Book of Abstracts

CRGS 2022

International Conference

CANADA

CRGS2022

Contests for Realization of Global Sustainability
22-23 March 2022
Simon Fraser University (SFU), BC, Canada

Editors

DANISH MIR SAYED SHAH
SENJYU TOMONOBU

University of
the Ryukyus
OKINAWA, JAPAN

MARCH 2022

repa.jp/crgs-canada

REPA

CRGS 2022

Contests for Realization of Global Sustainability

CRGS 2022

22-23 MARCH | BC, CANADA

CRGS 20212 draws an emerging platform of discussion, networking, and recent ideas to adopt Sustainable Development Goals (SDGs) at the edge of digitalization.

Adaption of academic and industrial solution models along with lessons learned from global practices positively contributing SDGs.

To join global efforts toward realization of transforming the world and secure societies' resiliency, you are welcome to share your knowledge and explore new opportunities within a broad theme of SDGs topics.

CRGS 2022

CONFERENCE REVIEW

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KEY DATES

Save conference dates

Full Paper Submission
Until Jan 15, 2022
Acceptance Notification
Until Feb 15, 2022
Early Bird Registration
Until Feb 20, 2022
Late Registration
Until Feb 28, 2022
Presentation Submission
Until Jan 31, 2022
Tour Package Reservation
Until Jan 31, 2022
Special Assistance Request
Until Feb 10, 2022

VENUE

Simon Fraser University (SFU)
Burnaby Mountain Campus
8888 University Drive
Burnaby, B.C.
Canada. V5A 1S6

CRGS 2022 RANSFORMS YOUR VISION INTO CREATIVE RESULTS!

CRGS 2022 calls for transboundary researches, experiences, case studies, and lessons learned to establish a global dialogue on Sustainable Development brings together scholars, researchers, and field practitioners conducting projects and research to achieve the United Nation's 17-SDGs.

- Several sessions presided by prominent speakers from different countries
- Two-tier publication options conference proceeding and journals special issues
- Peer-review publication with indexing in word-wide databases (selected high-quality submissions)
- Access to reviewers' comments and evaluation to improve your research quality
- Over 10 registration discounts
- Several vouchers and waiver coupons for upcoming conferences
- Best papers and sessions best paper awards.

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Organizing Chair Message

CRGS 2022

琉球大学

Dear professors, scholars, researchers, students, colleagues, and attendees!

MARCH 2022

On behalf of the organizing committee, I am delighted to welcome you to the hybrid (virtual and in-person) International Conference on Contests for Realization of Global Sustainability (CRGS 2022) from 22-23 March 2022 at Simon Fraser University in Vancouver, Canada.

However, we were expected to see everyone face-to-face, but the Omicron variant of COVID-19 has caused most of the program to hold online. Whereas, we are excited for the opportunity that we are summing up with the conference aims to draw an emerging platform of discussion, networking, and recent ideas to adopt Sustainable Development Goals (SDGs) at the edge of digitalization.

Adapting academic and industrial solution models and lessons learned from global practices will positively contribute to SDGs, which demand international efforts to transform the world and secure societies' resiliency. Therefore, your contributions through this conference by sharing decent knowledge and experiences toward sustainable development are salient contributions.

The conference proceeding compiles more than twenty peer-reviewed conference papers, in which the selected top papers extended versions are recommended for publication in special issues of the different journals.

I would like to congratulate all for successfully holding the conference within the contained situation pandemic. Thank you to the conference presenters, participants, reviewers, editors, facilitators, publishers, and sponsors. A special appreciation and thanks to the Keynote Speakers and Simon Fraser University (SFU) event and conference support team for their time and support.

With Warmest Regards,
Conference Organizing Chair
Dr. Mir Sayed Shah DANISH
University of the Ryukyus, Japan

"Any one of us is bound to raise current and future generations to maintain a sustainable future mindset. It is my great pleasure to be a teammate for sustainable development."

OKINAWA JAPAN

danish@mdanish.me
https://mdanish.me

CRGS 2022

Acknowledgment

For everything that our sponsors, publishers, facilitators, and stakeholders have done for this conference, everything you still do and will continue to do, we at CRGS2022, BC, Canada, want you to know how thankful we are.

We look forward to a successful future collaboration.

The Conference Organizing Committee

Ir Dr Sharifah Rafidah Wan Alwi

Professor, Universiti Teknologi Malaysia, Malaysia; Research Fellow, Process Systems Engineering Centre (UTM-PROSPECT)

Prof Ir Dr Sharifah Rafidah Wan Alwi, P.B.S., CEng, MIChemE, MIEM, REEM, CEM, is the Director of Process Systems Engineering Centre of Universiti Teknologi Malaysia (UTM). Sharifah has been extensively involved in 67 research projects, 24 industrial based projects for various companies and government agencies and has trained engineers from more than 200 companies in the field of sustainable engineering design and management. She specialises in process systems engineering with emphasis on resource conservation. She has won numerous awards such as Top Research Scientists Malaysia 2018, Malaysia Research Star Award 2019, 2018 and 2016, ASEAN-US Science Prize for Women 2016 in Energy Sustainability, National Young Scientist Award 2015, ASEAN Young Scientist and T echnologist Award 2014, IChemE Highly Commended Sir Frederick Warner Prize 2011 and Green Talents 2009. She is currently the Associate Editor for Journal of Cleaner Prodution (Q1) and Editorial Board member for Applied Thermal Engineering Journal (Q1). She has filed 15 patents (1 granted), 25 copyrights and developed 5 software products. She is the co-founder of UTM Spin-off company called Optimal Systems Engineering Sdn Bhd (OPTIMISE). She has also served as the Chairman for Malaysia IChemE Young Engineer Group (YEG) and is a member of Young Scientist Network, Academy of Sciences Malaysia (YSN-ASM) and Persatuan Saintis Muslim Malaysia (PERINTIS).

Professor Ir Ts Dr Sharifah Rafidah Wan Alwi
B. Eng. (UMIST, UK), PhD (UTM)
P.B.S., PEng – Practicing Eng, CEng, MIEM, MIChemE, YSN-ASM
Registered Electrical Energy Manager (REEM), Certified Energy Manager Trainer (AEMAS EMGS)

Process Systems Engineering Centre (UTM-PROSPECT)
Research Fellow
School of Chemical and Energy Engineering,
Faculty of Engineering/
Research Institute of Sustainable Environment (RISE)
Universiti Teknologi Malaysia
81310 UTM Johor Bahru, Malaysia.
Website: http://prospect.utm.my

Journal of Cleaner Production
Associate Editor

Optimal Systems Engineering Sdn Bhd (OPTIMISE)
Co-founder, Board of Director, Director of R&D
UTM Spin-off Company
Website: http://optimalsystems.my
Office:+607-5536025/36247 | Mobile: +6019-8683085 | Fax: +607-5588166
Primary Email: syarifah@utm.my | shasha@cheme.utm.my
Site: http://engineering.utm.my/chemicalenergy/ | https://people.utm.my/shasha/

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Keynote Speaker (1)

Ir Dr Sharifah Rafidah Wan Alwi
Malaysia

'Pinching' Eco-Industrial Park: Maximising Resource Savings and Minimising Waste and Emissions Towards SDGs

Industries play a key role in providing continuous supply of human's essential needs including food, chemicals, pharmaceuticals, building materials and equipment. Rapid population as well as industrial growth have been accompanied by rising demands for utility resources and widespread environmental pollution. Eco-industrial park (EIP) is the concept of industrial symbiosis between industries which are located within an industrial site. The concept of EIP became increasingly popular in the 1990s. It is reported by World Bank that there are already 250 EIP worldwide. The first modern EIP is Kalundborg in Denmark and is a reference for planners and industrial estates' leaders. An EIP network of linkages leads to high levels of environmental benefits and economic efficiency apart from many other less tangible benefits. It addresses multiple Sustainable Development Goals (SDG); SDG 6-9, 12 and 13. Major economic factors that influence the successfulness of eco-industrial networking are cost savings and enhanced competitiveness; reduced infrastructure costs; improved revenue generation; improved opportunity for investment (new businesses); job creation; improved human resources; and access to and development of new technologies. All these factors improve the competitiveness, attract investments, business retention, and community wellbeing towards. As many foreign companies are growing environmentally conscious, well developed and managed industries park such as Eco-Industrial Park (EIP) should be established to attract the foreign direct investment to foster the economic competitive development. Over the last four decades, Process Integration (PI) has emerged as a holistic approach for the optimal planning, design and retrofit of minimum resource utilisation networks. PI promotes symbiosis and synergy by maximising resource utilisation effi ciency and minimising wastes among interacting processes, industry and systems. In this lecture, PI techniques are discussed in the context of Eco-Industrial Park planning and management.

Marc A. Rosen

Past President, Engineering Institute of Canada and Professor (And Founding Dean From 2002-08)

Marc Rosen
BASc, MASc, PhD (Toronto), PEng,
FASME, FCSME, FEIC, FIEF, FCAE, FCSSE

Professor, Department of Mechanical and Manufacturing Engineering
Faculty of Engineering and Applied Science

PhD (Mechanical Engineering), University of Toronto, Canada, 1987
MASc (Mechanical Engineering), University of Toronto, Canada, 1983
BASc (Engineering Science, Nuclear and Thermal Power Generation Option),
University of Toronto, Canada, 1981

Courses:
Dynamics of vibrations;
Energy and the environment;
Engineering graphics and design;
Fluid mechanics;
Heat transfer;
HVAC and refrigeration systems design and analysis;
Industrial processes;
Law and ethics in engineering practice;
Mechanics;
Pollution prevention;
Pollution prevention and sustainable engineering;
Sustainable and alternative energy technologies;
Thermal environmental engineering;
Thermal power generation;
Thermal systems design; and
Thermodynamics.
Research and expertise

Professional activities:
President, Engineering Institute of Canada, 2008 to 2010;
Founding Dean, Faculty of Engineering and Applied Science, UOIT, 2002 to 2008;
Editor-in-Chief, International Journal of Energy and Environmental E
ngineering, 2012-present;
Editor-in-Chief (founding), Sustainability, 2009-present; and
President, Canadian Society for Mechanical Engineering, 2002 to 2004.

Honours and awards:
President's Award, Canadian Society for Mechanical Engineering, 2012
(for exceptional service to CSME and to mechanical engineering in Canada);
Fellow, Canadian Society for Senior Engineers, 2012;
Engineering Alumni Hall of Distinction, Faculty of Applied Science and Engineering,
University of Toronto, inducted 2010;
Research Excellence Award (Senior Category), University of Ontario Institute of
Technology, 2010;
Andrew H. Wilson History Award, Canadian Society for Mechanical Engineering,
2010 (for contributions to the history of engineering);
Best paper award, 6th WSEAS Int. Conf. on Engineering Education, 2009;
C.N. Downing Award, Canadian Society for Mechanical Engineering

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Keynote Speaker (2)

Marc A. Rosen
Canada

Engineering Sustainability for Sustainable Development

Sustainability is crucial for humanity, and engineering sustainability is an important contributor to overall sustainability and sustainable development. This is due to the pervasiveness of engineering and its importance in economic development and living standards, and the environmental impacts of engineering. But engineering sustainability is complex and challenging. Many factors that need to be considered and appropriately addressed in moving towards engineering sustainability are examined in this presentation, including appropriate selection of resources, use of sustainable processes, enhancement of the efficiency, environmental stewardship and others.

Mir Sayed Shah Danish

Assistant Professor, University of the Ryukyus;
Member, Board of Directors, REPA - Research and Education Promotion Association, Japan

Mir Sayed Shah Danish - Dr. Eng., MBA, CEng., SMIEEE, MIET - has been an engineering and technology expert and an academician for several years. He demonstrates a simple, in-depth narration style, turning concepts into measurable endeavors and systematically exploring interdisciplinary coverage. Apart from being a scientific scholar, he brings together multidisciplinary skills and expertise (energy, environment, business, and management), providing integrated solutions. He is the author of several academic and technical textbooks, guidebooks, training manuals, and other books in English and Dari (Persian) Languages. These publications have enabled him to link industry with academia, and he has achieved recognition with several awards and expressions of appreciation.

Since 2004, Dr. Danish has been involved in multidisciplinary engineering and technology by leading several projects in those fields while continuing as an active scholar and educator. He is an assistant professor at the University of the Ryukyus, Japan; founder and chair of the IEEE-Sustainable Energy and Intelligent Engineering Society (SEIES-PES & FRID joint chapter, Fukuoka Chapter); founder and facilitator of several academic branches of IET, ACM; and member of the board of directors, REPA - Research and Education Promotion Association. In addition, Dr. Danish has worked with national and international organizations and companies as an urban electric power planner, team leader, technical advisor, department head, educational manager, and director. He is a chartered engineer, UK (CEng.), senior member of IEEE, member of IET (MIET), and holds membership in many other academic societies. He received his bachelor's degree in electrical and electronic engineering (B.Sc.) in 2009 from Kabul University, Afghanistan); two master's degrees, one in energy and electrical engineering (M.Sc.) in 2015 from the University of the Ryukyus, Japan; the other in business administration (MBA) in 2016 from the National Institute of Business Management, India); and a doctorate in sustainable energy (Ph.D.) in 2018 from the University of the Ryukyus. He chaired and has been a committee member of several conferences and symposiums and has more than 100 publications. His main research interest is sustainable energy (policy, economics, market, environment, and management), smart cities and housing, storage systems, voltage stability, and related areas.

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Keynote Speaker (3)

Mir Sayed Shah Danish
Japan

An Archetype of the Modern Energy Policies Development: From Anticipation to Reality

This study discusses energy policy development at a critical moment that 169 countries are trying to save the world through ratifying the Paris Agreement (2016). However, competitive policy planning and design knew multidimensional endeavors when most developing nations are faced with the advent of economic and population increase day by day. Some of these countries still do not have energy policies or for many years remained unreformed. The presentation aims to retrieve nations' socio-economic onto a full growth path at the time of facing advents of many challenges fitting the sustainable development goals (SDGs). An adopted and new approach for a successful public energy policy development proposed to comply with the priorities by commensurate with the national strategies to meet anticipations and deliver optimum opportunities of technical, technological, political, social, environmental, economic, and institutional benefits. The proposed roadmap highlights a systematic knowledge of principles such as policy conceptualization, analysis, baselining, planning, development, and frameworking through exploring models, structures, and components in detail. Finally, it puts forward a series of procedures paradigm within multidisciplinary approaches in a synergistic manner as a multilateral policy development reference.

Alexey Mikhaylov

Deputy Director of Monetary Relations Research Center at Financial University under the Government of the Russian Federation, Russia

Alexey Mikhaylov
Ph.D. holds a lecturer position in Financial Markets and Banks Department in Financial University under the Government of the Russian Federation, Russia. He is an author of 30 scientific publications and conference papers indexed in SCOPUS and Web of Science, author of more than 80 scientific publications indexed in relevant scientific databases and author of 8 scientific monographs. He also is Head of laboratory of Financial markets and Banks department in Financial University under the Government of the Russian Federation. He specializes in Energy; Economics, Econometrics and Finance; Business, Management and Accounting; Environmental Science; Materials Science; Mathematics; Computer Science; Psychology; Social Sciences; Neuroscience. He has won numerous awards such as Rector's Award 2020 (Financial University). He is currently the Guest Editor in Metals (Q1 journal) and International Journal of Economics, Finance and Management Sciences. He has filed patent: Modified machine learning algorithm based on linear regression for forecasting oil prices, taking into account the influence of macroeconomic indicators. He is a member of Young Scientist Board of Financial University under the Government of the Russian Federation, ACI Russia – Financial Markets Association, Council on professional qualifications at the financial market, Russian Association of Crypto Industry and Blockchain.

ORCID ID: https://orcid.org/0000-0003-2478-0307
Editor in journals (Web of Science, Scopus) in 2020-2021:
https://www.mdpi.com/journal/energies/topic_editors
http://www.revistaorbis.org/equipoeditorial.html
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https://www.mdpi.com/si/53873

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Keynote Speaker (4)

Alexey Mikhaylov
Russia

Relationship of Financial Development Level and Sustainable Economic Growth

The purpose of the study is to identify the factors of financial development that have the greatest impact on the economic growth before COVID-19 pandemic of Russia. The analysis was performed using correlation analysis, construction and interpretation of the regression model, as well as its further verification for autocorrelation and heteroscedasticity. The time horizon covers the period 2007-2019. The article states that the largest negative impact on economic growth before COVID-19 pandemic among the many indicators of financial development has a domestic bank credit, and a significant positive impact - the capitalization of the stock market. Regression analysis confirms the statistical significance of the influence and finds the optimal equilibrium of stimulation real GDP growth (8.5%) via market capitalization growth (100.83%). The article describes the general problems of low financial literacy and weak public confidence, as well as risks arising in the process of globalization.

Vikas Sharma

Assistant Professor, Mechanical Engineering Department, Maharishi Markandeshwar University, Deemed university in Ambala, Haryana, India

Dr. Vikas Sharma has accomplished his study at renowned Institutions of India. He is also having Teaching Experience of 11 years of institutions having NIRF Ranking below 110. Dr. Sharma is an author of more than 25 research papers and conference papers indexed in Clarivate SCI, Scopus and Google Scholar in the field of advanced manufacturing processes and composite material. He has granted three Patents and filled one Patent in the field of Biomechanical Engineering. He also served as Guest Editor in Lecture Notes in Mechanical Engineering, Springer in the year 2019. Dr. Sharma also presented research paper in University of Cambridge, Cambridge, UK, 2018 on laser beam machining.
He is a reviewer of many esteemed Journals such as Elsevier, Springer, and Scopus Journals from 2015 to till date. He also conducted International Conference on Emerging Trends in Mechanical and Industrial Engineering (ICETMIE 2019) in association with GAIL (India) Ltd and Springer in 2019.
His specialization is in Additive Manufacturing, Laser Beam Machining, and Composite Materials. He is a lifetime member of Institutions of Engineers (IEI), India.

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Keynote Speaker (5)

Vikas Sharma
India

Sustainability of Additive Manufacturing (3-D Printing) And Its Environmental Impact

3-D Printing has the potential to make its remark on industry 4.0, which can be revealed in the growth of medical and aerospace industries. This technology distinguishes among other in terms of optimization of quality characteristics such as customized design, complex shapes, material consumption and production times. It provides a new disruptive path to transform basic business model into profitable model. Most manufacturers consider Additive manufacturing (AM) as one of the adaptable processes in the context of typical product design. Moreover, its positive effects on the environment make it sustainable and futuristic technology. Many parameters that need to be addressed in the presentation in context of sustainability, recycling of materials and eco-footprint. In the discussion, the current trend will be discussed for the latest additive manufacturing technologies being implemented in the industry. The various convenience points will be presented with respect to various parameters and technologies such as Stereolithography (SLA), Selective Laser Sintering (SLS), Selective Laser Melting (SLM), Digital Light Process (DLP), Multi Jet Fusion (MJF), PolyJet, Direct Metal Laser Sintering (DMLS) and Electron Beam Melting (EBM). In current era, it is strict responsibility of industries to identify the suitable technology to protect our generation from health issues. Finally, the additive manufacturing industry is definitely becoming a large industry in many sectors.

CRGS 2022

BEST PAPERS AWARDS 2022

Simon Fraser University
Vancouver, BC, Canada

Congratulation to the CRGS 2022 Best Paper Awards Recipients

This year, the Award and Appreciation Committee has announced two papers for the Best Paper Award. These two papers have received the same evaluation scores from reviewers and committee members. The best papers that received the CRGS 2022 Best Paper Awards will be published with one of the conference partners' journals by recommendation of the Scientific Committee with 100% Article Processing Charge (APC) waiver.

Best Papers Awards

Conference MC's Message!

We have the privilege of holding our conference Contests for Realization of Global Sustainability (CRGS) from 22-23 March 2022 at Simon Fraser University (SFU) in Canada.

My name is Tej S. from REPA - Research and Education Promotion Association, and it is my pleasure to bing MC for the CRGS 2022 international conference.

International Conference on Contests for Realization of Global Sustainability (CRGS 2022) offers a professional networking platform, backed by scientific reporting and discussion, which includes speakers talks, hybrid on-site and off-site (virtual) presentation options, two-tier: conference proceeding and journal special issue publication options, several registration discounts, and best papers award.

We welcome you all from around the world, calling this conference to gather for academic exchanges and make life memories even if it's only two days.

Seyed Mohammad Sadegh Hosseini Moghaddam et al.

Bushehr University, Iran

Evaluation for the Best Paper Award:
Not Nominated

Artificial Intelligence for Energy System Application in Smart Cities

Artificial intelligence (AI) plays a significant role in energy systems transformations in smart cities. Climate change and environmental sustainability imposed utilities to shift toward renewable energy resources and technologies applications in recent decades. Renewable energy technologies deployment is associated with high initial investment and integration with the existing supply and demand systems. Operation stability has been challenging to integrate renewable energy with the customary old systems. On the other hand, renewable energy ensures sustainable energy and future development with minimum loss and greenhouse gas emissions. Therefore, artificial intelligence is the primary mover of power systems modernization with high accuracy of management and control. This study tried to evaluate the efficiency and performance of artificial intelligence in the renewable energy sector, focusing on the European Union as the case study. This study analyzes the first renewable energy processes in the chain and energy from gross to final consumption. Then economic consequences of renewable energy using natural resources (solar, wind, etc.) in smart cities are discussed. Finally, the efficiency of artificial intelligence in renewable energy is examined, followed by future work.

Keywords:
Smart Energy
Smart City
Artificial Intelligence (AI)
Sustainable Energy
Climate Change
Energy System Automation

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Tobias Rösner and Christina Bredebach

Technical University Dortmund, Germany

Evaluation for the Best Paper Award: **Nominated**

Integrating the United Nations Sustainable Development Goals Into Organizational Strategy: A Sustainability Balanced Scorecard Approach Using ANP and TOPSIS

Artificial intelligence (AI) plays a significant role in energy sys Challenges related to sustainable development require companies to systematically align their strategies to meet stakeholder interests. The United Nations Sustainable Development Goals (SDGs) are guiding objectives for sustainable development on an international level up to the year 2030. This article links the goals of the SDGs to a recognized strategic management tool: the sustainability balanced scorecard (SBSC). So far, few approaches exist in this field. Consequently, this article presents a framework for developing and applying an SBSC that takes an integrative view of the SDGs. For this purpose, the analytic network process (ANP) and the technique for order preference by similarity to an ideal solution are applied (TOPSIS). The article concludes that the solution approach presented has considerable potential to support organizations in systematically integrating the SDGs into their strategy. Also, this article proposes interesting future research directions.

Keywords:
Sustainability Assessment
Balanced Scorecard
Multiple Criteria Decision-Making
Analytic Network Process
Sustainable Development Goals
Strategic Management

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Eisa Mousavi Rad et al.

Islamic Azad University, Iran

Evaluation for the Best Paper Award:
Not Nominated

Design of Zero Energy Residential Complex in the Smart City Environment

According to studies conducted by the Energy Consumption Management and Optimization Organization, in the typical constructions of the country, energy loss in buildings is often 22% through windows, 22% from floors, and 30% from walls. Applying the principles of energy consumption optimization in coordination with climatic conditions and design uses and the use of active and passive methods can effectively reduce energy consumption in conventional urban buildings. This research aims to provide solutions that address reducing energy consumption while creating quality in the architectural space. These solutions are obtained by recognizing the indicators of sustainable environmental design and comparative study with the climate of the desired design context. In the present study, the role of technology and digital tools in the field of location is the first and most important step in locating parts and functions and small-scale designs such as building facades. Then, the architectural recommendations of the climate and international standards were examined and some solutions were presented to reach the zero energy building(ZEB). Finally, the simulation method in Design Builder software analyzed the amount of energy consumption in the residential complex. It examined the researchers' efforts to find the best answer to the problems of architecture and urban planning. Results show a significant reduction in energy consumption to manage available resources in the best way.

Keywords:
Zero Energy
Renewable Energy
Residential Complexes
Smart Buildings
Advanced Cities
Energy Optimization

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Simra Nazim et al.

Amity University, United Arab Emirates (UAE)

Evaluation for the Best Paper Award: **Nominated**

The Future of Smart Mobility using 5G and IoT

Smart mobility based on 5G, IoT and AI is the future of transportation and a major part of innovative city development. Incorporating smart mobility solutions with city infrastructural facilities, such as public transport options and traffic data, can significantly improve safety on the road and optimize metropolitan economies that rely on efficient urban mobility to stay afloat. Vehicle-to-infrastructure (v2i) communication using ultrasonic, radar, and video technologies would convey data in real-time to daily commuters on networks, allowing for the detection of risky behavior before drivers are aware of it. The study focuses on the current scenario, future trends, and challenges with smart mobility. That followed by discussing how IoT can use AI and 5G to communicate faster, reduce latency and create a road management system to minimize problems in urban transportation systems. Analysis on the future of 5G and IoT in smart mobility discusses the current trends in the transport system, autonomous vehicles, public transport, car-sharing schemes, (mobility as a service) Mobility on Demand. IoT connects all transport systems and communicates using 5G technology, facilitating fast communication and reducing latency and connecting millions of devices to the network.

Keywords:
Smart Mobility
Future Transportation
Electric Vehicle
Smart City
Mobility on Demand
Devices Networking

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Mir Sayed Shah Danish et al.

University of the Ryukyus, Japan

Evaluation for the Best Paper Award: **Nominated**

A Contemporary Outlook on Energy Policy and Strategy Development Within Sustainability Constraints

In the industrial revolution era, which is associated with climate change and environmental crises, drawing viable strategies and tacking strategic policy actions will lead to environmentally friendly energy transitions. Strategic energy development highlights at the moment that 169 countries are trying to save the world through ratifying the Paris Climate Change Summit (2016). At the same time, competitive energy strategy aligning energy demand requires a multidimensional investigation to propose a long-run and sustainable policy planning. This study tries to draw a fundamental energy policy and strategy pathway that retrieves nations' socio-economic onto a full growth path when facing multiple challenges that fit the sustainable development goals (SDGs). First, an initial literature review evaluates a systematic framework to guide energy policy development. Then deals with adopting new approaches for a successful public energy policy development that meets priorities by commensurate with the national strategies to meet anticipations and deliver optimum opportunities of technical, technological, political, social, environmental, economic, and institutional benefits.

Keywords:
Energy Strategic Approach
Environmental Friendly Energy
Sustainable Energy
Socio-Economic Energy
Energy Strategy
Energy Policy

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Temitayo Shenkoya et al.

Chungnam National University, South Korea

Evaluation for the Best Paper Award:
Not Nominated

Student Startup: A Comparative Analysis of the Factors That Influence the Performance of Student Entrepreneurs in University Accelerators in Japan and South Korea

COVID-19 pandemic has caused a slow-down in economies across the globe, associated with a drop in their Gross Domestic Product (GDP). In a bid to lead efforts on the recovery of global economies, startups are one of the tools to champion these efforts. There is a lack of studies on the comparative analysis of factors that improve the performance of university accelerators in various countries. This study seeks to bridge the gap. The lessons from this study will help develop and least develop counties seeking to find ways to galvanize their economies in the fourth industrial revolution. Furthermore, it will allow developed countries whose economic progress has slowed down due to the pandemic - to learn from the lessons herein to find viable ways to champion their economic growth. The need to find a possible solution to put the world back on its track to champion sustainable growth and end poverty makes studies relating to the development of startups important. The methodology adopted in this research is mixed with qualitative and quantitative analysis. A systematic literature review will be carried out, and a mathematical model will be developed and analyzed using the multiple linear regression analysis methods.

Keywords:
University Startups
Pandemic Recovery
COVID-19 Impact Analysis
Gross Domestic Product
Entrepreneur
Economic Recovery

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Tandin Dorji et al.

Ministry of Education, Bhutan

Evaluation for the Best Paper Award:
Not Nominated

Aquaculture Advancement Ensuring Food Security and Local Sustainability: A Case Study

Aquaculture in Bhutan has been only for a decade or two. It is still on the verge of blooming. This study focuses on the attitude and willingness of the consumers to pay for aquaculture products, especially fish attributes, including farmed versus wild-caught fish in Haa district. Knowing the consumer preferences towards various species and their attributes could explain aquaculture industrial development and management in Bhutan. Furthermore, the results from our survey of local consumer preferences, particularly in terms of production source, will generate recommendations for policy and industry. A questionnaire survey method collects data on the attitude, and the willingness to pay for fish product attributes, including farmed versus wild-caught fish. This study examines consumers' attitudes towards payment for farmed fish and wild-caught fish products and the consumers' preferences over various fish species for both farmed and wild-caught.

Keywords:
Aquaculture Development
Bhutan Aquaculture
Farmed Fish Production
Wild-Caught Fish
Fish Consumers
Aquaculture Process

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Qamar Navid et al.

Beijing Institute of Technology, China

Evaluation for the Best Paper Award:
Not Nominated

Super-Capacitors Using Advanced Bio-Based Electrode Technology

Designing and optimizing new cell configurations for hybrid battery/supercapacitor systems is a growing field of opportunity. The processing of electrodes and cell assembly is just as necessary as developing the material and cell. In most cases, supercapacitors with bio-based electrodes can be used with batteries, enhancing their operating efficiency and overall performance. This study deals with the advantages and disadvantages of different supercapacitors, especially bio-based material electrodes. Bio-based materials for electrodes are discussed from both research and application perspectives, along with brief explanations of their properties, such as surface area and capacitance values. An overview of different materials for supercapacitor electrodes will be provided, along with individuals' positive and negative features. Findings are associated with information on the storage mechanism, working principle, and storage efficiencies of bio-based amended supercapacitors. Finally, cell configurations will be examined, highlighting the advantages and disadvantages of bio-based electrodes.

Keywords:
Supercapacitors
Bio-Based Amended Supercapacitors
Bio-Based Materials
Electrodes
Storage Efficiency
Supercapacitor Configurations

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Liezel Estrella-Pajulas et al.

Silliman University, Philippines

Evaluation for the Best Paper Award: **Nominated**

A Review on the Green Synthesis of Silver Oxide Nanoparticles for Photocatalytic Environmental Remediation and Biomedical Applications

This study reports the development of silver oxide nanoparticles (Ag2O NPs) fabricated using plant-mediated and microbe-mediated green synthesis. Metal oxide nanoparticles have been gaining attention because of their unique physical and chemical attributes, especially in environmental remediation. Applications range from removing heavy metals poisonous gas sensing textile biomedical to photocatalytic degradation of organic contaminants, following the growing interest in using silver oxide nanoparticles (Ag2O NPs) in many research fields. This study discusses the green synthesis of silver oxide nanoparticles covering plant-mediated and microbe-mediated fabrication of Ag2O. Several studies have reported the fabrication of Ag2O NPs via plant-mediated and microbe-mediated green synthesis. This nanoparticle preparation method is cost-effective, environmentally friendly, and not hazardous since conventional toxic solvents and reagents do not need to be used. More importantly, there are innumerable plants on the plant-mediated synthesis that can be used as the reducing agent in synthesizing the nanoparticles. Based on the literature, the Ag2O NPs prepared using the green synthesis methods show promising photocatalytic properties to remove organic compounds. These Ag2O NPs also showed remarkable antimicrobial and cytotoxic properties.

Keywords:
Metal Oxide Nanoparticles
Silver Oxide Nanoparticles
Green Synthesis
Plant-Mediated Synthesis
Microbe-Mediated Synthesis
Environmental Mitigation

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Hameedullah Zaheb et al.

University of the Rykyus, Japan

Evaluation for the Best Paper Award: **Nominated**

Nuclear Energy Within the Human and Environmental Sustainability Dimensions

Sustainable development requires the proper integration of humans and technology to be logical and friendly to environmental sustainability. Energy remains one of the most debated topics after the industrial revolution, while green energy is of the current century. International regulation binds nations to act responsibly in this regard. The disasters of Chernobyl and Fukuyama nuclear power plants alert societies that nuclear energy must remain secure, reliable and green. Still, the implications of any such incidents on both ecology and humanity remain grave. The importance of the research is to provide humanity with sustainable green energy, alongside the safety of both society and environment. The research objectives are to find the best possible ways to generate renewable green energy that has the most negligible implications for the ecology and humanity, and it can contribute to the policy making of nations. Energy data is retrieved from some reliable sources, i.e., IAEA, NEA, INRA and the independent nuclear agencies of Ukraine and Japan may provide some valuable figures for using as primary tools for manipulating the data. Nations must agree to surrender their independent energy programs to a global energy agency that may generate and regulate the energy in all the world regions for a better and more sustainable future.

Keywords:
Sustainable Energy
Environmentally Friendly Energy
Nuclear Energy
Energy Security
Energy Future
Sustainable Development

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Waqas Saeed et al.

MBBS University, Pakistan

Evaluation for the Best Paper Award: **Not Nominated**

Scientific Discovery Learning With Education Simulations Within Theoretical Practices in the Field of Law

This study investigates the applicability of studies on scientific discovery learning in simulations to professional legal education simulations, specifically in the field of law. There are significant parallels between the conclusions of this domain's study and our own experience of conducting simulations in law at the Glasgow Graduate School of Law, which we have found to be true. On the other hand, simulation learning is dependent on characteristics that occur not only in the design of the simulation but also in the environment in which it is implemented. While many of the studies on scientific discovery learning represent an important paradigm for law and other disciplines, we contend that the educational effectiveness of e-simulations is critically dependent on three factors: the design of learning outcomes, the type of simulation field used, and the organization of communities of practice surrounding or within a simulation. As a result of this evidence, there is a basic need to change the way designers think about making things because of the new medium coming along. This new medium will become a new "trading zone."

Keywords:
Education Simulations
Scientific Discovery Learning
Legal Education Simulations
E-Simulations Factors
Designing Learning Outcomes
Organizing Communities

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Zunaira Iftikhar et al.

Agile Institute of Rehabilitation Sciences, Pakistan

Evaluation for the Best Paper Award:
Not Nominated

A Thematic Analysis of the Pandemic Impact on Universities Students' Mental Health

Covid-19 pandemic has made the future uncertain for many in general but students in particular because of institutes suddenly shutting down, and while this new transition has hit everyone differently. Still, it has left a significant toll on the students specifically. This pandemic has changed the ways of living - financially, physically, emotionally, and mentally. This study analyzes the impact of Covid-19 on the students' mental health. It covers all over the globe and how they have been dealing with it, which coping mechanisms worked best for them during this time. The study also analyses how different financial backgrounds have left a different psychological impact on the students. The methodology adopted for it utilizes all the previous research and their data, which helped us determine the most worked solution vs. the least worked solution. Along with the previously done research, data from UNICEF concerning Education and Covid-19 has been utilized for determining the adverse impact of Covid-19. This study has also briefly touched on the impact of remote learning on students' mental health and how students have coped with this sudden yet uncertain new change. The research has come up with some proven solutions via which students can perform better in their academics during this uncertain time without compromising their mental health.

Keywords:
Pandemic Impact
Universities Students' Mental Health
COVID-19 Pandemic
Pandemic Recovery Options
Educational System Resiliency
Pandemic Mental Concerns

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Naveed Ahmed Qureshi et al.

Bahria University, Pakistan

Evaluation for the Best Paper Award:
Not Nominated

Evaluation of green supply chain impact on organizational performance

Supply chain is one of the essential domains of business. The customer of the current era is well aware of sustainable factors and the corporation has to implement green supply chain strategies in the organization. The objective aims to suggest strategies to reduce waste during the whole supply chain process. Moreover, the study aims to evaluate the impact of green supply chain strategies on organizational performance. High involvement of waste reduces the efficiency of the supply chain process, which ultimately creates an adverse impact on the performance of an organization. The lack of waste reduction strategies affects the environment regarding pollution and over-consumption of energy. The study is descriptive, and a systematic literature review approach is used to evaluate the impact of green practices on organizational performance. The research contributes to the field of academics and business as well. From a theoretical point of view, the desired study extends the literature for future scholars. The selected research suggests strategies to reduce supply chain waste from a business perspective.

Keywords:
Green Supply Chain
Supply Chain Process
Organizational Performances
Energy Over-Consumption
Organizational Assets
Organizational Strategies

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Mir Sayed Shah Danish et al.

University of the Ryukyus, Japan

Evaluation for the Best Paper Award:
Not Nominated

Interplay Consequences of COVID-19 on Global Environmental Sustainability

This chapter outlines the essentials of COVID-19 and its relation to environmental mitigation. COVID-19 pandemic has altered the ranking concern of climate change distress, and it is ranking as the first global priority to be adequately tackled. However, pandemic demonstrates with economic, social, and cultural constraints. Still, climate change and environmental pollution have been ignored as the utmost precaution while its impact is more severe in the long run. This chapter evaluates available opportunities for environmental sustainability in the pandemic era. At the same time, the most significant aspect of solid waste, especially clinical waste, is critical for limiting pandemics and preventing future consequences of improper waste management. Sustainable production relies on criteria that ensure affordability, accessibility, use efficiency, safety, disparity, and other factors of production, supply, distribution, and consumption in the way of efficient, cost-effective, and environmental-friendly.

Keywords:
Environmental Sustainability
COVID-19 Impacts
Pandemic Consequences
Solid Waste Management
Sustainable Production
Supply Chain

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Dejan Ivic et al.

University of Belgrade, Serbia

Evaluation for the Best Paper Award: **Nominated**

Deep Learning-Based Control Framework for Soft Open Points Control Under Communication Interruption

Conventional normally open points in distribution networks tend to be progressively replaced by power electronics-based devices i.e., Soft Open Points. The control of Soft Open Points (SOPs) shall ensure reliable and efficient operation of the complete network under regular operation conditions and under different interruptions/failures in necessary communication infrastructure. The main objective of the research is to explore possibilities and present the preliminary evaluation of deep learning-based control algorithm used to control Soft Open Point under communication interruptions. The Soft Open Points (SOPs) are foreseen as the new resource to improve the network flexibility, increase power supply reliability and increase the Distributed Generators Hosting Capacity. The efficient operation of Soft Open Points inevitably requires the reference values of power injections usually calculated using some Optimal Power Flow (OPF) algorithm. The SOP control cannot be performed under communication interruption and/or OPF unavailability using a centralized OPF-based strategy. The benefits of SOP integration have been widely reflected along with the entire distribution network and manifested as loss reduction, voltage profile improvement, increase of power supply reliability and improvement of the network flexibility. Simulation results retrieved as part of the proposed research will be a basis for further research, implementation and improvements of real SOP local controllers.

Keywords:
Soft Open Points (SOPs)
Communication Infrastructure
Optimal Power Flow (OPF)
Distribution Network
Power Flow Optimization
Power System Controller

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Zanaira et al.

The University of Lahore, Pakistan

Evaluation for the Best Paper Award:
Not Nominated

Tetheredness to Technology, Cognitive Fatigue: Buffering Effect of Willpower and Leadership Support to Mechanize the Creative Process Engagement of Employees

This research unloads the association between tetheredness to technology and creative process engagement (CPE), proposing a mediating role of cognitive fatigue and the moderating role of organizational and personal resources in transformational leadership and willpower. Three lags data from employees and their supervisors in the organizations of Pakistan, which represent essential evidence that tetheredness to technology in off-working hours depletes CPE is that individuals become cognitively fatigued by their technology-assisted job demands. Employees' transformational leadership and willpower buffer this adverse impact of tetheredness to technology through cognitive fatigue, like that this impact is alleviated when these two resources are plentiful. This study also interprets moderated mediation. The indirect effect of tetheredness to technology on CPE via cognitive fatigue is lesser for employees with high transformational leadership and willpower. For workplaces, this research consequently detects an essential mechanism through that work-related excessive psychological contact can damage creative behaviors; this mechanism is a little bit influential among employees who have a higher potential in jobs.

Keywords:
Technology Tetheredness
Cognitive Fatigue
Creative Process Engagement
Willpower
Transformational Leadership
Organizational Management

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Mir Sayed Shah Danish et al.

University of the Ryukyus, Japan

Evaluation for the Best Paper Award: **Nominated**

Environmental Re-Engineering Opportunity at the Pandemic Era

Climate change disaster and COVID-19 socio-economic impacts are leading nations to dramatic tragedy. Simultaneously, increasing demand for energy due to population, political competition, and industrial growth globally. At present, pandemic attracts more attention due to their immediate effect. While climate change is ignored, that can have a worsen consequence not only on the present but for the future generation in the long run. Therefore, re-engineering the current pandemic situation with a futurism outlook for saving the world will enable nations to transform and rethink strategies, policies, procedures, processes, and any actions that can cope with present and possible future pandemics climate change tragedies. Herein this study, the concept of re-engineering is applied for environmental sustainability, considering mitigation factors due to pandemic outstretch. This study aims to recall the pre-industrial times when most human activities were environmentally satisfied. So, this study pointed out re-design of sustainable society associated with viable policies at local and national structures to explore available opportunities that might be pandemic caused as the lesson-learned of the importance of environmental sustainability. Hence, this study first pointed out literature and statics related to the pandemic, following with environmental sustainability opportunities within constrained pandemic situations.

Keywords:
Environmental Re-Engineering
Environmental Sustainability
Sustainable Energy
Climate Change Mitigation
Climate Change Scenario
Pandemic

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Manisha Phour et al.

Chaudhary Charan Singh Haryana Agricultural University, India

Evaluation for the Best Paper Award: **Nominated**

Electro-Microbiology: A Sustainable Approach for Green Energy

The electro-microbiology field is making essential contributions to biofuels and renewable resources to meet the twenty-first century's difficulties, which researchers are seeking alternative renewable energy sources. Developing novel technologies to simultaneously improve power output and their transfer into biosynthetic pathways to create valuable chemicals is urgently required. Waste CO2 may be utilized as a carbon source in the manufacture of organic molecules, minimizing the need for significant amounts of arable land. This technique can be completely sustainable and carbon neutral if a renewable energy source is employed. A further advantage of microbial aided chemical synthesis using MECs is that it provides a very appealing and unique way for creating valuable compounds from wastewater while also generating power. Electromicrobiology offers the potential to address some of society's core pressing issues. Although many of the early investigations in Electromicrobiology were motivated by further optimizing microbial fuel cells for energy harvesting, several other potential possibilities for microbe electrode interactions have appeared recently, and probably more will be envisioned. The sensible development of any of these technologies will be based upon the ongoing study of electromicrobiology's fundamental processes, which is discussed in this study.

Keywords:
Electro-Microbiology
Biosynthetic
Biological Energy Systems
Microbial Aided Synthesis
Electromicrobiology
Microbial Fuel Cells

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Vaibhav Rai Khare et al.

IBPSA-India Chapter, India

Evaluation for the Best Paper Award: **Nominated**

A Strategic Planning Framework for Outdoor Thermal Comfort in Urban Head Island

Cities' rapid urbanization affects the characteristics of outdoor urban microclimates by altering pedestrians' perception and increasing the urban heat island effect. These poses challenges to many researchers and urban space designers in finding appropriate methods to reduce the urban heat island and thus to enhance the thermal comfort level of outdoor spaces to prolong the period of their use of space and viability as urban retreats. However, there is limited research conducted on outdoor thermal spaces. Micro-climate conditions in urban open spaces are directly linked to the configuration of the building. There are different indices developed to represent thermal comfort based on several parameters. This study aims to create an outdoor human thermal comfort index that is physiologically valid across various environmental conditions. The influence of urban geometry on the micro-climate and human comfort in urban spaces is an essential aspect to consider when estimating outdoor comfort. This study aims to review the outdoor thermal comfort factors based on the urban heat island (UHI) mitigation strategies, which include cool roof non-roof (shading with structure tree plantation water bodies) and covered parking.

Keywords:
Urban Heat Island (UHI)
Outdoor Thermal Spaces
Micro-Climate Conditions
Human Thermal Comfort Index
Outdoor Thermal Comfort Indices (OTCI)
Urban Energy Applications

Type of Paper: Regular

Paper Status: Accepted

Presentation: In-person

Muhammad Alyas et al.

Imran Idrees Teaching Hospital, Pakistan

Evaluation for the Best Paper Award: **Not Nominated**

Validated Scales of Measurement Used to Measure Cancer Fatigue: A Systematic Review

In cancer patients, fatigue is a common but controllable disease that significantly impacts many aspects of their personal lives. The total prevalence is between 50 and 90 percent among cancer patients. After addressing reversible or treatable factors like hypothyroidism, pallor, rest unsettling influence, torment, psychiatric trouble, climacterium, unfavorable medicine reactions, metabolic aggravations, or organ brokenness (cardiovascular breakdown, myopathy, and pneumonic fibrosis, patients) may be screened with a short fatigue self-appraisal instrument or scale. All cancer patients should be aware of their fatigue at all times. Systematic reviews of available scales for measuring cancer-related fatigue are expected to focus on those that have already been approved or validated. Each of the scales must have been approved for use in cancer patients and widely utilized in this population to meet the criteria of inclusion. Searches on PubMed and NCBI yielded a total of 5088 papers, which were narrowed down to 34 papers that yielded 12 scales (5 unidimensional and seven multi-dimensional). Scales were influenced by psychometric features, items, scale, malignancy site, dimension, and population. Most of the time, a one-dimensional fatigue scale was shown to be a more accurate gauge.

Keywords:
Measurement Validated Scales
Measure Cancer Fatigue
Cancer Patients
Fatigue Disease
One-Dimensional Fatigue Scale
Multi-Dimensional Fatigue Scale

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Seyedeh Zahra Mousavi et al.

Islamic Azad University of Marvdasht, Iran

Evaluation for the Best Paper Award:
Not Nominated

Evaluating the Effect of Optimizing Energy Consumption in Hotels for Increasing Efficiency and Revenue Generation in Various Places

Since the consumption of non-renewable energy has become a global challenge, hotels, commercial complexes, and industrial sectors are the most energy-consumed building among these consumers. Hotels energy management because of various consumption loads and continued utilization are essential. Therefore, the present study examines the solutions for optimizing energy consumption in the mentioned places. And evaluating the sectors that consume the most energy clarifies the optimal solutions. Also, some solutions are presented in the global context studies that can be further information to contribute to efficiency improvement. Applied methods in this study examine the proposed case study and compare the finding to the previous methods.

Keywords:
Energy Consumption Optimization
Hotel Energy Management
Hotel Economy
Renewable Energy Applications
Energy Efficiency
Smart Energy

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Temitope Francis Abiodun

University of Ibadan, Nigeria

Evaluation for the Best Paper Award:
Not Nominated

Massive Deployments of Insurgent Intelligence by Non-state Violent Actors (NSVAS) In the 21st Century: A Serious Threat to Global Security

The practice of intelligence is not limited to the machinery of a nation state alone. In more recent years, the rise of 'private sector intelligence' has only just begun to be interrogated by practitioners and academics. However, the use of intelligence by insurgents and other groups assembled to achieve varied forms of politico-military outcomes has often been overlooked. Therefore, this paper examines the factors and conditions that give rise to the deployment of insurgent intelligence by the Non-State Violent Actors (NSVAs), the level and trends of deployment, and implications for global security. The paper reveals a flawed pre-conception that insurgent movements are not as highly bureaucratized as state entities; therefore, it is subsequently assumed that they lack the sophistication to produce intelligence. This study recommends adequate training on security personnel in the states to be alive to their responsibilities and ensure the proper border control and management to checkmate the influx of violent or deadly movements across global frontiers.

Keywords:
Terrorism
Non-violent State Actors
Private Sector Intelligence
Security
Violent and Safety
Intelligence Security

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

Hamideu Jafari et al.

Islamic Azad University, Iran

Evaluation for the Best Paper Award:
Not Nominated

Hybrid Electric Vehicles in Smart Urban Environments to Optimize and Manage Energy Consumption

Information technology is considered the central axis of change and development in world technologies. Its achievements have been integrated into people's lives in such a way that turning it away and ignoring it will cause a significant disruption in society. In this regard, e-cities in any country can provide a gradual, logical, scientific, and economic presence of this valuable phenomenon, which is currently a measure of countries' scientific ability and power to produce, distribute, and use knowledge. The automotive industry is one of the industries that has made significant progress with developing and expanding information technology in smart urban environments. Two critical issues are raised along with the increasing advancement of technology in the automotive industry. The first is pollution from fossil fuels and the second is the limitation of these resources. Among the technologies that have helped reduce pollution and fuel consumption are hybrid vehicles, one of which is electric hybrid vehicles, fuel cell technology, direct-injection gasoline engines, diesel engines with homogeneous air mixture, and fuel and dual-fuel vehicles noted.

Keywords:
Hybrid Electric Vehicles
Automotive Industry
Intelligence Urban
Smart Cities
Climate Change
Information Technology

Type of Paper: Regular
Paper Status: Accepted
Presentation: In-person

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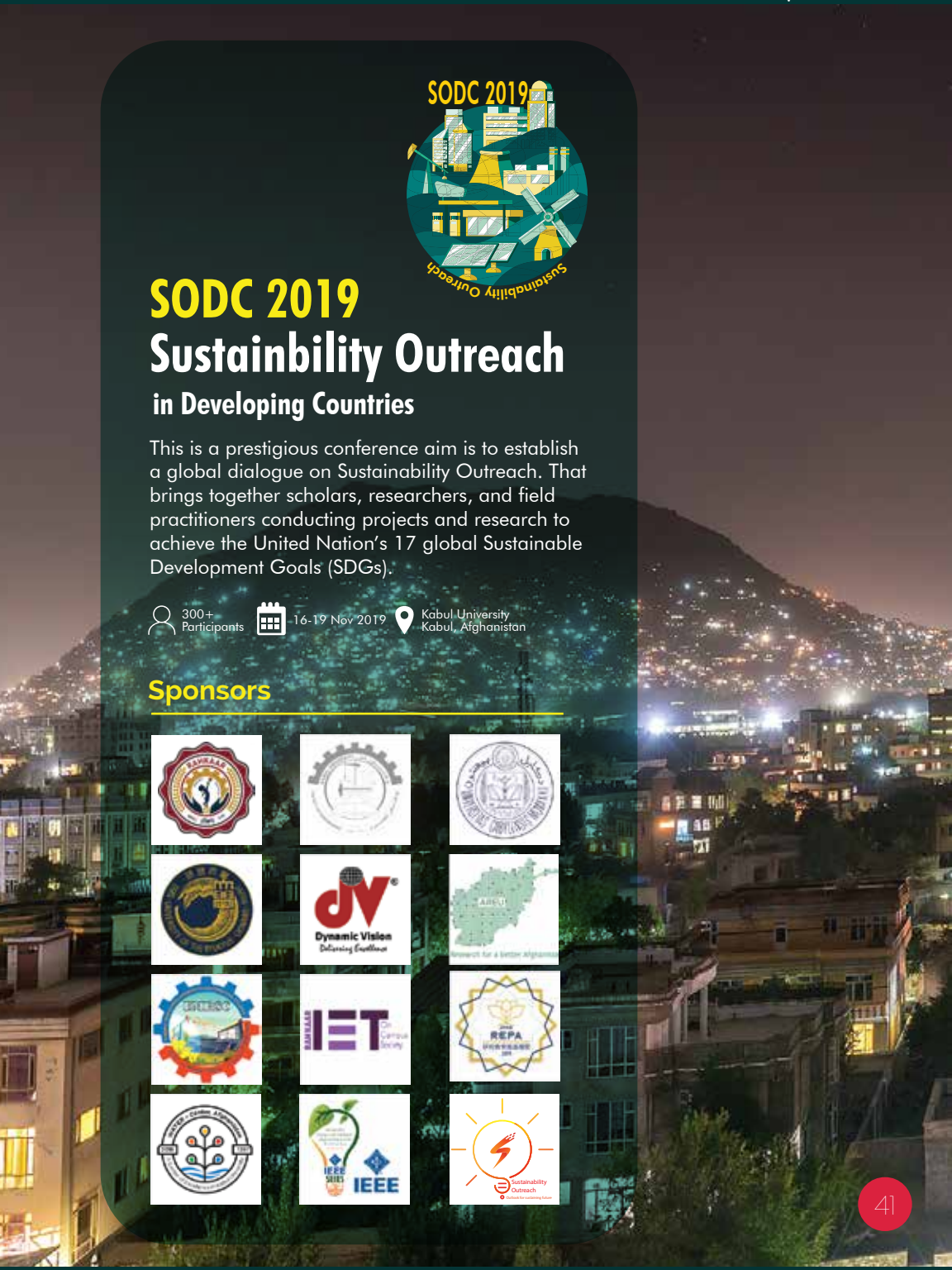

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Keynote Speakers	10+
Sessions	8
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Participants/Attendees	600+
Accepted Abstracts	56
Delivered Presentations	51
Full Paper Submission Deadline	Closed
Call for Full Paper	It is closed for submission(including sub abstracts)
Publishers	Conference Proceeding, IGI Global & Springer (accepted papers only)
Review Process	As per IGI Global & Springer peer-review regulations
Expected Rate of Acceptance	40+
Conference Series	Will be held in Asia, Europe and Latin America during 2020-2024

IETSO 2020
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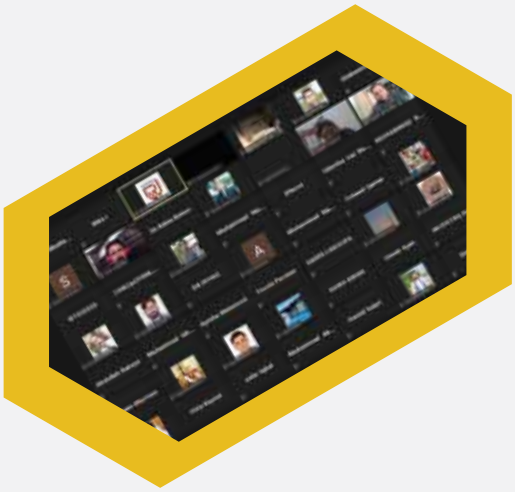
The recent endeavors towards sustainable development within Sustainable Development Goals (SDGs) 2030 has raised global attention for its potential to overcome the century challenges through universal collaboration to protect the planet, eradicate poverty, and ensure peaceful life.



Nowadays, nearly all of the academic institutions' consideration has been on how efficiently to design and implement the SDGs strategic roadmaps, proposing viable solutions, localizing the goals, incorporating research efforts, and sum up with call for action at national and international levels.

Therefore, in collaboration with acknowledged universities and organizations, REPA - Research and Education Promotion Association creates an international forum to discuss and share knowledge for effective deployment of the SDGs 2030 within viable models, scenarios, and best worldwide accepted practices.

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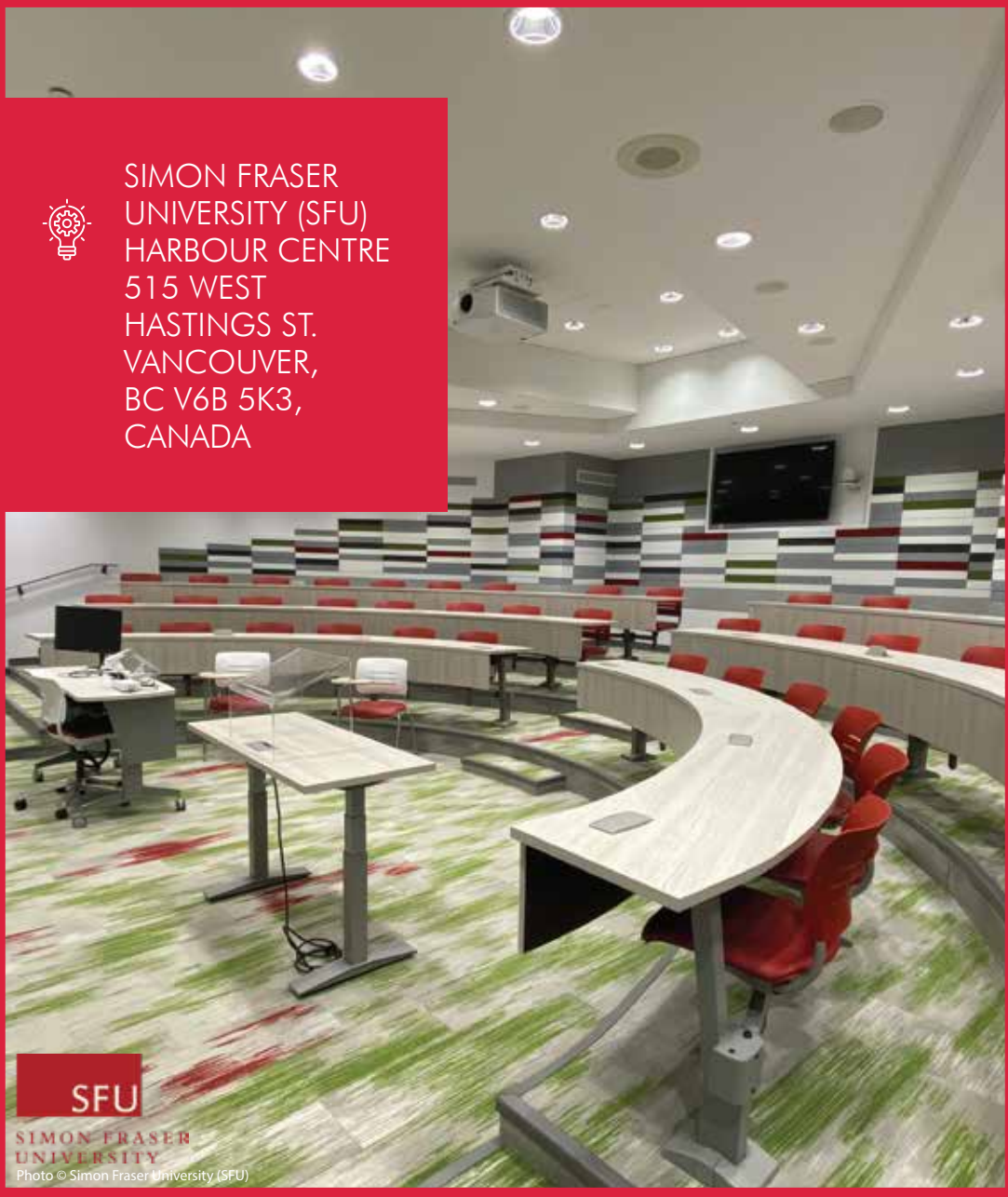

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Simon Fraser University
Burnaby, B.C. Canada
Tel : +1 (778) 744-6640
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