

THE 3RD SUSTAINABILITY AND RESILIENCE CONFERENCE: CLIMATE CHANGE

November 15-16, 2021, Online

PROGRAM

THE 3RD SUSTAINABILITY AND RESILIENCE CONFERENCE: CLIMATE CHANGE

DAY1 (15/11/2021)	
09:00 – 09:20	OPENING CEREMONY
09:20 – 09:30	BREAK
09:30 – 11:00	KEYNOTE SPEAKER: BNP PARIBAS SESSION ON CLIMATE CHANGE BY MR. JÉRÔME PONROUCH AND MR. CRAIG LEESON
11:00 – 11:10	BREAK
11:10 – 12:50	PARALLEL SESSIONS A1 – A7
12:50 – 13:00	BREAK
13:00 – 14:00	KEYNOTE SPEAKER: RENEWABLE ENERGY SESSION BY PROF. WAHEEB ALNASSER
14:00 – 14:10	BREAK
14:10 – 15:50	PARALLEL SESSIONS B1 – B7
DAY2 (16/11/2021)	
11:10 – 12:50	PARALLEL SESSIONS C1 – C7
12:50 – 13:00	BREAK
13:00 – 13:20	CLOSING REMARKS AND GROUP PHOTO

Please note that the time zone currently being used in the conference program is Bahrain Time. Bahrain observes Arabia Standard Time all year.

Parallel Session Details:

Bahrain time	Monday, November 15	Tuesday, November 16
11:10 - 12:50	A1: <u>Sustainable Management</u> A2: <u>Climate Change</u> A3: <u>Education for Sustainable Development</u> A4: <u>Heritage and Sustainable Development</u> A5: <u>Solar Systems and Heat Transfer</u> A6: <u>Biodiversity and Ecology (1)</u> A7: <u>Agriculture, Forestry, and Fisheries</u>	C1: <u>Energy Sustainability, Resilience, and Transportation</u> C2: <u>Energy and Renewable Fuels</u> C3: <u>Smart Urbanism</u> C4: <u>Sustainable Buildings and Resilience</u> C5: <u>Water Resources and Agriculture</u> C6: <u>Building Systems and Technology</u> C7: <u>Social and Organizational Sustainability</u>
12:50 - 14:10		
14:10 - 15:50	B1: <u>Greenhouse Gases and Sustainability</u> B2: <u>Sustainability of Water Resources</u> B3: <u>Sustainable Construction (1)</u> B4: <u>Health</u> B5: <u>Sustainable Construction (2)</u> B6: <u>Sustainable Management and Resilience Planning</u> B7: <u>Innovation and Technology in the Built Environment</u>	

Monday, November 15

Monday, November 15 11:10 – 12:50

A1: Sustainable Management

Chair: Saswati Borah

11:10 Action Research Approach: Improving the Effectiveness of Decision Making on Controlling Employee Turnover Rate in a Small Private Steel Casting Company under Capacity Limited Environment

Poh-Chuin Teo, Jia Ran, Theresa C.F. Ho, Ling Suan Choo and Zaiful Hasmi Mohd Hashim

11:26 The Relationship of HR Internal Service Quality on Employees' Satisfaction in The Baking Sector of Bahrain

Naglaa Fathy El Dessouky and Asmaa Al-Ghareeb

11:43 Green Human Resource Management For Sustainable Organizations

Naglaa Fathy El Dessouky and Hakeem Alquaiti

12:00 A discussion of damage mitigation of natural disasters: How to increase citizens' preparedness

Hiroko Oe and Yasuyuki Yamaoka

12:16 Exploring the Role of Web Personalization in Consumer Green Purchasing Behavior: A Conceptual Framework

Mustafa Raza Rabbani and Abu Bashar

12:33 Knowledge Exploitation and Knowledge Exploration for Sustainable Performance of SMEs

Muhammad Uzair Asif, Muzaffar Asad, Muhammad Kashif and Muhammad Abrar ul Haq

A2: Climate Change

Chair: Hajar Ali Mahfoodh

11:10 Characterization of PM2.5/PM10 ratios over Eastern Part of Saudi Arabia and Bahrain from 2008 to 2019

Gulnur Coskuner, Majeed S. Jassim, Mohamad Zaid and Umer Malik

11:30 Climate Change Implications on Small Island Developing States (SIDS): a Socioeconomic Perspective from the Kingdom of Bahrain

Ali Saleh, Saud Altaei and Fahad Alkhaldi

11:50 Climate Change in KSA: Effects, Trends and Planned Actions

Gaydaa AlZohbi, Abdullah Alzahrany and Golam Kabir

12:10 Reflections on the Kigali Amendment Implementation in the GCC

Hajar Ali Mahfoodh, S. Shubbar Hameed Ebrahim, Khuld Jabby, Ali Tumayhi and Abdulmohsin Alghamdi

12:30 Assessing PM2.5 in Bahrain From the DPSIR Framework Perspective

Sara E Ghanem, Hanan Abbas and Asma Abahussain

A3: Education for Sustainable Development

11:10 *The feasibility and benefits of installing grid-connected PV Systems in the Kingdom of Bahrain*

Shaker Haji, Amal Durazi, Yaser Al-Alawi and Motaz Mestarehi

11:30 *A Brief Review on Hydrogen production to Utilization Techniques*

Fazil Qureshi, Mohammad Yusuf and Bawadi Abdullah

11:50 *Remediation of Plastic waste through Microbial Degradation*

Haleema Zeb Abbasi, Umair Amjad, Bibi Zeb and Muhammad Hashim Abbasi

12:10 *Building a Pedagogical Framework for the Education of Sustainable Development using a Values-based Education Approach*

Ruo Xi Huang, Alessandro Pagano and Agostino Marengo

12:30 *Temperature-dependency of Environmental Higher Education*

Anwaar Buzaboon, Hanan M Albuflasa, Waheeb Alnaser, Safwan Mahmood Shatnawi, Khawla Albinali and Eman Almohsen

A4: Heritage and Sustainable Development

Chair: Hessa AlAtawi

11:10 *Hybrid school design and living museums as means to spread cultural awareness of developed educational systems*

Nehal Ali Almurbati and Shaikha Almalood

11:26 *Technological Environmental Education in the Arab World: Case of Kingdom of Bahrain*

Nahed Yusuf Salman, Mahmood Saeed Mustafa Alalawi, Ahmed Abdulla Al-Shaalan and Mariam Al-Mannai

11:43 *The Relationship between Climate Change and Cultural Heritage in the GCC*

Hajar Ali Mahfoodh and Hessa AlAtawi

12:00 *Smart Sustainable Initiatives for Traditionally Planned Cities: A Theoretical Analysis*

Parminder Kaur and Harveen Bhandari

12:16 *Developing an Integrated Approach for Management of Living Religious Heritage in Indian Context*

Harveen Bhandari

12:33 *Rethinking life Post Pandemic: Would reviving the courtyard make a difference?*

Hawra Jaafar Shaikh Mansoor and Zainab Abdulhusain Mohamed

A5: Solar Systems and Heat Transfer

11:10 *Solar Power Assessment for Photovoltaic Installation in Malaysia University Campus*

Ghaithan Sadeq Ghaithan, Aliyah Sanusi and Fadzidah Abdullah

11:30 *Assessment of Lightweight Aggregate Concrete Using Textile Washing Stone*

Shah Room, Mujahid Ali, Mohammad Azad Alam, Usman Khan, Syed Ammad and Syed Saad

11:50 *A Hybrid Clean Energy System Based Thermal Solar Technologies*

Amgad Muneer, Abdo Ali Al-Shara and Chandrasekharan Nataraj

12:10 *A Computer Simulation to Analyze the Cost-Benefit of Solar Air Cooling: Case Study for Jordan*

Abdulghafgoor Ibrahim Ahmed Saidi princess sumaya university for technology, Fawzi Mohammed Munir Al-Naima and Abdul Ghani Abdul Aziz Abdul Ghani Albaali princess sumaya university for technology

12:30 *Urban heat island: case study of Diyar Al Muharraq in Bahrain*

Fatima Janahi

A6: Biodiversity and Ecology (1)

Chair: Reem Sultan

11:10 *Population variation of Polyphagotarsonemus latus (Banks) in Baghdad province, central Iraq*

Luaay K Khalaf, Sr.

11:26 *Estimating evapotranspiration using remote sensing and the metric energy balance model: case study of Sidi Benour region (Morocco)*

Abdelmejid Rahimi, Abdelkrim Bouasria, Ikram El Mjiri, Fatna Zaakour and Mohammed Bounif

11:43 *A Biologically Distinct Isolate of Cucumber mosaic virus from Iraq*

Aya Nasir and Mustafa Adhab

12:00 Production of Pure Aflatoxin B1 (AFB1) Using Different Media

Aseel Al-Rahdi, Mustafa Adhab and Halima Hussein

12:16 Hydrogen production via natural gas reforming: A comparative study between DRM, SRM and BRM techniques

Mohammad Yusuf, Leila Bazli, Mohammad Azad Alam, Kok Keong Lau, Azmatullah Noor, Faisal Masood, Klaus Hellgardt and Bawadi Abdullah

12:33 Biodiversity and occurrence of plant viruses over four decades: Case study for Iraq

Mustafa Adhab, Nawres Al-Kuwaiti and Rakib Al-Ani

A7: Agriculture, Forestry, and Fisheries

11:10 Soil quality index to assess soil management practices in the semi-arid of Morocco

Hiba Et-tayeb

11:30 Vertical farms and sustainable food security .. Urban concept

Islam Hamdi El Ghonaimy and Fatema Hashem

11:50 The Impact of Urban Sprawl on The Marine Wealth of Bahrain

Mohamed Husain Ali

12:10 Study of agricultural land use variability in Doukkala irrigated area between 1998 and 2020

Mohammed Bounif, Abdelmejid Rahimi, Abdelkrim Bouasria and Ikram El Mjiri

12:30 The Prototype Design of Water pH and TDS Indicator Device based on Microcontroller Arduino

Muhammad Raihanto, Gisya Yudhistira, Melinska Febrianti and Qurtubi Qurtubi

Monday, November 15 14:10 – 15:50

B1: Greenhouse Gases and Sustainability

Chair: Hajar Ali Mahfoodh

14:10 Greenhouse Gas Mitigation and Energy Recovery Potential for Optimum Waste Management Scenarios in Bahrain

Gulnur Coskuner, Majeed S. Jassim, Sadeq Jaffer and Salman Ali

14:30 Problems of CO2 Emissions in Ukraine and Ways to Overcome Them

Myroslav Panchuk, Andrii Panchuk and Ilona Mandryk

14:50 Gas Waste Management in the GCC

Hajar Ali Mahfoodh, S. Shubbar Hameed Ebrahim and Mohammed Redha Qader

15:10 Biogas Market in Indonesia: The Roles of Carbon Trading

Nadiya Pranindita, Saut Sagala, Agunan Samosir, Johannes Anhorn, Ann-Kathrin van Laere, Aleksejs Zacepins, Angela Sainz, Dominik Rutz, Bernhard Wlcek, Dwight Rosslee, Frank Hofmann, Franz Kirchmeyr, Jorge Hilbert, Mutala Mohammed, Wondwossen Bogale and Yaseen Salie

15:30 A Shear Mixing approach in Polymer Composite Formation

Saba Ayub, Beh Hoe Guan, Faiz Ahmad and Zaib Un Nisa

B2: Sustainability of Water Resources

14:10 Sustainability of water resources with precise modelling of crop coefficients

Chandrasekhar Reddy K

14:30 Kinetic modelling of nutrient removal of petroleum industry wastewater remediation

Azmatullah Noor, Shamsul Rahman Mohamed Kutty, Ahmad Hussaini Jagaba, Mohammad Yusuf, Md. Wasim Akram, Md. Raghieb Adil, Nehal Ahmad and Mohsin Jamal

14:50 Effect of hydraulic retention time on the treatment of Pulp and Paper Industry Wastewater by Extended Aeration Activated Sludge System

Ahmad Hussaini Jagaba

15:10 Flood Estimation Studies Using Hydrologic Modelling System (Hec-Hms) For Batu Pahat River Malaysia

Aiman Mohammed, Safwan Sadeq and Amgad Muneer

15:30 Sphericity and Shape Analysis For Grain Scale Organization at Lepoh River, Hulu Langat Selangor

Aiman Mohammed, Amgad Muneer and Safwan Sadeq

B3: Sustainable Construction (1)

Chair: Ehab Juma Adwan

14:10 Impact of the COVID-19 Pandemic on Construction Industry in Malaysia

Aawag Mohsen Alawag, Wesam Salah Alaloul, Mohd Shahir Liew, Muhammad Ali Musarat, Abdullah Baarimah, Khalid Mhmoud Alzubi and Muhammad Altaf

14:30 Using Sulfur Extender to Evaluate the Environmental Effects and Energy Demand of Reclaimed Asphalt Pavement

Mohammad Ibna Anwar, Md. Arifuzzaman, Md Kamrul Islam and Uneb Gazder

14:50 BIM Methodology applied to Facility Management: development of an integrated tool to benefit the building operation

Luã Carneiro, Yan Jeronymo, Pedro Murga, Giovanna Consulmagnos, Karoline Figueiredo and Assed N Haddad

15:10 Application of Machine Learning for Prediction of Early Seven-Day Strength of Concrete in Factories

Sami Osman, Ayed Alluqmani, Md. Arifuzzaman, M. Aburizaiza, W. Sindi and Md Shah Alam

15:30 Investigating the Tensile Strength and Permanent Deformation of Asphalt Concrete using Different Gradation Methods

Muhammad Junaid and Uneb Gazder

B4: Health

Chair: Mohammad Selim

14:10 The impact of the vaccination and booster shots in containing the COVID-19 epidemic in Bahrain: a game theory approach

Mona Abdulkarim AlSayegh

14:26 Identifying the Type of Chronic Kidney Disease Based on Heavy Metals in Soil using ANN

Dinithi Weerasinghe, Banage Kumara, Kuhaneswaran Banujan and S. k Gunathilake

14:43 A Numerical Study of High Hydrostatic Pressure Using CFD

Abdul Ghani Abdul Aziz Abdul Ghani Albaali princess sumaya university for technology and Fawzi Mohammed Munir Al-Naima

15:00 Enhancing Medical Data Transparency and Integrity with Blockchain Based Implementation

Lim Qing Yuan, Muhammad Ehsan Rana and Qusay Al Maatouk

15:16 The effects of planned urban development on the comfort of healthy urban living

Mohammad Selim

15:33 Impact of COVID 19 on Small and Medium-Sized Enterprises: Evidence from Egyptian Plastic Packaging Industry

Dina El kayaly, Nahla Hazem and Irene Fahim

B5: Sustainable Construction (2)

14:10 Investigating Mechanical Properties of Interlocking Concrete Blocks by Recycling Waste Polyethylene Terephthalate – A Sustainable Approach

Kok Heng, Muhammad Imran Khan, Muslich Sutanto, Salah Elias Zoorob and Sri Sunarjono

14:30 Employing a robust data-driven model to assess the environmental damages caused by installing grouted columns

Mohammed Majeed Hameed, Faidhalrahman Khaleel and Deiaaldeem Khaleel

14:50 Effect of Palm Oil Clinker Powder-Based Geopolymer as a Modifier on the Properties of Bitumen and Mixtures: A Sustainable Approach

Nura Shehu Aliyu Yaro, Madzlan Napiiah, Muslich Sutanto, Aliyu Usman, Abdulfatai

Murana and Waqas Rafiq

15:10 Identification and evaluation of barriers and drivers to sustainable construction in China

Muhammad Sajjad, Hu Anfeng, Abdul Hannan Qureshi and Li Yonghua

15:30 Implementation Challenges of Automated Construction Progress Monitoring Under Industry 4.0 Framework Towards Sustainable Construction

Abdul Hannan Qureshi, Wesam Salah Alaloul, Bilal Manzoor, Syed Saad, Aawag Mohsen

Alawag and Khalid Mhmoud Alzubi

B6: Sustainable Management and Resilience Planning

14:10 Cultivating Employee Green Behavior: The Essence of Individual Green Value

Yossra Fareed El-Tony and Ling Suan Choo

14:26 Challenges and Motivations for Youth Entrepreneurship Start-Ups: Empirical study from Egypt

Dina El kayaly and Irene Fahim

14:43 Do technological innovation, financial development, and economic freedom limit energy demand The analysis of ASEAN+3

Ala Fathi and Aliya Isiksal

15:00 Covid-19 Interior and Architectural Design Solutions for Educational Workshops

Zainab AbdulMohsen Eid

15:16 Digital Wallet in Supporting Green FinTech Sustainability

Muhammad Anshari, Mohammad Nabil Almunawar, Masairol Masri and Mahani Hamdan

15:33 Management Analysis on Occupational Health and Safety in the Boiler House Using Method of Hazard Identification, Risk Assessment and Determining Control

Auliaur Lutfianto, Melinska Febrianti, Gisya Yudhistira and Qurtubi Qurtubi

B7: Innovation and Technology in the Built Environment

Chair: Anamika Jiwane

14:10 Integration of Building Information Modeling (BIM) and Value Engineering in Construction Projects: A Bibliometric Analysis

Abdullah Baarimah, Wesam Salah Alaloul, Mohd Shahir Liew, Al-hussein M. H. Al-Aidrous, Aawag Mohsen Alawag and Muhammad Ali Musarat

14:30 PVT Properties for Yemeni Reservoirs Using an Intelligent Approach

Salem Baarimah and Abdullah Baarimah

14:50 Recent Environmental Economic Rating of Renewable Energy Deployment in Prospective Built Environment in Saudi Arabia

Yousif Mohammed Alsharidah and Abdulsattar Alazzawi

15:10 Investigation of the Current Innovative Industrialized Building Systems (IBS) in Malaysia

Al-hussein M. H. Al-Aidrous, Nasir Shafiq, Abdullah Baarimah and Aiman Hasan Hamood Al-Masoodi

15:30 Brainstorming Room Design Using Service Design

Bayan Aburowais

Tuesday, November 16

Tuesday, November 16 11:10 – 12:50

C1: Energy Sustainability, Resilience, and Transportation

Chair: Wafa Al-Ghatam

11:10 Automation in Traffic Engineering to Prevent Road Accidents: A Review

Muhammad Ali Musarat, Muhammad Altaf, Muhammad Babar Rabbani, Wesam Salah Alaloul, Khalid Mhmoud Alzubi and Marsail Ghaleb Al Salaheen

11:26 Awareness of Vehicle Safety Features and Their Use and Impact on Accidents

Uneb Gazder

11:43 Evaluation of flexible pavement distresses – A Case Study of Northern Bypass Peshawar, Pakistan

Mujahid Ali, Faisal Masood, Muhammad Imran Khan, Mohammad Azeem, Muhammad Qasim and Fatehah Ali

12:00 Comparative analysis of support vector machine and maximum likelihood classifications using satellite images of Selangor, Malaysia

Mohammed Feras Baig, Muhammad Raza UI Mustafa, Husna Takaijudin and Muhammad Talha Zeshan

12:16 Design resilience of co-working space using users' persona maps for interior designers

Fatema A.Aziz Qaed and Nehal Ali Almurbati

12:33 Influence of Symmetrical and Asymmetrical Voltage Sags on the Performance of a Variable Frequency Transformer

Imdadullah Imdadullah

C2: Energy and Renewable Fuels

Chair: May Khalfan

11:10 Conducted Emissions of Compact Fluorescent Lamps and Electronic Ballast Modeling

[Mulualet T. Yeshalem](#), [Baseem Khan](#) and [Om Prakash Mahela](#)

11:30 Optimization of electric power systems considering the environmental impact and uncertainties

[Gonzalo E Alvarez](#) and [María Julia Blas](#)

11:50 A Review of the Hybrid Darrieus-Savonius Turbine for Hydrokinetic Applications

[Nauman Maldar](#), [Cheng Yee Ng](#) and [Elif Oguz](#)

12:10 Optimisation of energy supply net with a single energy source

[Vladimir Nikulshin](#)

12:30 Thermal and Morphological Characterization of Coagulation-Processed Nanocomposite of Polypropylene and Bio-nanocarbon obtained from Bamboo

[Zaib Un Nisa](#), [Kanchuan Lee](#), [Saba Ayub](#), [Beh Hoe Guan](#) and [Faiz Ahmad](#)

C3: Smart Urbanism

Chair: Huda Almadhoob

11:10 A Comprehensive Study of Distinctive Methods of Waste Segregation and Management

[Shravya Chepa](#), [Shivani Singh](#), [Himanish Dutt](#), [Aashish Sharma](#), [Santosh Madeva Naik](#) and [Hema Mahajan](#)

11:30 Sustainable Neighbourhood: A Urban Improvement Strategy for the Kingdom of Bahrain

[Zahra Iftikhar Ahmed](#)

11:50 Soil artificialization assessment by using time series remote sensing data (case El Jadida)

[Ikram El Mjiri](#), [Abdelmejid Rahimi](#) and [Abdelkrim Bouasria](#)

12:10 Investigation of a novel drying technique in tableware production process

[Haneen Hassan](#), [Sherifa Elhady](#) and [Irene Fahim](#)

12:30 Construction Accidents via Integrating Building Information Modelling (BIM) with Emerging Digital Technologies a Review

[Syed Ammad](#), [Syed Saad](#), [Muhammad Bashir](#), [Abdul Hannan Qureshi](#), [Muhammad Altaf](#) and [Kumeel Rasheed](#)

C4: Sustainable Buildings and Resilience

Chair: Mona Ismail

11:10 *The Study of Sustainability and Parametric Design Approach of Tall Buildings at Early Design Stage-Review**The vertical city model is gaining popularity as a result of rapid urban population growth, the widespread spread of economics, developers, and d*

Aiman Hasan Hamood Al-Masoodi

11:26 *A case study on Green Buildings and its applicability in Bahrain*

Mona Ismail, Abdulla HusamAddin Ahmed, Abdulla Dawood Almanea, Ahmed Alsuliman and Abdulla Alsuliman

11:43 *Orientation Effect on Energy Consumption in Building design*

Brahim Belmahdi

12:00 *Building Information Modelling in Morocco: Quo Vadis?*

K Idrissi Gartoumi, A Aboussaleh and Z Smail

12:16 *Evaluation of Interaction between Bridge Infrastructure Resilience Factors Against Seismic Hazard*

Ángel Francisco Galaviz Román, Md Saiful Arif Khan and Golam Kabir

12:33 *Automated Monitoring for Construction Productivity Recognition*

Khalid Mhmoud Alzubi, Wesam Salah Alaloul, Marsail Ghaleb Al Salaheen, Abdul Hannan Qureshi, Muhammad Ali Musarat and Abdullah Baarimah

C5: Water Resources and Agriculture

Chair: Abdulla Alqaddoumi

11:10 *An effective predictive model for daily evapotranspiration based on a limited number of meteorological parameters*

Mohammed Majeed Hameed, Faidhalrahman Khaleel, Mustafa Abbas Abed, Deiaaldeem Khaleel and Mohamed Khalid AlOmar

11:26 *Comparative Study between Two Methods of Crop Classification in the Irrigated Area of Sidi Bennour*

Abdelkrim Bouasria, Khalid Ibno Namr, Abdelmejjid Rahimi, El-Mostafa Ettachfini, Ikram El Mjiri and Mohammed Bounif

11:43 Use of Remote Sensing Data to Estimate Sugar Beet Crop Yield in the Doukkala Irrigated Perimeter

[Abdelkrim Bouasria](#), [Khalid Ibno Namr](#), [Abdelmejid Rahimi](#), [El-Mostafa Ettachfini](#), [Ikram El Mjiri](#) and [Mohammed Bounif](#)

12:00 The economic feasibility of converting agricultural waste to PLA using simventure

[Nahla Hazem](#) and [Irene Fahim](#)

12:16 Effectiveness of different surface soil covers in reducing turbidity and total suspended solids under severe rainfall events

[Muhammad Talha Zeshan](#), [Muhammad Raza Ul Mustafa](#) and [Hifsa Khurshid](#)

12:33 Hybrid GSA-CS assisted performance evaluation of single-channel PVT air collector

[Sourav Diwania](#), [Devendra Rawat](#), [Maneesh Kumar](#) and [Gagandeep Singh Dua](#)

C6: Building Systems and Technology

Chair: Abdulla Al-Jalahma

11:10 Facilitating Role of Cloud Computing in Driving Big Data Emergence

[Teah Yi Fan](#) and [Muhammad Ehsan Rana](#)

11:26 IoT-based Smart Water Quality Monitoring System for Malaysia

[Kamalanathan Shanmugam](#), [Muhammad Ehsan Rana](#) and [Roshenpal Singh](#)

11:43 Evaluating the Impact of Design Patterns on Software Maintainability: An Empirical Evaluation

[Hen Kian Jun](#) and [Muhammad Ehsan Rana](#)

12:00 Sentimental Analysis, Technology and Application

[Shagun Garg](#), [Prakharima Singh](#) and [Neha Singh](#)

12:16 A Framework for Catering Software Complexity Issues Using Architectural Patterns

[Abdulla Muaz](#), [Muhammad Ehsan Rana](#) and [Vazeerudeen Abdul Hameed](#)

12:33 Multidisciplinary Computational Optimization: an Integrated Approach to Achieve Sustainability in Tall Building Design at Early Stage

[Fadi H Alkhatib](#)

C7: Social and Organizational Sustainability

Chair: Nehal Ali Almurbati

11:10 Social Sustainability and Social Innovation Design: towards a memorable family space

Zuhoor Khadem, Hana Aljowder, Fatema A.Aziz Qaed and Nehal Ali Almurbati

11:30 The Role of Human Resource Policies in Fostering Organizational Success: An Evidence from Bahrain's Construction Sector

Habib Mohamed and Elsayed Elamir

11:50 Corporate Ownership Structure and Dividend Payouts: The Case of GCC Countries

Mohamed Almulla and Omar I. Juhmani

12:10 Identifying the Impact of Corporate Sustainability on Organizational Performance: A Quantitative Evidence from MENA Region Industrial Sector

Nada Megahed, Shaju George and Wedyan Ismaeel

12:30 Measuring Women Empowerment Practices in Private Sector in Bahrain

Sara Matoog and Waleed A. Aziz