



International Conference on Innovation,
Technology, Enterprise and Entrepreneurship

ICITEE 2019

Kingdom of Bahrain

Conference Programme

 24 - 25 November 2019

 The Grove Hotel & Conference Centre, Amwaj Islands



Day 0 – 23 November 2019
Registration & Welcome

Floor 13

The Grove Hotel & Conference Centre, Amwaj Islands

6.00pm-8.00pm

Conference Reception and Registration



Day 1 – 24 November 2019

8.00am-9.00am

Guests Arrival and Registration

9:00am-9:15am

National Anthems & Opening Remarks

Professor Ghassan Aouad, President, Applied Science University, Kingdom of Bahrain

Professor Paul Ivey, Deputy Vice-Chancellor and Chief Business Officer, London South Bank University, United Kingdom 'Conference Chairs'

9:15am-9:30am

Speech by the Patron of the Conference, HE Dr Majid bin Ali Al Nuaimi, Minister of Education and Chairman of the Higher Education Council, Kingdom of Bahrain

Speech to be delivered by HE Dr Abdul Ghani AlShuwaikh, Secretary General, Higher Education Council, Kingdom of Bahrain

9:30am-9:45am

Welcome Speeches

Professor Waheeb Al Khaja, Chairman of the Board of Trustees, Applied Science University, Kingdom of Bahrain

Professor David Phoenix, Vice-Chancellor, London South Bank University, United Kingdom 'Conference Honorary Chairs'

9:45am-10.00am

The Importance of Research and Innovation in the Arab World

HE Professor Amr Ezzat Salama, Secretary General, Association of Arab Universities 'Honorary Guest'

10.00am-10.15am

The Role of the Chartered Institute of Building (CIOB) in promoting research and innovation

Professor Charles Egbu, President, Chartered Institute of Building, United Kingdom

10.15am-10:25am

Tokens of Appreciation

10:25am-10:30am

Group Picture

10:30am-10:45am

Coffee Break

Day 1 – 24 November 2019 *Cont.*

10:45am-11:30am	Keynote Session: Future Directions of Research in the United Kingdom (chaired by Prof Charles Egbu)			Professor David Phoenix, Vice-Chancellor, London South Bank University, United Kingdom
11:30am-11:45am	Questions and Answers			
12:00pm-1:00pm	Lunch Break			
Theme Chair	Innovation - Professor Hiam Khoury	Education - Professor Yusuf Arayici	IT - Professor Yazeed Al Sbou	
1:00pm-1:20pm	<i>Innovation Management: Exploring the synergy between management innovation and technological innovation in the context of global value chains, Mohamad Wafai, Royal Roads University, Victoria, Canada</i>	<i>Online Educational Gaming System for Children with Autism, Moaiad Khder, Samer Shorman, and Hajar AlManea, Applied Science University, Kingdom of Bahrain</i>	<i>An Agile Method to Promote Self-Organized Software Development Teams, Mohammed Youssif, Applied Science University, Kingdom of Bahrain and Jose Galud, University of Castilla-La Mnacha, Albacete, Spain</i>	
1:20pm-1:40pm	<i>Modern Paints and Modern Art: Synthetic Paint Media and their Impact on Art of the 20th Century, Mohamed Soltan, Applied Science University, Kingdom of Bahrain</i>	<i>Using Technology in Legal Education: Urgency, Benefits, Risks, and Challenges, Abdullellah Nawayseh, University of Sharjah, United Arab Emirates</i>	<i>Scientific Research Online Management System Proposed System for Applied Science University - Bahrain (Case Study), Moaiad Khder and Samah Fujo, Applied Science University, Kingdom of Bahrain</i>	
1:40pm-2:00 pm	<i>Creativity, Design, Management, Innovation, Enterprise and Entrepreneurship: A Conversation Starter, Kathryn Best, American University of Sharjah, United Arab Emirates</i>	<i>Soft Skills that Improve Distributed Teams and E-learning Efficiency: A Theoretical Proposal, Mohammed Youssif, Applied Science University, Kingdom of Bahrain and Sebastián Romero-López, Consejería de Educación JCCM, Albacete, Spain</i>	<i>Quality of Service Monitoring of Wireless Networks Based on Combined Active-Passive Measurements, Yazeed Al Sbou, Applied Science University, Kingdom of Bahrain</i>	
2:00pm-2:20pm	<i>The Height of Future Architecture: Significance of High versus Low Rise Architecture in Science Fiction Films, Islam Abohela and Noel Lavin, Applied Science University, Kingdom of Bahrain</i>	<i>Analysis and Design of a Curriculum Management Information System, Ayman Al Dmoor and Udai Al Juboori, Applied Science University, Kingdom of Bahrain</i>	<i>Cloud-Based ERP Systems Implementation: Major Challenges and Critical Success Factors, Ahmad Shatat, Applied Science University, Kingdom of Bahrain</i>	

Day 1 – 24 November 2019 *Cont.*

Theme Chair	Innovation Professor Hiam Khoury	Education Professor Yusuf Arayici	IT Professor Yazeed Al Sbou
2:20pm-2:40pm	<i>The Role of Managerial Innovation in Improving Human Resource Performance at Bahrain Sport Federations, Bedoor Alhajeri and Adel Alzyoud, Applied Science University, Kingdom of Bahrain</i>	<i>Innovation in the Education of Architectural Schools to Improve Awareness of Architecture Conservation, Nihad Almughany, Applied Science University, Kingdom of Bahrain</i>	<i>Empirical Study in Image Denoising Using Total Variation Based On Color Space, Samer Shorman, Applied Science University, Kingdom of Bahrain</i>
2:40pm-3:00pm	<i>Innovative Field Applications of Fiber Reinforced Polymer Composite Reinforcing Bars in Civil Engineering Infrastructures, Hamdy Mohamed, Applied Science University, Kingdom of Bahrain</i>	<i>Using Problem-based Learning in Innovation Management: The Case of Social Innovation at Arabian Gulf University, Odeh Al Jayyousi and Rustom Mamlook, Arabian Gulf University, Kingdom of Bahrain</i>	<i>Towards Arabic Common Criminal Policy on Combating IT Offences, Ahmad Abu Olaim, and Husein Bani Issa, Applied Science University, Kingdom of Bahrain</i>
3:00pm-3:20pm			<i>A Method of Word Spotting for Machine-Printed Arabic Text Documents, Ayman Al Dmoor, Applied Science University, Kingdom of Bahrain</i>
3:20pm-3:40pm			<i>Real-time Website Security, Mohammad Al Hamami, Applied Science University, Kingdom of Bahrain, Omar Nofal and Alaa Al Hamami, Princess Sumaya University for Technology, Jordan</i>
3:40pm-4:00pm	Tea Break		

Day 1 – 24 November 2019 *Cont.*

Theme Chair	Entrepreneurship - Dr Faiza Zitouni	Sustainability - Professor Hilal AlBayatti	Financial Innovation - Dr Ramzi Nekhili
4:00pm-4:20pm	<i>The Relationship between Entrepreneurial Leadership and Job Satisfaction: A study of Small and Medium Size Manufacturing Enterprises in Kingdom of Bahrain, Fatema Albufelasa and Ahmed Al Muhamadi, Applied Science University, Kingdom of Bahrain</i>	<i>Smart and Green Infrastructure for Future Cities, Yamuna Kaluarachchi, London South Bank University, United Kingdom</i>	<i>Culture, Bank Supervision, and Investor Protection: Evidence from Financial Crisis, Ashraf Khallaf, and Feras Salama, American University of Sharjah, United Arab Emirates</i>
4:20pm-4:40pm	<i>Entrepreneurship as a Pillar of Economic Diversification*: Can a Growing Support for Tech Startups and a Flourishing Entrepreneurial Ecosystem Make Bahrain a New Regional Hub?, Hatem Dammak, Applied Science University, Kingdom of Bahrain</i>	<i>Supporting the Growth and Development of SMEs in Kingdom of Bahrain, Ragab Ismail and Adel Al Samman, Applied Science University, Kingdom of Bahrain</i>	<i>Assessment of predominant barriers affecting the progression of transport infrastructure investment: A Case of Johannesburg Metropolitan Municipality, Khotso Ditsebe, Clinton Aigbavboa, Wellington Thwala and Kgaygelo Chiloane, University of Johannesburg, South Africa</i>
4:40pm-5:00pm	<i>The Relationship between Creativity and Entrepreneurial Intention among Young People in Bahrain and Indonesia: Literature Review, Adel Alzyoud and Ahmed Arab, Applied Science University, Kingdom of Bahrain and Aprihatiningrum Hidayati, PPM School of Management, Jakarta, Indonesia</i>	<i>Smart City Business Models from a Waste Management perspective: A Systematic Literature Review, Nisha Shetty, Suresh Renukappa, Subashini Suresh and Khaled Algahtani, University of Wolverhampton, United Kingdom</i>	<i>Islamic Finance for SMEs: Past, Present and Future Direction, Hafnida Hasan, Laad Sartwai and Nizar Naim, Applied Science University, Kingdom of Bahrain and Nora Abdul Rahman, Universiti Utara Malaysia, Malaysia</i>
5:00pm-5:20pm	<i>The Role of Higher Education Institutions in Promoting Entrepreneurship in the Kingdom of Bahrain, Hatem Dammak, Applied Science University, Kingdom of Bahrain</i>		<i>The Prominence of Publicly and Privately Funding Transport Infrastructure Projects in the Gauteng Province, South Africa: Appraisal of Financial Mechanisms, Khotso Ditsebe, Clinton Aigbavboa, Wellington Thwala and Kgaygelo, University of Johannesburg, South Africa</i>
8:30pm-10:30pm	Conference Gala Dinner <i>Gala Dinner Speaker: Professor Charles Egbu, President of CIOB, introduced by Professor Ghassan Aouad</i>		

Day 2 – 25 November 2019

9:00am- 9:00pm

Conference Sessions

9:00am- 9:30am

Keynote Address: *Entrepreneurship at London South Bank University, United Kingdom (chaired by Professor Ghassan Aouad)*

Professor Paul Ivey, Deputy Vice-Chancellor and Chief Business Officer at London South Bank University, United Kingdom

Theme Chair

BIM and Innovation in Construction
Dr Islam Abohela

Sustainability
Professor Hilal Albayatti

Project and Knowledge Management
Professor Khaled Gharaibeh

9:40am-10:00am

Implementing Building Information Modeling in Kuwait, Asmaa Alsaleh, Empire Digital Construction & Consultation, Kuwait and Mustafa Alshawi, Unisearch Ltd, United Kingdom

A Review of Occupant's Energy Behavior Data Collection Methods and Techniques, Rima Alaaeddine, Song Wu and Elham Del Zendeh, University of Huddersfield, United Kingdom

Achieving Success in Construction Projects: Is it Influenced by Project Management Techniques, Assem Al Hajj, Khawarizmi International College, United Arab Emirates and Mario Zraunig, Senior Project Manager, CH2M, United Arab Emirates

10:00am-10:20am

Automated Health and Safety Documentation in Construction Using Image Processing, Rula Sharqi, Ammar Kaka and Yasmen Nilson, Heriot Watt University, United Arab Emirates

Sustainability of the UK Construction Industry Workforce: A Critical Review, Robert Wharton, Suresh Renukappa and Hani Alamil, University of Wolverhampton, United Kingdom

The Impact of Knowledge Management on Employees' Performance in Bahrain Petroleum Company (BAPCO), Radwan Kharabsheh and Adnan Alomari, Applied Science University, Kingdom of Bahrain

10:20am-10:40am

Smart Modern Construction Businesses: The Transforming Business Models in Industry 4.0, Priyadarshini Das, Srinath Perera, Sepani Senaratne, and Robert Osei-Kyei, Western Sydney University, Australia

The Impact of Training and Staff Development on the Sustainability of SMEs and New Business Ventures: A Review of the Literature and Research Methods to Explore the Link, Mohammed Abu Keir and Yasser Abuseneh, Applied Science University, Kingdom of Bahrain

The Power of Coaching: Impact of Coaching Programs on Employee Performance in Bahraini Companies, Adel Al Samman and Fatima Ismail, Applied Science University, Kingdom of Bahrain

10:40am-11:00am

Agile BIM Framework for a New Management Approach, Nouredin Omar and Taha Elhag, Heriot-Watt University, Dubai Campus, United Arab Emirates

The UK Water Industry Issues and Challenges, Andrew Kamunda, Suresh Renukappa, Subashini Suresh and Saeed Al Nabt, University of Wolverhampton, United Kingdom

Day 2 – 25 November 2019 *Cont.*

Theme Chair	BIM and Innovation in Construction Dr Islam Abohela	Sustainability Professor Hilal Albayatti	Project and Knowledge Management Professor Khaled Gharaibeh
11:00am-11:20am	<i>Enabling a Single Source of Truth Through BIM and Blockchain Integration, Amer Hijazi, Srinath Perera, Ali Alashwal and Rodrigo Calheiros, Western Sydney University, Australia</i>	<i>Application of Construction Waste Minimisation Approaches at the Design Stage: A Systematic Review, Mahmoud Alhawamdeh and Angela Lee, University of Salford, United Kingdom</i>	
11:20am-11:40am	<i>Development of BIM Implementation Framework for Digital Construction in Turkey, Mehmet Sakin and Yusuf Arayici, School of Engineering Hasan Kalyoncu University, Turkey</i>		
12:00pm-1:00pm	Lunch Break		
Theme Chair	BIM and Innovation in Construction Dr Islam Abohela	Sustainability Professor Hilal Albayatti	Project and Knowledge Management Professor Khaled Gharaibeh
1:00pm-1:20pm	<i>The Impact of Organisation Culture on Effective Exploitation of Building Information Modelling, Big Data Analytics and Internet of Things (BBI) for Competitive Advantage in Construction Organisations, Upeksha Madanayake, Mustafa Cidik and Zulfikar Adamu, London South Bank University, London, United Kingdom and Charles Egbu, Charles, University of East London (UEL), Docklands Campus, London, United Kingdom</i>	<i>Assessment method on united nation sustainable development goals, applied for a sustainable city, with a focus on Greater Khartoum services, Hind Khogali, Dar Al Uloom University, Kingdom of Saudi Arabia</i>	<i>Challenges of Expanded Public Works Programme in the Provision of Construction Skilled Workers in South Africa, Douglas Aghimien, Clinton Aigbavboa, Ayodeji Oke, Wellington Thwala and Zanele Raphiri, University of Johannesburg, South Africa</i>

Day 2 – 25 November 2019 *Cont.*

Theme Chair	BIM and Innovation in Construction Dr Islam Abohela	Sustainability Professor Hilal Albayatti	Project and Knowledge Management Professor Khaled Gharaibeh
1:20pm-1:40pm	<i>Emerging Technologies in Construction Safety and Health Management</i> , Theo Haupt, University of Technology Durban, South Africa, Mariam Akinlolu and Mohlomi Raliile, University of KwaZulu-Natal Durban, South Africa	<i>Waste Management Approaches and Challenges in the Construction Industry within the Kingdom of Bahrain</i> , Mahmoud Mawed and Jaswin George, Jaswin, Heriot-Watt University Dubai Campus, United Arab Emirates	<i>An Evaluation of Equality and Diversity Issues within the UK Civil Engineering Industry</i> , Asiha Khan, Kier Utilities & Rail, Kier Construction, United Kingdom and Suresh Renukappa, Subashini Suresh, University of Wolverhampton, United Kingdom and Abdulaziz Al Falih, Qassim University, Kingdom of Saudi Arabia
1:40pm-2:00pm	<i>Impact of Big Data from BIM and GIS on Smart Urban Futures</i> , Sara Biscaya, University of Salford, United Kingdom	<i>Artificial Intelligence Solutions to Environmental Problems-Possible Applications in Bahrain</i> , Khaled Gharaibeh, Applied Science University, Kingdom of Bahrain	<i>A Choosing by Advantages Approach for Selecting and Identifying Off-Site Construction Components</i> , Hayyan Zaheraldeen, Hiam Khoury and Farook Hamzeh, American University of Beirut, Beirut, Lebanon
2:00pm-2:20pm	<i>Digitalisation as a Veritable Option for Construction Organisations to Achieve Competitive Advantage</i> , Douglas Aghimien, University of Johannesburg, South Africa	<i>Reasons for Implementing Smart Cities Initiatives: An empirical study</i> , Wala Abdalla, Suresh Renukappa, Subashini Suresh and Razan Al-Janabi, University of Wolverhampton, United Kingdom	<i>Industry Preparedness for Off-Site Construction</i> , Rula Sharqi, Heriot-Watt University Dubai Campus, United Arab Emirates and Ghassan Aouad, Applied Science University, Kingdom of Bahrain
2:20pm-2:40pm	<i>Embedding Industry 4.0 strategies within the UK construction Industry</i> , Haddy Jallow, Costain Group, United Kingdom, Suresh Renukappa, Subashini Suresh, University of Wolverhampton, United Kingdom and Ahmed Alneyad, Abu Dhabi Police GHQ, United Arab Emirates	<i>A Proposed Program to audit the Sustainable Development Goals in the Kingdom of Bahrain</i> , Ammar Al Sammarraee and Nadya Alshareeda, Applied Science University, Kingdom of Bahrain and Aseel Anber and Entsar Kadum, Federal Board of Supreme Audit, Iraq	<i>Impact of Stakeholder Management Tools and Techniques on Construction Project Success</i> , Stephanie White, Sitzler, Adelaide, South Australia, Australia and Abbas Elmualim and Salem Abdalla, University of Sharjah, UAE
2:40pm-3:00pm	<i>BIM for Facilities Management on a Blockchain platform</i> , Mohamed Salama and Omar Salama, Heriot Watt University, Edinburgh, United Kingdom		<i>A Study on the Effect of R&D on Bahrain Economy to Achieve its 2030 Vision</i> , Ragab Ismail and Nympha Rita, Nympha, Applied Science University, Kingdom of Bahrain
3:00pm-3:30pm	Tea Break		
3:30pm-3:45pm	Best Papers and Attendance Awards		
3:45pm-4:00pm	Conference Concluding Remarks		

Day 3 – 26 November 2019
Social Day

<i>Time</i>	<i>Place</i>	<i>Duration</i>
<i>9:00am–9:30am</i>	<i>Departure from the hotel</i>	
<i>9:30am–10:30am</i>	<i>Alfateh Grand Mosque</i>	<i>1 hour</i>
<i>10:30am–12:30pm</i>	<i>Bahrain National Museum</i>	<i>2 hours including short cruise tour</i>
<i>12:30pm–3:30pm</i>	<i>Bab Al-Bahrain Souk</i>	<i>3 hours including lunch / Traditional Bahraini Food</i>
<i>3:30pm–4:30pm</i>	<i>Arad Fort</i>	<i>1 hour</i>
<i>4:30pm–5:00pm</i>	<i>Arrival to the hotel</i>	

Bahrain National Museum:

One of the first museums in the Gulf, the Bahrain National Museum opened in 1988. The site itself, on the edge of the sea, is a tremendous attraction. In addition to the rich collection that covers 6000 years of Bahrain's history.



Day 3 – 26 November 2019
Social Day

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<i>9:30am–10:30am</i>	<i>Alfateh Grand Mosque</i>	<i>1 hour</i>
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<i>12:30pm–3:30pm</i>	<i>Bab Al-Bahrain Souk</i>	<i>3 hours including lunch / Traditional Bahraini Food</i>
<i>3:30pm–4:30pm</i>	<i>Arad Fort</i>	<i>1 hour</i>
<i>4:30pm–5:00pm</i>	<i>Arrival to the hotel</i>	

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Day 3 – 26 November 2019
Social Day *Cont.*

Bab Al-Bahrain (Souq)

The souq located at the entrance to the Manama Souq in Bahrain's capital. Built in 1949, it has a vibrant collection of shops offering a wide range of goods from traditional textiles, spices perfumes, handicrafts and souvenirs.



Al-Fateh Grand Mosque

The Al-Fateh Mosque (also known as Al-Fateh Islamic Center & Al Fateh Grand Mosque) is one of the largest mosques in the world, encompassing 6,500 square meters and having the capacity to accommodate over 7,000 worshippers at a time. Besides being a place of worship, the mosque is one of the premier tourist attractions in Bahrain.





Day 3 – 26 November 2019
Social Day *Cont.*

Arad Fort:

Arad Fort is a 15th-century fort in Bahrain. Formerly guarding a separate island of its own, the fort and its surroundings have since been joined to Muharraq Island. Arad Fort was built in the typical style of Islamic forts during the 15th century before the Portuguese invasion of Bahrain in AD 1622.

