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ABSTRCTS BOOKS

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ABSTRACTS BOOKS

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KEYNOTES

Dr. Shakir Ullah
University of Maryland Global Campus, USA
University of Louisiana Monroe, USA

Keynote Title: "The New Realities of Big Data, Artificial Intelligence, and FinTech: Future Prospects and Implications"

Abstract: Even though we may argue that big data, Financial Technologies (FinTech), and Artificial Intelligence (AI) are new phenomena, they existed before we coined the modern terms. Big Data accumulated before we even realized it Big Data existed. AI helped us analyze the growing data before we thought it was AI and FinTech was there to make the large amounts of financial data more meaningful.

As big data accumulated over time, analyzing it for decision-making became increasingly difficult for human minds to tackle. So, AI was needed to do the job, and FinTech plays a role in the specific realm of the financial world. All that information had to be analyzed by humans for decision-making purposes. This used to be a tedious, time-consuming task and even resulted in inefficient decisions. All of these tasks are now done by AI systems. The human involvement is in these decisions is shrinking day by day. For example, we had to do numerous hours of calculations to analyze stock data for placing a single order. This process has been automized so much that the AI analyzes the data for us and trades on our behalf and has proved to be making more money than an average investor. In the marketing and customers relations space, AI is the driver in making critical decisions. Customers' social activity, product reviews, likes/dislikes, shared content, and even their searches for specific products are analyzed by the artificially intelligent machines, loyalty/rewards applications, and CRM (customer relationship management) systems. Finance is being transformed by AI, big data and blockchain technologies. The emerging technologies of decentralized finance (DeFi) and Non-Fungible Tokens (NFTs) will transform the world in the years to come. All businesses and in particular, financial institutions must embrace these new technologies before its too late.

This keynote speech sheds light on the future prospects and challenges for businesses in the emergence of these new technologies.

Bio: Dr. Shakir Ullah is working as an Associate Professor of finance at the University of Maryland Global Campus and the University of Louisiana Monroe, in the United States. He is also a Doctoral Dissertation Chair at the California Intercontinental University. Earlier, he worked as Dissertation Chair at Georgetown University, Washington D.C, as a faculty of finance at Stratford University, Virginia, as the Chair of Stratford University's Institutional Review Board (IRB), as lecturer at the University of Southampton, United Kingdom, and as Global Business Analyst at Euromonitor International,

Shakir holds PhD in finance from the University of Southampton, UK, and MBA in finance from KDI School of Public Policy and Management, South Korea. He is a published author in Financial Times top 20 journals including the Journal of Business Et

Prof. Carlos Rodriques
Universidade Fernando Pessoa (UFP), Porto, Portugal;

Prof. Ana Campina
Universidade Fernando Pessoa (UFP), Porto, Portugal;

Keynote Title: *"Industry 4.0, Environment and Human Rights"*

Abstract: Technological advancement, especially in digital technologies, has had such an advance at the business level that it has produced yet another Industrial Revolution with all the consequences for business development in constant change.

Alongside this Industrial Revolution caused by computer/digital technological development, there is another in terms of energy producing sources, that is, we are witnessing the replacement of polluting energy producing sources, based on fossil fuels, by the so-called clean energy, or that is, based on natural sources, wind, sun, water and biomass.

These simultaneous changes that currently involve the industry have, of course, implications for Human Rights.

In this study, we intend, then, to link the consequences for the industry of the new revolutions produced by the advancement of digital technologies, with the introduction of new sources of clean energy and the link with Human Rights.

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ABSTRACTS

Determination of 180 years variation of Ba concentration in the atmosphere with the help of annual rings of Corylus colurna tree

Kübra Key, Düzce University

Şemsettin Kulaç, Duzce University

Abstract

Today, one of the most crucial problems worldwide is environmental and especially air pollution. Air pollution, which causes the death of millions of people every year, also poses a risk for other living things and ecosystems. Among the components of air pollution, especially heavy metals are of particular importance because they do not deteriorate and disappear easily in nature. They can be toxic and carcinogenic to humans even at low concentrations and bioaccumulate in living organisms. Therefore, it is vital to determine the heavy metal concentrations in the air. Biomonitors are the most widely used method for monitoring heavy metal pollution in the air. Annual rings of trees are frequently used, especially in monitoring the change over many years. However, with this method, studies have been carried out on the traceability of the change of elements such as Pb, Cr, Ni, Co. Barium (Ba), which has been largely neglected in studies on heavy metals, plays a key role in producing many products in the industry. However, Ba is one of the most dangerous and toxic heavy metals. In this study, it was tried to determine the Ba concentration change by using the 180-year-old Corylus colurna tree annual rings cut in 2020 from Kastamonu province. The heavy metal concentrations in the bark and inner bark were also compared with the heavy metal concentrations in the woods, and the directional variation of the heavy metal concentrations was also evaluated. Detailed results of this work will be further discussed.

Keywords; Heavy Metal, Barium (Ba), Biomonitor, Corylus colurna

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IMPACT OF LIBERAL DEMOCRACY TOWARD DEFORESTATION IN INDONESIA: CASE STUDY KOTAWARINGIN TIMUR, KALIMANTAN TENGAH

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Ezra Surya Aji, Universitas Pertamina

Karema Margareth Lolong, Universitas Pertamina

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Abstract

Indonesia is a country with a forest area of 94.1 million hectares in 2019. With the extent of forests in Indonesia, the issue of deforestation is one of the most vulnerable issues in Indonesia. Based on data from the Central Bureau of Statistics, in 2015 to 2019 Indonesia has lost 3.9 Million Hectares of forest. Deforestation activities in Indonesia are often synonymous with forest commercialization, seeing land expansion and forest function transfer often occur in the process. The process of commercialization of forests can not be separated from the involvement of the government as a policy formulation in forest management, especially under a government with a liberal democratic system that is closely related to its orientation to capitalism. From that activity, the author assumes that there is government involvement, especially local government, in the ease of access to forest exploitation as one of the reasons for the high deforestation rate in Indonesia. Specifically, the author chose one of the regions on the island of Kalimantan that has the largest forest area in Indonesia, precisely East Kotawaringin, which is the region with one of the highest deforestation rate in Central Kalimantan Province as a case study area to prove the link between deforestation rates and liberal democratic governments in the reform period. The method used in this study is a qualitative method with secondary data that includes books, journals, government reports, to articles and studies conducted by non-governmental organizations with environmental focus such as Wahana Lingkungan Hidup Indonesia (WALHI), Greenpeace Indonesia, Forest Watch Indonesia (FWI), and Global Forest Watch (GFW).

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Investigation of Green Metric Sustainability Index: Evaluation of Turkish Universities in the Top 500 in 2020 Ranking by Categories

Gamze Altun, Bursa Uludag University

Murat Zencirkiran, Bursa Uludag University

Abstract

Today, universities all over the world want to make a name for themselves with the steps and practices they have taken on sustainability issues by increasing environmental awareness. To achieve this goal, it is inevitable that they focus on a "green campus and sustainable campus". As the interest in sustainable campuses increased, universities started to be evaluated based on their environmental and sustainable activities. In evaluations, some international sustainability indexes such as University League, Sustainability Tracking and Assessment Rating System and GreenMetric, which increase awareness of sustainability, are used and universities are ranked. In this study, international environmental sustainability indexes were examined and comparisons were made between them. The Green Metric ranking system, which is known to be the most preferred among the sustainability evaluation indexes, and in which demanding international universities participate through an online survey, and a total of 6 main categories and 53 indicators with different importance percentages of this ranking system were examined and evaluations were made about their importance percentages. When the Green Metric ranking results for 2020 are examined, it is seen that there has been an increase in the number of participating countries and 45 universities from Turkey are included in this ranking. In our study, where we consider the Turkish universities in the top 500 in the 2020 Green Metric ranking as material; To determine the category with the highest impact on the success of these universities, universities with different rankings despite having the same overall score were compared. Additionally, some suggestions were made by discussing what needs to be done for Turkish universities to rise to higher ranks.

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Treatment of lead chloride-contaminated wastewater with Scenedesmus acuminatus grown under different color light sources

Melih Onay, Van Yuzuncu Yil University

Abstract

Microalgae have recently gained a wide range of uses due to their rapid growth and metabolic properties. One of them is growing in waste water and using it for treatment in heavy metal-polluted waters. In this study, the growth and behavior of Scenedesmus acuminatus grown in municipal wastewater in different concentrations of lead chloride under white, blue and red light were investigated. Also, chlorophyll, carotenoid, biomass and carbohydrate contents of microalgae samples grown at these different wavelengths were determined. As a result, The IC50 values under white, blue and red light are 445.4, 558.7 and 362.1 mg/L, respectively. Microalgae samples grown in the blue light have the highest tolerance to lead chloride and can be used to treat wastewater. Microalgae samples grown in red light, on the other hand, have the highest carbohydrate concentration with a value of 32% at 240 mg/L of PbCI2. Scenedesmus acuminatus grown under red light can also be used for biofuel production.

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Binalarda Etkin Enerji Verimli Camlar ve Maliyet İlişkisi

Ender Yetim, Akdeniz University

Aynur Kazaz, Akdeniz University

Abstract

Çalışmada, Akdeniz İklim Bölgesinde yer alan ve TS 825'e göre 1. Derece Gün Bölgesinde sınıflandırılan Antalya'da ada bazlı yerleşkede binaların konumu, yönelimi, cephe uzunlukları, pencere/duvar alan oranı dikkate alınarak seçilen 3 bloktan oluşturulan baz binalarda saydam yüzeylerde enerji verimli camların kullanılması durumunda binanın enerji performansı üzerine etkisi incelenmiştir.Baz binalarda kullanılan C serisi sıradan çift camlar(4mm+12HB+4mm, 4mm+16HB+4mm) yerinefarklı ısıcam serisi(K,K3+), cam kombin-yonu(4mm+12+4mm,4mm+16+4mm,4mm+12+4mm+12+4mm,4mm+16+4mm+16+4mm) ve camlar arası farklı dolgu gazı (hava, argon) kullanılarakher bir baz bina modeli için toplam 8 adet senaryo uygulanarak tasarım bina modelleri oluşturulmuştur. Mevcut bina modelleri vetasarım bina modelleri arasında enerji maliyet, emisyon ve tasarruf oranları, EnergyPlus dinamik termal simülasyon motoru bulunan DesignBuilder simülasyon programı ile saatlik analizler gerçekleştirilerek elde edilmiştir. Çalışma kapsamında tasarım binalarda ısıtmada yakıt türü olarak doğalgazın kullanımının yanı sıra elektrik enerjisi de kullanılarak yakıt türüne göre meydana gelen enerji maliyet, emisyon ve tasarruf oranları değişimi irdelenmiştir. Isıtma, soğutma ve havalandırma sistemlerinin enerji tüketim değerleri verileri üzerinden yapılan analizler sonucunda"4mm+16+4mm+16+4mm'' kombinasyonuna sahip, camlar arası dolgu malzemesi olarak argon gazı kullanılan kaplamalı cam sisteminin Akdeniz İklim Bölgesi için optimum senaryo olduğu görülmüştür. Optimum senaryonun baz binalara uygulanmasıyla binalarda kullanılan yakıt türüne bağlı olarak %32,16 ile %38,96 arasındayıllık enerji tasarrufu sağlandığı, CO_2emisyon oranlarında %14,95 ile %26,38 arasında azalım yaşandığı, cam maliyet artışının ise ortalama 3,73 \$/m2 olduğu görülmüştür.

Anahtar Kelimeler:enerji etkin tasarım, enerji verimliliği, cam tipi, bina enerji simülasyonu, maliyet analizi

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Determination of Aluminum Accumulation in Atmosphere by Using Cedar Tree Annual Rings

Hatice Çobanoğlu, Düzce University

Abstract

In recent years, industrial activities and energy consumption, which have been increasing due to rapid urbanization in developing countries, cause pollution that is threatening human health. Millions of people die every year worldwide due to air pollution. The heavy metals among air pollution factors exist in nature and are not biodegradable elements. For this reason, they can stay in nature for a long time and tend to accumulate within the body. Even the low concentrations of some heavy metals have particular importance in pollutants that are particularly dangerous for human health because of their toxic effects or carcinogens. Therefore, monitoring heavy metal pollution, identifying risky regions, and determining the change in the atmosphere's concentration in the process is extremely important. One of the most effective methods to determine the change of heavy metal concentrations in the atmosphere is to use the annual rings of trees as a biomonitor. Perennial plants that grow in our country constitute annual rings, and it is possible to obtain information about the change of heavy metal concentration in the region by using tree rings. In this study, the annual rings were determined from the main body of the Cedar tree, and Al was determined to change the concentration of elements per year. Moreover, the Al concentrations in the inner and outer crust were also determined. As a result, it was determined that the Al concentration in the bark was much higher than that in the wood. Detailed results of this study will be further discussed.

Keywords: Aluminum, Annual Rings, Cedar, Heavy metal

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The Effect of Indoor Air Quality to Indoor Plants

Hakan Sevik, Kastamonu University

Abstract

Today, the majority of the population in the world lives in urban areas, and approximately 90% of the time of people living in urban areas is spent indoors. Indoor air is up to 100 times more polluted than outdoor air, and so that people spend most of their time indoors, indoor air has a much greater impact on human health than outdoor air. Indoor air pollution is defined as the most important environmental cause of death globally and it is stated that it causes an estimated four million premature deaths each year in the last decade. Therefore, indoor air quality is a very important factor affecting people's health and well-being. Plants which is the one of the tools used for years to improve indoor air quality, hence, plants are living organisms and the effect of their environment on air quality can be positive or negative such as plants that increase the amount of oxygen in the environment by photosynthesis when the ambient conditions are suitable can cause a decrease in air quality by giving CO_2 to the environment in cases where there is not enough light. In this research, the effect of indoor plants on indoor air quality has been tried to be evaluated in many research paths.

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COVİD-19 PANDEMİ SÜRECİ KAPSAMINDA SAĞLIKLI BİR ÇEVREDE YAŞAMA HAKKININ DEĞERLENDİRİLMESİ

A. Cem Sönmez, Bursa Uludağ University

Murat Zencirkıran, Bursa Uludağ University

Abstract

Çevre hakkı sağlıklı ve dengeli bir biçimde yaşama hakkını ya da insancıl yaşam koşullarını tehdit eden her türlü çevre sorunlarının yaratılmasına karşı direnme hakkını ve talep hakkını içermektedir. Sağlıklı bir çevrede yaşama hakkı bireyin korunmuş çevre şartlarında beden ve ruh sağlığı içinde yaşamını sürdürmesini sağlama hakkı olarak tanımlanmaktadır. Anayasamıza göre, herkes sağlıklı ve dengeli bir çevrede yaşama hakkına sahiptir. Çevreyi geliştirmek, çevre sağlığını korumak ve çevre kirlenmesini önlemek Devletin ve vatandaşların ödevidir. Bilindiği üzere, son bir yıl içerisinde gerçekleşen küresel salgın sağlıklı bir çevrede yaşama gereksinimini fazlasıyla arttırmıştır. COVID-19 virüsünün küresel bir salgına dönüşmesi sağlıklı bir çevrede yaşama hakkı olmak üzere insan haklarını doğrudan etkilemektedir. Çevre hakkının konusu, sağlık hakkı ile birlikte ele alınışı ve pandemi sürecinde bu hakkın kazandığı önem bu çalışmanın konusunu oluşturmakta olup sağlıklı ve dengeli bir çevrede yaşama hakkının önemi yaşanılan pandemi süreci ekseninde değerlendirilecektir.

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İKLİM DEĞİŞİKLİĞİ İLE MÜCADELE KAPSAMINDA YEŞİL ALTYAPI KAVRAMININ DEĞERLENDİRİLMESİ

Sena Yanık, Selcuk University

Banu Öztürk Kurtaslan, Selcuk University

Abstract

Dünya nüfusunun hızla artmasıyla birlikte son yıllarda dünya bütününde ekolojik sorunlarla karşı karşıya kalınmaktadır. Küresel ısınma ve iklim değişikliği bu sürecin sonuçlarından bir tanesidir. İklim değişikliği, yeryüzünde ani ve beklenmedik hava olaylarının yaşanmasına neden olmaktadır. Bu bağlamda sürdürülebilir kentsel gelişim anahtar bir kavram olarak ortaya çıkmıştır. Yeşil altyapı kavramının sürdürülebilir kentlerin önemli bir unsuru olduğu ifade edilebilir. Kentler, iklim değişikliğinin neden olduğu etkilerin en yoğun hissedildiği alanlardır. Bu etkiler kentlerde ısı adası etkisinin artması, hava kirliliği, sıcak hava dalgaları ve su kıtlığı yaşanması, yağış rejiminin değişmesi, kurak gün sayısının artması, yağmur sularının sel ya da taşkınlara neden olması şeklinde ortaya çıkmaktadır. Yeşil altyapı kavramının sürdürülebilir kentlerin önemli bir unsuru olduğu ifade edilebilir. Yeşil altyapı, stratejik olarak planlanan ve yönetilen doğal, yarı-doğal, kamu ve özel mülkiyete ait alanların oluşturduğu ağı ifade eder. Yeşil altyapı sisteminin mekansal planlama sürecinin bir parçası haline gelmesi bu sistemi oluşturan bileşenlerin yağış suyu yönetimi çözümlerini içermesi, kentlerin kırılgan ekosistemlerinin korunması, yeşil alanlardan sağlanan ekosistem servislerinin iyileştirilmesine yönelik akılcı çözümler geliştirilmesi kentin iklim değişikliği etkilerine dirençli ve dayanıklı hale gelmesine olumlu katkılar sağlayacaktır. Yeşil altyapı sisteminin bileşenleri olarak kentsel peyzajdaki doğal habitatlar, yeşil koridorlar, açık ve yeşil alanlar birbiriyle ilişkilendirilir ve kent ekolojisinin gelişmesine katkı sağlanır. Bu çerçevede bu çalışmanın konusu, her geçen gün önem kazanan kentsel yeşil altyapı kavramıdır. Sürdürülebilir kentsel gelişim çerçevesinde yeşil altyapı kavramının tanımı, planlanması ve bileşenleri teorik bir değerlendirme sağlayacak şekilde nitel yöntemle araştırılmıştır. Bu araştırmanın içerdiği literatür taramasının ardından sonuç ve öneriler geliştirilmiştir. Bu noktada, küresel ısınma ve iklim değişikliğinin sonuçlarıyla başa çıkma kabiliyetine sahip dirençli şehirlerin oluşumu için yeşil altyapı kavramının artan bir öneme sahip olmaktadır.

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