

Under the patronage of **H. E. Eng. Kamal bin Ahmed Mohammed** Minister of Transportation & Telecommunications Kingdom of Bahrain

2ND IEEE MIDDLE EAST & NORTH AFRICA COMUNICATIONS CONFERENCE 19-21 NOVEMBER 2019

The Diplomat Radisson Blu Hotel Kingdom of Bahrain









Welcome to IEEE MENACOMM 2019



Riyad Hamzah Honorary Chair President, University of Bahrain

The 2019 IEEE Middle East & North Africa COMMunications Conference (MENACOMM 2019) will be held during 19-21 November 2019 at The Diplomat Radisson Blu Hotel, Kingdom of Bahrain. IEEE MENACOMM 2019 conference is technically co-sponsored by IEEE ComSoc chapters consortium (Bahrain, Jordan, Kuwait, Lebanon, Saudi Arabia, and Tunisia) in addition to three newly joined ComSoc chapters (Oman, Iraq, and Morocco). The conference is organized and sponsored by University of Bahrain (UoB), IEEE Communications Society Bahrain Chapter (IEEE Bahrain ComSoc), and Bahrain Society of Engineers (BSE). MENACOMM 2019 is managed by a steering committee with representatives from all technical co-sponsor MENA ComSoc chapters.

IEEE MENACOMM 2019 aims to bring together researchers, developers and practitioners interested in the advances of modern telecommunication systems, networks, and emerging ICT technologies, to present their latest research findings and results. The conference focuses on various aspects of 5G communications and networks. The conference will include a peer-reviewed program of technical sessions, special sessions, and exhibition.

Objectives

IEEE MENACOMM 2019 Theme will be "Communications for sustainable development". The conference aims to showcase how communications and Information technologies can enrich a sustainable future on various areas such as agricultural, educational, environmental, health monitoring, etc. The conference will have a special session on sustainability and show how, broadly, various types of communication networks can be used to support a more sustainable life on Earth.

IEEE MENACOMM 2019 will be a chance to explore Bahrain, the island that is uniquely situated at the heart of the Arabian Gulf; Bahrain is in a central position across the Gulf Cooperation Council (GCC). Bahrain has a rich history with a multi-cultural relaxed cosmopolitan atmosphere. With a promising future for investments, in recent years, Bahrain has become a regional technology hub and destination of investment for many international ICT companies. MENACOMM 2019 will be held on 19-21 November 2019, the most favorable season/weather in Bahrain.

We look forward to meeting you in Manama, Kingdom of Bahrain at IEEE MENACOMM 2019.

Committees

Conference Honorary Chair

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Conference General Co-Chair(s)

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(Local arrangements / Tutorial / Workshops / Exhibition) ISA QAMBER

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Committees

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Conference Topics

Technical Scope

The Conference will focus on, but will not be limited to, the following tracks and topics of interest:

Track 1: Emerging Technologies and Future Trends

- 5G and Next Generation Networks
- · IoT Applications, Services and M2M Communications
- Smart Cities: Technologies, Challenges, and Solutions
- Cooperative, device-to-device and multi-hop communication
- Vehicular Networks and V2X Communications
- Intelligent transportation systems
- Network slicing and softwarization
- Software Defined Networking (SDN) and Network Function Virtualization (NFV)
- · Molecular Communications and Nanoscale Networks
- · Green Communications and Energy Efficient Computing
- · Cognitive Radio, Spectrum Sensing and Software Defined Radio
- Edge-Fog Computing and Networking
- Cloud Radio Access Network (C-RAN)
- · Context and location-aware wireless services and applications
- Wireless body area networks and e-health services
- Energy efficient and energy harvesting systems
- Communication technologies for Industry 4.0
- Adaptive content distribution in on-demand services

Track 2: Physical Layer and Fundamentals

- Millimeter waves, Ultra-Wideband and Sub-THz communication
- Massive MIMO and Beamforming Techniques
- Channel modeling, characterization and estimation
- OFDM, multi-carrier modulation, waveform design
- Modulation, coding, diversity, equalization, synchronization
- Radio Resources and spectrum management
- Interference modeling, management, cancellation and alignment
- Electromagnetics, Antennas and Wave Propagation
- Optical Networks, Photonics and Systems, Radio over Fiber
- Microwave Engineering and RF Design.
- Image, Speech and Signal Processing
- Deep Learning for Communications
- Smart grids, power line Communications
- Aerospace and satellite communications
- Information-theoretic aspects of wireless communications
- PHY strategies for low-rate, sporadic and asynchronous communications
- Content caching and storage in wireless networks
- Joint information and energy transmission

Conference Topics

Track 3: Network, MAC and Cross layer Design

- Network security and Privacy
- Blockchain, Trust and Encryption
- Big Data and network data analytics
- · Al and Machine Learning for Communications
- Semantic Web, Ontologies, Social Networks and Tactile Internet
- Cloud Computing and Distributed systems and Data-center Networks
- · Network coding and Network Management
- Ad Hoc, Rely and Sensor Networks
- MAC and QoE/QoS Support and Cross-Layer Optimization
- · Communications Reliability and Modeling
- Virtual network management and orchestration
- · Routing protocols in wireless networks
- Self-Organized Networking
- Mobility, location, and handoff management
- · Multimedia QoS and traffic management
- · Wireless broadcast, multicast and streaming
- Networks measurements and characterization
- Mobile social networks

Track 4: Industrial Trends (Abstracts and Presentation Only)

Submissions to be made via email: info@menacomm2019.org

Important Dates

Paper Submission Deadline (Final)	15 August 2019
Notification of Acceptance	15 September 2019
Camera-Ready Submission	30 September 2019

Keynote Speakers



KAUST, Kingdom of Saudi Arabia

Mohamed-Slim Alouini was born in Tunis, Tunisia. He received the Ph.D. degree in Electrical Engineering from the California Institute of Technology (Caltech), Pasadena, CA, USA, in 1998. He served as a faculty member in the University of Minnesota, Minneapolis, MN, USA, then in the Texas A&M University at Qatar, Education City, Doha, Qatar before joining King Abdullah University of Science and Technology (KAUST), Thuwal, Makkah Province, Saudi Arabia as a Professor of Electrical Engineering in 2009. He is affiliated with the Computer, Electrical, and Mathematical Science and Engineering (CEMSE) Division of King Abdullah University of Science and Technology (KAUST) Thuwal, Makkah Province, Saudi Arabia.

Prof. Adlen Ksentini Eurecom

EMEA ComSoc Director, France

Adlen Ksentini is a COMSOC distinguish lecturer. He obtained his Ph.D. degree in computer science from the University of Cergy-Pontoise in 2005, with a dissertation on QoS provisioning in IEEE 802.11-based networks. From 2006 to 2016, he worked at the University of Rennes 1 as an assistant professor. During this period, he was a member of the Dionysos Team with INRIA, Rennes. Since March 2016, he has been working as an assistant professor in the Communication Systems Department of EURECOM. He has been involved in several national and European projects on QoS and QoE support in future wireless, network virtualization, cloud networking, mobile networks, and more recently on Network Slicing and 5G in the context of H2020 projects 5G!Pagoda and 5GTransformer. He has co-authored over 100 technical journal and international conference papers. He received the best paper award from IEEE IWCMC 2016, IEEE ICC 2012, and ACM MSWiM 2005. He has been awarded the 2017 IEEE Comsoc Fred

W. Ellersick (best IEEE communications Magazine's paper). Adlen Ksentini has given several tutorials in IEEE international conferences, IEEE Globecom 2015, IEEE CCNC 2017, IEEE ICC 2017, IEEE/IFIP IM 2017. Adlen Ksentini has been acting as TPC Symposium Chair for IEEE ICC 2016/2017, IEEE GLOBECOM 2017, IEEE Cloudnet 2017 and IEEE 5G Forum 2018. He has been acting as Guest Editor for IEEE Journal of Selected Area on Communication (JSAC) Series on Network Softwerization, IEEE Wireless Communications, IEEE Communications Magazine, and two issues of ComSoc MMTC Letters. He has been on the Technical Program Committees of major IEEE ComSoc, ICC/GLOBECOM, ICME, WCNC, and PIMRC conferences. He is currently the Vice-Chair of the IEEE COMSOC Technical Committee on Software (TCS),and secretary of IEEE COMSOC France. He is affiliated with EMEA ComSoc of Europe, Middle-East and Africa as Region Director.

Keynote Speakers

Prof. Andrew Nix

Faculty of Engineering, University of Bristol, UK

Professor Andrew Nix received BEng and PhD degrees from the University of Bristol in 1989 and 1993 respectively. His PhD was entitled "A Fundamental Investigation into Short Range High Capacity Mobile Data Transmission," and compared time-domain and frequency domain equalisation strategies for use in Wireless Local Area Networks (WLANs). He joined the Communication Systems & Networks Group as a member of lecturing staff in December 1992 and was promoted to a full professor in 2001. He become the Head of Communication Systems and Networks Group in 2011 and also led the Department of Electrical and Electronic Engineering as Head of Department. From 2014 he served a five-year term as the Dean of the Faculty of Engineering. In 2016 he co-founded the Smart Internet Lab, one of the largest academic communication labs in the world. His research interests are focused around the challenges associated with ubiquitous, mass market, low cost mobile telecommunication systems. This includes the development of advanced 5G RF planning tools and innovative spectral and power efficient digital wireless technologies. He has worked on a range of 5G technologies and demonstrators. He is a multiple world record holder and a pioneer of the use of the new 5G mmWave bands. His current research interests cover major societal challenges in wireless, energy, transport and healthcare. He is a Professor of Wireless Communication Systems and was formerly a Dean of the Engineering Faculty and Head of the Communication Systems and Networks (CSN) research group. Over a period of 27 years Professor Nix has supervised more than 65 PhD students and published in excess of 450 refereed journal and international conference papers.



ACM Distinguished Scientist, Egypt

Moustafa Youssef is a professor at Alexandria University and founder & director of the Wireless Research Center of Excellence, Egypt. His research interests include mobile wireless networks, mobile computing, location determination technologies, pervasive computing, and network security. He has tens of issued and pending patents. He is the Lead Guest Editor of the upcoming IEEE Computer Special Issue on Transformative Technologies, an Associate Editor for IEEE TMC and ACM TSAS, served as an Area Editor of ACM MC2R as well as on the organizing and technical committees of numerous prestigious conferences. He is the recipient of the 2003 University of Maryland Invention of the Year award, the 2010 TWAS-AAS-Microsoft Award for Young Scientists, the 2013 and 2014 COMESA Innovation Award, the 2013 ACM SIGSpatial GIS Conference Best Paper Award, the 2017 Egyptian State Award, multiple Google Research

Awards, among many others. He is an ACM Distinguished Speaker, an ACM Distinguished Scientist, and an IEEE Fellow. He is an ACM Distinguished Scientist and a Fellow IEEE Founder and Director at The Wireless Research Center Alexandria University, Alexandria, Egypt.

Sponsorship Details and Benefits

Benefits	Diamond BHD 5,000 / USD 13,350	Platinum BHD 4,000 / USD 10,700	Gold BHD 3,000 / USD 8,000	Silver BHD 2,000 / USD 5,350
Company Name and Logo in appropriate sizes will be published in all the conference publicity materials	V	V	\checkmark	V
Entitled for free exhibition space with fittings at the exhibition hall	12 sqm	10 sqm	8sqm	6 sqm
Complimentary delegates from the sponsoring company to attend the conference with full package	5	4	3	2
Publicity materials will be included in the conference pack	\checkmark	\checkmark	\checkmark	\checkmark
Complimentary Company advertisement shall be provided in the exhibition guide	2 Pages	2 Pages	1 Page	1 Page
Company will be honored with a Plague by the Conference Patron during the opening ceremony	1 st	2 nd	3 rd	4 th
Company Logo with appropriate size with the display in the conference hall	\checkmark	\checkmark	\checkmark	\checkmark
Company logo will be displayed on Rollup / Monoliths	Separate	Shared	Shared	Shared
Company Name, logo and profile will be published in the conference proceedings	\checkmark	V	\checkmark	V

(Sponsorship amount inclusive of 5% Value Added Tax)

Sponsorship Form

2nd IEEE Middle East & North Africa COMMunications Conference

19-21 November 2019, The Diplomat Radisson Blu Hotel Kingdom of Bahrain

To Co-sponsor the Conference & Exhibition, please complete this form to the attention of: The Conference Secretariat, IEEE MENACOMM 2019 Email: conferences@bse.bh

Diamond Sponsor	BHD 5,000	USD 13,350
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Sponsorship Coordinator

Bahrain Society of Engineers P.O. Box 835, Manama, Kingdom of Bahrain Tel: +973 1781 0734 Email: conferences@bse.bh

Delegate Registration Form

2nd IEEE Middle East & North Africa COMMunications Conference

19-21 November 2019, The Diplomat Radisson Blu Hotel, Kingdom of Bahrain

Please complete in BLOCK letters. Complete a separate form for each applicant.

Title (Dr. / Mr./Mrs./Miss)	
Name:	
Mobile:	Email:
Organisation:	Position:
Telephone:	Country:
Signature:	Date:

Conference Registration Fees				
Category	Full registrations (Early Birds) Before 31st July 2019	Full registrations after 31st July 2019		
Authors – IEEE Members	BHD 132 USD 350	BHD 170 USD 450		
Authors – Non Members	BHD 150 USD 400	BHD 188 USD 500		
IEEE & BSE members		BHD 75 USD 200		
Non Members		BHD 94 USD 250		

(Inclusive of 5% Value Added Tax)

Method of Payment: Payment by one of the following must be included with the Registration Form:

Bank Transfer:

Bahrain	Society	of Engineers,	IBAN No.	BH47-NBOB-	-0000-0099-0659-9
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National Bank of Bahrain, Manama Main Branch, Kingdom of Bahrain, Swift Code - NBOBBHBM

Please debit to my Amex Master Card	Visa
Card Number:	Expiry Date:
Card Holder's Name and Address:	
Date:	Signature:

Full registrations include access to All Sessions, Welcome Reception, Conference Dinner, conference bag and material. All attendees and accompanying guests must register and receive a conference badge in order to participate in conference activities.

Cancellation Policy:

- 50% Refund if cancelled before 1st Nov 2019
- No refund after 1st Nov 2019 due to logistics commitment.

Please send the completed registration form along with appropriate fees to:

Bahrain Society of Engineers

P.O. Box 835, Manama, Kingdom of Bahrain Tel: +973 17810734 Fax: +973 17827475

E-mail: conferences@bse.bh or register online at www.menacomm2019.org

Exhibition Information

A technical exhibition will be held in conjunction with the technical sessions within the conference venue. The exhibition is intended to provide an opportunity for equipment, materials and service providers to display and demonstrate their products and services related to the communications sector. Interested organizations are encouraged to participate by sponsoring the event and/or by taking part in the exhibition (see the exhibition form). The exhibition stands are 3m wide 2m deep and 2.4m height. Stand fittings will consist of a system stand, fascia board in English, one electrical power point and sufficient tables and chairs. In addition, each exhibitor will avail the following benefits:

- 1. Exhibitors names will be published in the conference web site.
- 2. Exhibitors profile and logo will be included in the Conference Proceedings.
- 3. Advertising space will be available in the Exhibition Guide at a minimum cost, details will be provided on request.
- 4. A brief resume (8 10 lines) of each exhibitor will be included in the official exhibition guide, which will be circulated to all invited government officials, VIPs, visitors and participating delegates.
- 5. Wide publicity will be given in the MENA Region about the exhibition to attract regional, international Communications and Industrial Companies and Government officials to visit the exhibition booths during the conference period.
- 6. Each exhibitor is entitled to one full conference package (one person allowed to attend all the technical sessions free of charge during the conference period).
- 7. All exhibitors will be awarded with certificates.

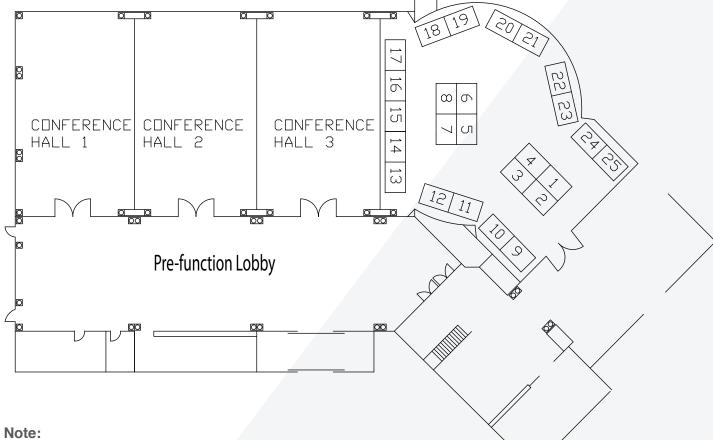
For further details about the Exhibition, please contact the Conference Secretariat.

Conference Secretariat

Bahrain Society of Engineers, P O Box 835, Manama, Kingdom of Bahrain

Tel: +973 17 810734 Fax: +973 17 827475 Email: conferences@bse.bh





Organisers have the right to modify / change the floor plan as and when required. Exhibition Stand height is 2.4m.

Exhibition Stand Booking Form

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Please complete in BLOCK letters. Complete a separate form for each applicant.

Company:			
Name of Representative:		Position:	
Mailing Address:			
City:	Country:	Postal Code:	
Telephone:		Fax:	
Mobile:	Email:		
Products or services to be displayed:			
Signature:		Date:	
Company Seal:			
Kindly issue LPO to: Bahrain Society of Engineers Shell Scheme Package Participation fees: BHD 900 or US\$ 2400 (per 6m²) (Inclusive of 5% Value Added Tax) Mo. of Stands Required Participation includes: White wall panels 2.4m height, Carpet Floor, 2 Tables with three chairs, two fluorescent lights, one 240 volt power socket. Stand Nos.			
		Please forward your booking form to: The Conference Secretariat IEEE MENACOMM 2019	

P O Box 835, Manama, Kingdom of Bahrain. Tel: +973 17 810734 Email: conferences@bse.bh

Bahrain Society of Engineers

Conference Venue & Accommodation

The conference and exhibition will be held at The Diplomat Radisson Blu Hotel, Residence & Spa. The Hotel is situated in the heart of Bahrain Business, shopping and cultural hub and a 12 minutes drive from the Bahrain International Airport. The hotel contains 367 rooms which includes 141 suites ranging from one to three bedroom. All rooms offer views of sea and city sky view.

Following are the special rates for the conference paticipants:

Room Type	Room Rates
Superior Single Room	BHD 45.000
Superior Double Room	BHD 50.000
Suite Room Single	BHD 65.000
Suite Room Double	BHD 70.000
Grand Suite Single / Double	BHD 90.000

All the rates quoted are in BHD (Bahraini Dinars) per room per night subject out service charge of 10%, Government levy 5% and Value Added Tax 5%



For more information please visit event website www.menacomm2019.org

Bahrain visa

For short term visa, please visit www.evisa.gov.bh

Hotel Reservation

Telephone: +973 17525252 Online : www.radissonblu.com/diplomathotel-bahrain and enter the '*Promotional Code*' Email: reservations.bahrain@radissonblu.com

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