GCN GLOBAL COMMUNICATIONS NEWSLETTER

October 2023
ISSN 2374-1082

CONFERENCE HIGHLIGHTS

IEEE International Conference on Blockchain and Cryptocurrency 2023 (ICBC 2023), Dubai, UAE

by Adel Ben Mnaouer, Prince Sultan University, Saudi Arabia, Burkhard Stiller, University of Zurich, Switzerland, and Fakhreddine Karray, MBZUAI University, UAE, IEEE ICBC 2023 General Co-Chairs

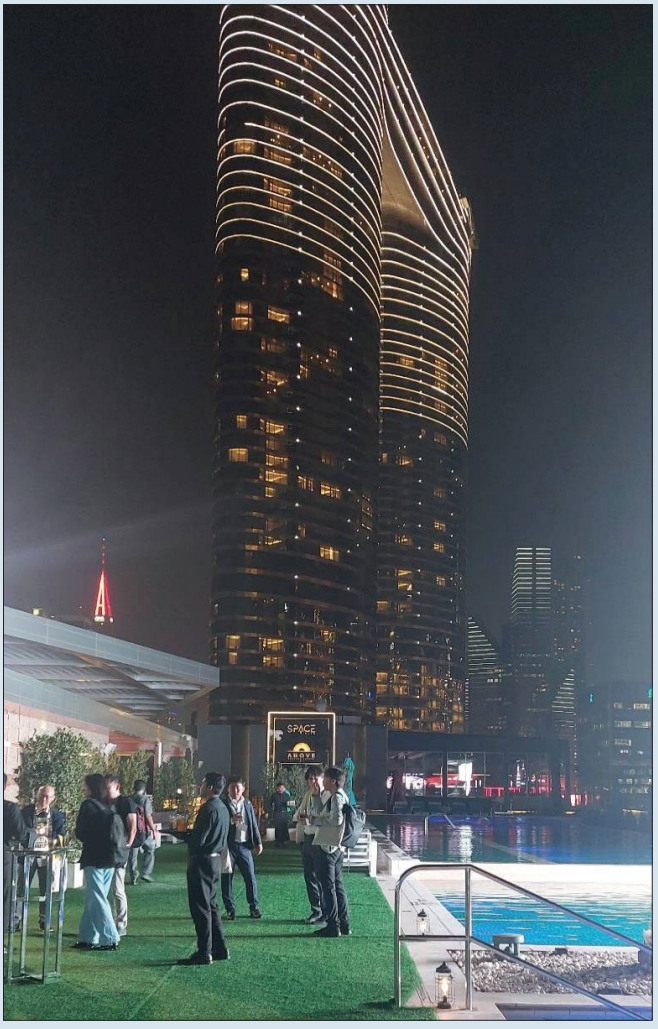
ICBC 2023 is the 5th edition of the IEEE Communications Society (ComSoc)-sponsored IEEE International Conference on Blockchain and Cryptocurrency. It is the society's primary forum for reporting the latest research results and innovations, regulations, standards, industry practice innovations, and policies in the exciting, emerging, and challenging area of blockchains and cryptocurrencies. It was held in Dubai, United Arab Emirates, on May 1–5, 2023, at the Sofitel Dubai Downtown Hotel.

It was a challenging task to win the bid for Dubai as we were a bit late in bidding, but this happened at the end of the Corona pandemic times, too, which provided a very good planning basis for ICBC, since Dubai's measures and procedures for daily life and event organizations in the context of the pandemic had almost returned to normal. We acknowledge proudly the help of Dubai Tourism in enhancing the bid by offering the conference's attendees with ample information about what Dubai could offer to visitors. The support and gold sponsorship of the Canadian University Dubai and the support of the IEEE UAE Section were also highly valuable in helping secure the bid despite stiff competition.

The excellent location (at Downtown Dubai) was carefully chosen, and the hotel's local amenities and performance to the high satisfaction of the attendees. Just to exemplify, breakfast as part of the room fees and lunches as part of the conference fees offered a very wide range of local and international food options with high quality. Although the hotel venue was close to the many attractions Dubai is offering, the rate of attendance of the conference was noticeably high till the last workshop on CryptoEx'23. Overall, three social events were organized during the conference, the first one was a cocktail reception by the grass-pool of the hotel overlooking Burj Khalifa and Dubai Downtown. The second one was a Dhow cruise and dinner in the Dubai Marina area with music and Tennoura dance show. And the third one was the Gala Dinner at the hotel's ballroom with a sumptuous banquet. Thus, the first dimension of an attractive set-up for an important conference and event had been dealt with successfully.

On the second dimension, especially the technical content of an IEEE event, in this year's edition of ICBC 2023, we have received 266 submissions, including full/short papers, posters, Systematization-of-Knowledge (SoK) papers, and Demos, which had been contributed to by 694 authors from 37 countries. In addition, two workshops had been collocated with the main conference track, namely CryptoEx'23 and Crosschain'23. Out of these overall submissions, about 24.7% were from North America, 31% from Europe, 33.4% from Asia/pacific, 5.1% from Australia, and 5.8% from the rest of the world. While each paper had received at least three reviews, from the technical program committee consisting of 175 experts in total, overall, 130 papers (including workshops) were retained to appear in the proceedings in its different categories.

Panel discussion including Salil Kanhere, UNSW, Sydney (leftmost) as moderator, Raja Jurdak, Queensland University of Technology, Australia, Deepak Puthal, Khalifa University, UAE, Burkhard Stiller, University of Zurich, Switzerland and Artem Barger, Director, Eternyze IT Services, Budapest, Hungary.



Cocktail Reception by the grass pool at the Sofitel Hotel, a snapshot of some attendees

Award presentation to Stephan Tai, Keynote Speaker, from left to right: Moayad Aloqaily, MBZUAI, Abu Dhabi, James Won-Ki Hong, POSTECH Korea, Stefan Tai, University of Berlin, and Adel Ben Mnaouer, Prince Sultan university, Saudi Arabia

Through this rigorous process, the program compiled shows a very high-quality: only 33 full papers have been selected for the single-track program, corresponding to a competitive acceptance rate of 18.5%. Selected ICBC 2023 best-papers were invited to submit an extended version of their papers to Wiley's International Journal of Network Management with a fast-track review process. Additionally, 5 SoK papers, 25 short papers, and 27 posters have been accepted to the conference program. Moreover, 10 demo papers were accepted. The conference program was also enriched with three panel discussions by experts selected from among the attendees and from local industries. Those panel topics on "Blockchain

The student support team receiving public recognition, from left to right: Adel Ben Mnaouer, Prince Sultan University, Saudi Arabia, Mohammed Faieq, Ayman Samsudeen, Issraa and Hajer Ben Mnaouer, David Bourne, Canadian University Dubai, and Moayad Aloqaily, MBZUAI.

for Post-Quantum AI and Security: How much help it may bring?," "CBDCs — Will they ever happen? When? In what form?," and "Are Private Blockchains Dead?" interested, in all cases, a very large set of attendees, who participated actively in those discussions as well.

The general feedback on ICBC 2023 from the audience attending was extremely positive. Lots of words of praise and satisfaction were expressed by the attendees to the organizing team which made us happy and proud of the achievement. Valuable goodies were presented to all the attendees and the in-kind contribution of Dubai Tourism is again duly acknowledged.

The next station of the IEEE ICBC will be the beautiful city of Dublin in Ireland. We wish the organizing team success for the IEEE ICBC'24.

DISTINGUISHED LECTURER

Activities of the IEEE ComSoc Nigeria Chapter in 2022

by Nasir Faruk, IEEE ComSoc Nigeria Chapter Chair

In 2022, six technical meetings and presentations were undertaken from May to November.

IEEE NIGERCON conference was held between 17th May 2022 and 19th may 2022. During the conference, we enlightened the participants the IEEE ComSoc and its benefits of joining the society. Some Souvenirs were given to the visitors of our booth. We had 23 newly recruited prospective members. ComSoc actively participated in the activities of the conference where we attended seminars, workshops and technical presentations.

For the month of June, a technical presentation on Communication Technology Careers and Membership Drive for Students and Early Graduates was undertaken, where Engr. John Agbakoba (CEO, I-Squared Consulting Limited, Lagos, Nigeria.) and Engr. Abdullateef Aliyu (Vice — President, IEEE Smart Village, Africa Working Group) were hosted.

A technical paper on Intelligent Reflecting Surface-Assisted UAV Communications Systems was presented by Prof. Samarendra Nath Sur from the Department of Electronics & Communications Engineering, Sikkim Manipal Institute of Technology, India for the month of July.

In August, the IEEE ComSoC hosted Dr. Kennedy Chinedu Okafor (Dept of Mechatronics Engineering, Federal University of Technology, Owerri, where he delivered a technical presentation on Dumpsite Intercloud for Smart Urbanizaton in Africa.

In September, the society hosted Professor Sudhir Dixit, a co-founder, Senior Fellow and Evangelist at the Basic Internet Foundation in Oslo, Norway, IEEE Future Network Initiative Advisory Board Member, Docent, University of Oulu, Finland, Board Member, Wirelesss World Research Forum (WWRF) and a Life Fellow of IEEE. who was on IEEE ComSoc distinguished lecturer tour to Africa. The distinguished lecture was supported by IEEE ComSoc, IEEE Nigeria Section and IEEE Smart Village.

The distinguished lecture delivers three lectures the first entitled,

Cross section of picture showing the Immediate past chair, IEEE ComSoc Nigeria Liaison Officer, Current Chair, Treasurer and other Volunteers.

Participants with Professor Sudhir Dixit after the lecture.

"*What Comes Next? Is there a Need for a New Generation*," while the second lecture entitled "*What Comes Next? Is there a Need for a New Generation?*" and the third lecture title was "*Internet Lite: Connect the Unconnected: The Killer App for 5G and Beyond*." In his presentations, Professor Sudhir Dixit noted that the 6G is driven by societal needs rather than technology as it could be the first mobile radio generation to aim at closing the digital divide in rural and remote areas which lack proper connectivity. The evolution of a newly designed IP architecture which will offer advanced flexibility across a decentralized cloud-native mobile network where clients do not need any server or software installation but requires a fast internet connection were provided. Furthermore, the distinguished lecturer explained that everyone can get involved in connecting

the unconnected most especially for people who want to pursue a career in telecommunications as there are opportunities to solve problems in the industry with experiences, students' ideas and technical expertise. Also, the solutions and services of the 6G network that are driven by customer problems and several use cases- retail, education, manufacturing, transportation, healthcare and so on. Wearable Technology such as smart glasses, smart shirt, smart rings, smart socks, smart finger, SGPS/GPRS Body Control were example of solutions in healthcare to enhance our lifestyle.

Other speakers at the event were Dr. Rislan Kanya (DVC, ITRI, Baze University) who gave the welcome address, speaking about the institution making a difference to modernize the Nigerian society through the positive impact of its services using the quintuple helix innovation model and graduate output. Engr. Azuka Ofogu, the immediate past Chair, ComSoc Nigeria spoke about IEEE ComSoc paving the way for advancement in telecommunications and noted the main vision of the IEEE ComSoc is to bring the world together in harmony through communications and networking technology, research application, education and incubation of new ideas and finally, Engr. Abdullateef Aliyu (Vice — President, IEEE Smart Village, Africa Working Group) who read the citation of the invited lecturer.

In November, IEEE ComSoc attended and co-sponsored Conference on Information Technology for Education and Development (ITED) which is going to be an IEEE collaborated Annual Conference of the Academia in Information Technology Profession (AITP). The Conference aimed to bring together students, academia, industry, researchers, and government officials to discuss how information technology can further enhance education and promote national development.

CHAPTER REPORT

IEEE ComSoc Iraq Chapter Scientific Activities through First Half of 2023

by Sattar B. Sadkhan, IEEE ComSoc Iraq Chapter Chair

During the first 6 months of the year 2023, the IEEE ComSoc Iraq chapter in cooperation with IEEE Iraq section and IEEE Iraq CIS chapter participated in technically support and enhancing the organization of (7) International conferences (technically sponsored by IEEE) and many scientific workshops in many Iraqi universities. All these conferences were held in hybrid status,

The main tasks of IEEE ComSoc Iraq chapter were working as volunteers to scientifically enhances the scientific and technical organization, and attracting academics (from Iraqi universities and from outside Iraq — International universities) for enhancing the reviewing and participation in these conferences.

These conferences are:

- 9thIEC-2023: The 9th International Engineering conference sustainable Technology and development (IEC2023) in February 24–25, 2022 at Tishik International University — Erbil city (Kurdistan Region).
- The second conference of Al-kadhum College — Missan Branch (ACA2023). The conference holds at 27–28 Feb. 2023.
- The International Conference of IT College in Al-Qadisyia University (ICITAMS2023) — at 20–21 March 2023.
- The third International conference of Diyala University — Engineering College at 3–4 May 2023.
- The Third International conference of North Technical University — Engineering College — at Mosul City — North of Iraq at 21-22 June 2023.
- The 6thiiceta- 2023, International Conference hold at Islamic University in Al-Najaf City- at June IRAQ
- The Third International conference of Imam Jafar Al-Sadiq University- Al-Muthana Branch at 4 July 2023.

The main academic voluntaries tasks of the members of IEEE Iraq section and IEEE Comsoc Iraq Chapter and IEEE Iraq CIS Chapter were concentrated to enhance (scientifically) the holding and choosing the best suitable (with very good quality) of the pre-accepted papers to be upload to IEEE digital explore library, and also to encourage and enhance the Iraqi Universities to go ahead in organizing (yearly) such important scientific conferences. We visited these universities many times and discussed with their conferences organizers the importance of going ahead in establishing such conferences.

Other goals have been to encourage and enhance the Iraqi Universities to go ahead in organizing (yearly) such important scientific conferences. Also, the IEEE Iraq ComSoc Chapter signed (10) local (MoU) with (10) universities to hold their International conferences in 2023.

Many others scientific activities were hold through this period, which are:

- Meeting with the Lebanon –France University in Erbil City-Kurdistan — and sign MoU to enhance the organization of their conference.
- Meeting with (Soran University 0 in Erbil city at January 2023, and signing MoU for holding the International Conference at October 2023.
- Scientific Workshop in Al-Mansoor College University at June 2023 at Baghdad city.
- Scientific Meeting with Al-Muthana Branch of Imam Jaffar Al-sadiq University at March 2023.
- Signing the MoU with Academic staff of Oil Engineering Department at University of Technology at March 2023, and the conference will be hold at November 2023.

9th IEC-2023 — the 9th International Engineering Conference on advances in Computer and Civil Engineering Towards Engineering Innovations and Sustainability — in Tishik University

The International Conference of Al-Qadisyia university March 2023.

Signing the MoU with the Technical Institute- North Technical College- Kirkuk City

- Signing the MoU with the academic staff of Alnoor University at Mosul city.
- Signing the MoU with the college of Computer Science and mathematics - Mosul University at march 2023.
- Scientific lecture for Economic Management College in North Technical University- Mosul City at March 2023.
- Meeting with Academic staff of Imam Alkadhum College- at Al-Qadisyia city at March 2023.
- At March 2023, scientific meeting with the academic staff of Science College- Diyala university for holding the International conference sponsored by IEEE.
- At March 2023 signing the MoU with the Kirkuk Technical Institute- of the North Technical university for holding the International conference sponsored by IEEE.

So many other scientific activities were organized and hold in other universities, and we hope that in the next report we will explain them. This is our message to the world that Iraqi scientific people are existing, and they offer the scientific capabilities to say to the world that we are existing and we need to cooperate scientifically with other international universities.

CHAPTER REPORT

Thailand Industrial Talks on International Day of Light 2022

Optical Communications and Woman in Science & Engineering

by Keattisak Sripimanwat, IEEE ComSoc Thailand Chapter Chair

As previous years, Thai ComSoc chapter joined the International Day of Light (IDL — May 16) event as the national contact node. IDL2022 theme was set on the sustainable development with optical communications. Two invited talks designed for non-technical background audiences, were given online by large industrial firms updating their optical fiber networks and services to the public.

The opening talk entitled "Optical Communication Network for National Electricity Generating" was presented by Mr.Pornpong Chiewcharat, a senior engineer from the Electricity Generating Authority of Thailand (EGAT). Starting from the basic of both electricity and its communication network through the services, lightwave communication in real life could be realized via this grid application as well.

Next, Mr.Puttapong Patumrattanachot, a communication engineer from recent largest TELOCS locally, Advanced Info Service Public Company Limited (AIS), illustrated optical fiber foundation for wireless communication network. Related knowledge through the contemporary services was presented in the topic of "Network foundation and AIS optical fiber services."

All optical routes of both networks covering the whole country are also shown impressively on a single national maps. Detail and videos of these talks are recorded at www.quantum-thai.org/single-post/idl-2022-thailand.

Posters and Video Thumbnails of Events. From left to right: Mr.Pornpong Chiewcharat (EGAT), Mr.Puttapong Patumrattanachot (AIS), Woman in Science & Engineering (WISE) Dr. Asanee Kawtrakul.

In parallel at early of the year 2022, IEEE ComSoc Thailand formally jointed the campaign "Woman in Science & Engineering (WISE)" for the first time. Under the initiated WISE series 2022, inspired stories of Dr.Asanee Kawtrakul, emeritus professor in telecommunications and computer engineering field, were published monthly. Her experiences on critical thinking, decision making, and many valuable suggestions to students through young female engineers to the public, were focused and digested. Those seven popular columns are serving at www.quantum-thai.org/q-home/tags/asanee-kawtrakul.

By successfully organizing above mentioned IDL & WISE 2022, more case studies shall be extended in the further years. Introduction for the invited topic and people from the public is also welcome.

GCN GLOBAL COMMUNICATIONS NEWSLETTER

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IEEE ComSoc IEEE Communications Society
www.comsoc.org/gcn
ISSN 2374-1082