUP

www.icsd.eu