



IEEE Communications Society Technical Committee on Smart Grid Communications

Tuesday, May 5, 2022 - 15:00 – 16:30 CET

Virtual meeting

Agenda – TC SGC Meeting – 10/5/2022

- ▶ Call to order
- ▶ Approval of the agenda
- ▶ Approval of previous meeting minutes (July 21 and November 21)
- ▶ *TC structure and status*
- ▶ Reports on nominations, conferences and journals
- ▶ Report on SIGs activities
- ▶ Establishment of webinars
- ▶ Awards and nominations committee: announcement of 2021 award
- ▶ Any other business
- ▶ Adjourn

TC structure and status



Mission statement

- ▶ Support the IEEE Smart Grid Initiative
- ▶ Promote ComSoc's position in the development and promotion of smart grid related technologies
- ▶ Ensure that ComSoc members play a decisive technological role in smart grid communications, control, and computing
- ▶ Website: <http://sg.committees.comsoc.org/>

Officers 2022-23

- ▶ Chair:
 - **Andrea Tonello**, University of Klagenfurt, Austria

- ▶ Vice Chairs:
 - **Chris Develder**, Ghent University, Belgium

- ▶ Secretary
 - **Kun Yang**, University of Essex, UK

- ▶ Appointed officers
 - Industry Relations: **Alberto Sendin**, Iberdrola, Spain
 - ComSoc TC-PLC Liaison: **Ralf Lehnert**, TU Dresden, Germany
 - PES Liaison: **Antonello Monti**, RWTH Aachen University, Germany

Member development

- ▶ 232 as of Dec. 2019 registered members
- ▶ 252 as of June 2020
- ▶ 259 as of January 2021
- ▶ 263 as of July 2021
- ▶ 265 as of November 2021
- ▶ 256 as of May 2022 registered members (decrease ...)
- ▶ To become a member, sign up the TCSGC mailing list at <https://comsoc-listserv.ieee.org/cgi-bin/wa?SUBED1=asgcc&A=1>
 - A **member** must be a Comsoc member
 - Non ComSoc members can contribute as **collaborators**
 - To become a **voting member**, attend at least two out of the last five TCSGC meetings
 - TCSGC meetings are held twice a year at IEEE ICC and IEEE SmartGridComm



Nominations, conferences and journals



Nominations and representatives

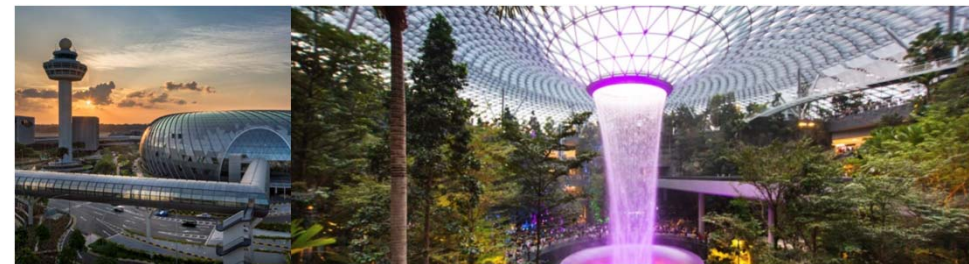
- ▶ IEEE ICC 2022 SGC Track : Christian Wietfeld, TU Dortmund
 - Submitted 19 papers, accepted 6
- ▶ IEEE Globecom 2022 SGC Track : Chris Develder, Ghent Univ.
 - Submission deadline 22 May, 2022
- ▶ IEEE ICC 2023 SGC track : Dejan Vukobratovic, Univ. of Novi Sad
- ▶ IEEE Globecom 2023: Biplab Sikdar, National University of Singapore
- ▶ IEEE ICC 2024 SGC track: Nomination made

Call for Nominations announced regularly via the TCSGC mailing list
If you are interested in being nominated, please contact one of the officers



IEEE SmartGridComm 2022

- **Location:** Singapore
- **Dates:** 25-28 October 2022
- **Venue:** The event will be hybrid. Physical portion will be held in Singapore University of Technology and Design (SUTD) campus
- **Travel update:** Singapore has reopened its borders to **all** fully vaccinated travelers. See <https://safetravel.ica.gov.sg/> for more info
- **Website:** <https://sgc2022.ieee-smartgridcomm.org/>
- **Call for papers** (deadline: 10 June) and call for workshop proposals (deadline 15 May) are open! We look forward to your contributions
- **Organizers:** Sun Sumei (A*STAR), David Nicol (UIUC), Binbin Chen (SUTD).
- Same week as Singapore International Energy Week (SIEW)
<https://www.siew.gov.sg/>
- Please email binbin_chen@sutd.edu.sg for any questions or comments



Special issues

Current:

You may want to send information. The TC web site will also be updated.

Past:

IEEE Transactions on Green Communications and Networking – SI on Collaborative Intelligence for Green Internet of Things in the 6G Era

Guest Editors: Celimuge Wu, Kok-Lim Alvin Yau, Zonghua Zhang, Damla Turgut, Shiwen Mao

Submission deadline: 10 December 2021

Frontiers in Communications and Networks, has a section on Smart Grid Comms with specialty chief editor Editor Melike Erol- Kantarci

MDPI Energies - SI on Power Line Communication (PLC) Evolution: New Challenges and Innovative Solutions

▶ Guest Editors: Alberto Sendin, Andrea Tonello

– Submission deadline: 31 July 2021

IEEE Network Magazine, SI on AI and 6G Convergence: an Energy-efficiency Perspective

▶ Guest Editors: Y. Zhang, M. Erol-Kantarci, W. Sun, Y. Dai, J. Hoydis, M. C. Gursoy,

– Submission deadline: 15 April 2021

IEEE Transactions on Green Communications and Networking - SI on Communications and Computing for Green Industrial IoT and Smart Grids

▶ Guest Editors: Melike Erol-Kantarci, George C. Alexandropoulos, Peter Han Joo Chong, Andrea Tonello, Yan Zhang

– Submission deadline: 1 March 2021



Report on SIGs activities

Special interest groups

▶ 1. SIG Communications and Networks to Enable the Smart Grid

- Chair: Dejan Vukobratovic - University of Novi Sad
- Vice Chair: Gregor Verbic - University of Sidney

▶ 2. SIG Cyber Security and Privacy for the Smart Grid

- Chair: Lalitha Sankar - Arizona State University
- Vice Chair: György Dan – KTH
- Vice Chair: Jinsub Kim- Oregon State Univ.

▶ 3. SIG Energy Storage and Electric Vehicles

- Chair: Hamid Nazaripouya - UC Riverside
- Vice chair: Phuong Nguyen - TU Eindhoven

▶ 4. AI and Computational Intelligence

- Chair: Yan Zhang - University of Oslo
- Vice-chair: Melike Erol-Kantarci - University of Ottawa
- Vice-chair: Damla Turgut - University of Central Florida

▶ Past SIGs

- SIG Big Data Management and Analytics
- SIG ICT-Enabled Transactive Energy and Grid Economics
- SIG Energy Internet and Energy System Integration
- SIG Active Distribution Grids and Microgrids
- SIG Smart Metering, Demand Response and Dynamic Pricing

SIG Communications and Networks to Enable the Smart Grid

Conferences:

- ▶ PMAPS 2022 (online) June 2022 - <https://www.pmaps2022.org/>
- ▶ ISGT Europe 2022, Novi Sad, September 2022 - <https://ieee-isgt-europe.org/>

SIG: AI and Computational Intelligence

Keynotes, Invited Talks, Panels:

- D. Turgut, "Physical and computational modeling of smart homes," Invited talk at ELEVATE'22, sponsored by IEEE IEM Student Branch and Computer Society of IEEE IEM, Kolkata Section, Region 10, April 14, 2022
- D. Turgut, "Preparing women for early career in science and engineering," Panelist at Women In Engineering Workshop at International Conference on the Design of Reliable Communication Networks (DRCN'22), March 31, 2022
- D. Turgut, "IoT-enabled smart homes and smart healthcare," Invited talk by ACM-W Chapter at University of Ottawa, March 2, 2022
- Y. Zhang, "Machine Learning in Digital Twin Edge Networks", Workshop on Data Driven Intelligence for Networks and Systems (DDINS), ICC 2022, May 2022
- Y. Zhang, in workshop "Sustainable and Intelligent Green Internet of Things for 6G and Beyond", IEEE VTC2022-Spring

Distinguished lectures and Tutorials:

- M. Erol-Kantarci, "Deep and Reinforcement Learning in 5G and 6G," Bangalore Chapter, 8 January 2022
- M. Erol-Kantarci, "Deep and Reinforcement Learning in 5G and 6G," IEEE ComSoc Oregon Chapter, 27 April 2022
- D. Turgut, "Communication, computation, and privacy trade-off in machine learning for smart environments," IEEE ComSoC Latin America, 29 April 2022
- Y. Zhang, "Digital Twin for 6G and Internet of Things", ComSoc Argentina
- Y. Zhang, "Digital Twin for 6G", tutorial in IEEE/CIC ICC 2022



SIG: AI and Computational Intelligence

Special Issues:

- “Communications and Computing for Green Industrial IoT and Smart Grids” in IEEE Transactions on Green Communications and Networking. To be published in March 2022. GEs: A. Tonello, Y. Zhang, M. Erol-Kantarci, P. Chong, G. Alexandropoulos.
- “AI and 6G Convergence: An Energy-Efficiency Perspective”, in IEEE Network Magazine, to be published in Nov/Dec. 2021. GEs: Y Zhang, M. Erol-Kantarci, W. Sun, Y. Dai, J. Hoydis, and M. Cenk Gursoy
- “Collaborative Intelligence for Green Internet of Things in the 6G Era” in IEEE Transactions on Green Communications and Networking. To be published in June 2022. Ges: Celimuge Wu, Kok-Lim Alvin Yau, Zonghua Zhang, Damla Turgut, Shiwen Mao
- “Digital Twin for Industrial IoT” by IEEE Transactions on Industrial Informatics in 2022. GE: Y. Zhang, C. Alcaraz, W. Sun

Conference organizational roles:

- D. Turgut, IoT & Sensor Networks Symposium Co-Chair, IEEE ICC 2022, May 16-20, 2022, Seoul, South Korea
- D. Turgut, Communication and Networking Symposium Co-Chair, IEEE SmartGridComm 2022, October 25-28, 2022, Singapore
- M. Erol-Kantarci, Wireless Communications Symposium Co-Chair, IEEE Globecom 2022, December 4-8, 2022, Rio de Janeiro, Brazil
- Y. Zhang, Program Chair, IEEE/ACM IWQoS 2022, Oslo, Norway, Program Chair, IEEE ICCT 2022, Symposium Chair, IEEE ICC 2022, General Chair, BlockSys 2022

SIG: AI and Computational Intelligence

▶ Recognitions:

- M. Erol-Kantarci is appointed as Chief Cloud RAN AI/ML Data Scientist at Ericsson from January 2022 in addition to her academic position at the University of Ottawa
- D. Turgut, IEEE INFOCOM 2022 Distinguished TPC member

▶ Committee

- Y. Zhang, COMSOC Fellow Evaluation Committee

Webinars



Webinars

- ▶ Idea: organize a series of webinars.
- ▶ Objective: engage more our community and offer some value
- ▶ Focus on a specific topic and last 1-1.5 hours (*talk or panel*)
 - Access will be remote
 - I would also offer free access
 - ComSoc staff can help in advertising them
- ▶ Webinars can be part of the SIG activities
 - 2 webinars/year. Each webinar will be organized by one of the four SIGs and cover a topic within the SIG scope
 - Engagement of industry would also be a good objective either by having a speaker from industry or seeking for industry colleagues to attend

Proposals solicited

- ▶ Initial ideas received:
 - Engage the TC-PLC and cover the topic power line communications (probably on standardization aspects)
 - Organize a joint seminar with the Technical Committee on Green Communications & Computing
- ▶ SIGs can send a brief proposal:
 - Title/topic of the webinar
 - Possible speaker/s
 - Date (indication of time period)

TCSGC Awards



TCSGC awards

- ▶ Two awards
 - Outstanding Service Award
 - Technical Achievement Award
- ▶ Committee members: Lutz Lampe (Chair), Chris Develder, Petar Popovski, Anna Scaglione, Christian Wietfeld
- ▶ Formed according to updated P&Ps: collected vote for approval and informed TEAC
- ▶ Term until conclusion of activities (early 2022)

Technical Achievement Award 2022

The 2022 Technical Achievement Award goes to:

Hamed Mohsenian-Rad

Congratulations !



Any other business ?

Next meeting

- ▶ Smart Grid Comm 2022

Thank you!

