# Wireless Congress: Systems & Applications | November 14 - 15, 2018 l in parallel to electronica (Munich, Germany)

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Sponsor
as at June 26, 2018

## DAY 1 | Wednesday| November 14, 2018

**09:00** **15 Years Wireless Congress – Happy Birthday: A Review and an Outlook on the Wireless World** — Prof. Dr. Axel Sikora, University of Applied Sciences Offenburg

**09:30** **LTE Cat-NB1 and M1 Pave the Way for 5G-IoT** — Len Jelinek, IHS Markit

**10:00** **The Potential of 5G for Industry 4.0** — Afif Osseiran, PhD, Ericsson

**10:30** COFFEE & COMMUNICATION BREAK

| | Session 01: IOT/Networks | Session 02: Security | Session 04: Energy Harvesting | Session 05: Mobile Communication |
|---|---|---|---|---|
| **11:00** | **Why Beacons Are Not the Solution: Understanding Proximity Technologies and Using them to Your Advantage**<br>Michael Wolf, Wingu | **Authenticating Wireless Nodes in Building Automation: Challenges and Approaches**<br>Prof. Andreas Rüst, ZHAW InES | **New Developments in Advanced Security for Energy Harvesting Wireless Systems**<br>Marian Hoensch, EnOcean Alliance | **NB-IoT and LTE-M: What to Know before You Start Development**<br>Joachim Dressler, Sierra Wireless |
| **11:30** | **Making the Right Choice: Wireless Technologies for the IoT**<br>Jean Labrosse, Silicon Labs | **Z-Wave – How does State of the Art Wireless Security Look Like**<br>Prof. Dr. Christian Paetz, Z-Wave Alliance | **Energy-Harvesting in Zigbee 3.0**<br>Arasch Honarbacht, PhD, ubisys technologies | **The Internet of Things Becomes Mobile – Opportunities, Challenges and Solutions for IoT Devices**<br>Matthias Weiss, PhD, CommSolid |
| **12:00** | **Cross Analysis of Zigbee Against Other IoT Networking Stacks**<br>Henk Veldhuis, TÜV Rheinland | **Security Tradeoffs and Commissioning Methods for Wireless IoT Protocols**<br>Lars Lydersen, PhD, Silicon Labs | **Electromagnetic Harvester for Self-Sufficient Wireless Current Sensors**<br>Andreas Hennig, PhD, Fraunhofer IMS | **NB-IoT Power Saving and Cloud Connectivity in Practice**<br>Lyn Sören Matten, mm1 Technology |
| **12:30** | **Comparing Zigbee, Thread and Bluetooth Mesh Performance – Who Wins?**<br>Tom Pannell, Silicon Labs | **Session 03: Industrial**<br>**Wireless Communications in Automation and Connected Industries**<br>Prof. Dr. Armin Dekorsy, Dr. Dirk Wübben; University of Bremen | **Energy Harvesting Shoes**<br>Prof. Dr. Juan-Mario Gruber, ZHAW InES | **Performance Investigation for Narrowband Internet of Things**<br>Zubair Amjad, University of Applied Sciences Offenburg |
| **13:00** | LUNCH BREAK | | | |
| **14:00** | **IQRF – Wireless Mesh Technology, Ecosystem and Alliance for Robust and Reliable IoT Solutions**<br>Simon Chudoba, IQRF Alliance | **Wireless Communication for Smart Cities and Buildings**<br>Milan Popovic, Popovic Consulting | **Mesh Without Batteries? Energy Harvesting Devices for Bluetooth**<br>Matthias Kassner, EnOcean | **Session 07: Bluetooth**<br>**Bluetooth Low Energy: Mesh Networking Simplified**<br>Brian Senese, OpenSynergy |
| **14:30** | **2nd Generation Wireless Mesh Network for Reliable Communication in Unlicensed Spectrum**<br>Thomas Steen Halkier, Neocortec | **High-Speed, Cellular Li-Fi HotSpot for Real-Time Applications**<br>René Kirrbach, Fraunhofer IPMS | **Indoor Smart Gardening Based on an Energy Autonomous Wireless Network Platform**<br>Prof. Dr. Elke Mackensen, Sebastian Möhringer, Patrick Moser, University of Applied Sciences Offenburg | **Comparing the Energy Requirements of Bluetooth Smart Devices (2018)**<br>Prof. Dr. Marcel Meli, Manuel Brütsch, ZHAW InES |
| **15:00** | **Session 06: DECT**<br>**DECT for 5G**<br>Daniel Hartnett, DECT Forum | **Optimizing Production Processes with Wireless Smart Sensors and Tracking**<br>André Hanak, Fraunhofer IIS | **Energy Harvesting Solutions for Low Power Wide Area Network**<br>Graham Martin, EnOcean Alliance | **How We've Built the Biggest Bluetooth Mesh Network for Lighting Applications**<br>Janusz Stasik, SILVAIR |
| **15:30** | **Interoperability of Wireless Technologies – ULE & IoTivity Bridging Gateway Project**<br>Avi Barel, ULE Alliance | **Real-Life IO-Link Wireless Performance for Industrial Application**<br>Pascal Gaggero, PhD, Balluff | **Harvesting Energy from Trees in Order to Power LPWAN IoT Nodes**<br>Prof. Dr. Marcel Meli, ZHAW InES | **Trending Near You: Advanced BLE Beacons Using Bluetooth 5**<br>Joe Tillison, Silicon Labs |
| **16:00** | COFFEE & COMMUNICATION BREAK | | | |
| **16:30** | **Tutorial 01: DECT**<br>**openD: Leveraging the Uniqueness of DECT and ULE for State of The Art Wireless Connectivity**<br>Daniel Hartnett, DECT Forum | **Tracking Forklifts in Large Indoor Spaces with Off-The-Shelf Devices**<br>Luen To, Thorsten Vaupel, Steffen Meyer; Fraunhofer IIS<br>**Tutorial 02: NB-IOT**<br>**Make your Hands Dirty on NB-IoT Application** Wilhelm Oelers, Triptec HL | **Tutorial 03: emb::6**<br>**emb::6 Workshop**<br>David Rahusen, Daniel Jäckle, Patrick Weber; STACKFORCE | **Tutorial 04: Li-Fi**<br>**From Wi-Fi to Li-Fi**<br>Alexander Noack, PhD, Fraunhofer IPMS |
| **17:00** | | | | |
| **18:00** | Live Hacking: WLAN-Security and Get-together | | | |
| | **Security of Things or "Never touch a running system" – Quality Assurance in Times of Internet of Things (Problems of Digitization in Live Hacking)**<br>Thomas Haase, T-Systems Multimedia Solutions | | | |
| **19:30** | | | | |

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## DAY 2 | Thursday| November 15, 2018

**09:00** **5G – Expectations, Opportunities, Challenges – and Missing Pieces** — Prof. Dr. Gerhard Fettweis, Vodafone/TU Dresden

**09:30** **Semiconductor Technologies for 5G Applications** — Nadine Collaert, IMEC

**10:00** **5G Development for Vertical Industries** — Dr. Joseph Eichinger, Huawei

**10:30** **Panel Discussion: 5G - the All-in-One Wireless Connectivity Suitable for Every (industrial) Purpose?** — Chair: Prof. Dr. Axel Sikora, University of Applied Sciences Offenburg

Panellist: Prof. Dr. Gerhard Fettweis, Vodafone/TU Dresden, Nadine Collaert, IMEC, Dr. Joseph Eichinger, Huawei

**11:00** COFFEE & COMMUNICATION BREAK

| | Session 08: WiFi | Session 09: Zigbee | Session 10: LPWAN | Session 11: Technology |
|---|---|---|---|---|
| **11:30** | **5G or .11ax, a New Battle of Standards?**<br>Cees Links, Qorvo | **Introduction to Zigbee 3.0: What's in the Stack?**<br>Arasch Honarbacht, PhD, ubisys technologies | **Evaluation of the Use of LoRaWAN and SigFox for the Transmission of Location Data of Mobile Systems**<br>Nicole Hirtreiter, Prof. Gerald Kupris; Deggendorf Institute of Technology | **Integrated 3-µA UHF Triband Receiver for Simultaneous Multiband Reception**<br>Heinrich Milosiu, PhD, Fraunhofer IIS |
| **12:00** | **Analysis of IEEE 802.11ax High Efficiency WLANs for in-Vehicle Use**<br>Alper Akbilek, perisens | **Zigbee Smart Energy 1.4**<br>Jonathon Harros, Element Materials Technology | **Universal Testbench for LPWA and NB-IoT**<br>Jubin Sebastian E., University of Applied Sciences Offenburg | **Maximizing the Range of Low-Current Wireless Designs**<br>Martin Stoehr, Maxim Integrated |
| **12:30** | **Driving Wi-Fi Based Connectivity for Low-Power IoT Applications**<br>Siddharth Sundar, Silicon Labs | **Dotdot – the Universal Language of the IoT**<br>Jonathan Harros, Element Materials Technology | **Telegram Splitting Multiple Access – a Novel Physical Layer Approach for Highly Scalable Low Power Wide Area Networks**<br>Josef Bernhard, Fraunhofer IIS | **Radio Scheduling in Dynamic Multiprotocol IoT Applications**<br>Marius Munder, Silicon Labs |

**13:00** LUNCH BREAK

| | Session 12: LoRa | Session 13: Compliance | Deploy Highly Scalable, Low Power Wireless Systems Faster with OpenWeightless | Session 15: Antenna |
|---|---|---|---|---|
| **14:00** | **LoRaWAN – Ideal Solution for Sensor Networks**<br>Michael Fink, Semtech Germany | **Radio Lockdown Directive**<br>Sebastian Raible, European Parliament | Michael Green, OpenWeightless CIC | **Re-Configurable Antennas for 5G**<br>Devin Crawford, ANSYS Germany |
| **14:20** | | **The EU Radio Equipment Directive and its Consequences to Implementations**<br>François Ambrosini, IBIT Ambrosini | | |
| **14:30** | **LoRa Rollout Overview**<br>Johannes Fottner, David Armour; Semtech Germany | | **Session 14: Sigfox**<br>**Sigfox – Technical Characteristics and Use Cases**<br>Aurelius Wosylus, Sigfox Germany | **Design of IoT MIMO Antenna**<br>Heikki Rekonen, National Instruments |
| **14:40** | | **Software Defined Radio Regulation – an SMEs View**<br>Guido Körber, Code Mercenaries | | |
| **15:00** | **Does it Always Have to Be LoRaWAN?**<br>Heinz Syrzisko, IMST | **Discussion** | **Sigfox – Indoor-Performance for Smart Building and Smart Metering Installations**<br>Michael Muenkel, STMicroelectronics Application | **Using PIFA Technology to Secure Stable Connectivity in Mobile IoT Units**<br>Tommy Kärrman, Antti Silventoinen; Proant |

**15:30** COFFEE & COMMUNICATION BREAK

| | Tutorial 05: IP 500 | Tutorial 06: Narrowband | Tutorial 07: Sigfox | Tutorial 08: Antenna |
|---|---|---|---|---|
| **16:00** | **IP500 Alliance Standard – Certified Wireless IoT Network for Commercial Buildings**<br>Helmut Adamski, IP500 Alliance | **Introduction to Narrowband-Communication**<br>Matthias Herlich, Salzburg Research | **Open-Source Software and Hardware Systems**<br>Alexander Lehmann, Sigfox Germany | **Embedded Antenna Design – Make or Buy**<br>Harald Naumann, tekmodul |
| **17:00** | | | | **Tools and Methods for Efficient Antenna Development**<br>Roger Denker, MegiQ |
| **17:30** | | | | |
| **18:00** | | | | |

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*Please note: In order to be registered you have to fill in all required fields marked with an asterisk *****.*
*(A confirmation email will be sent to you)*

**I want to register for**

- ❒ **Only Day 1 (Nov. 14)**
- ❒ **Only Day 2 (Nov. 15)**
- ❒ **Full Conference (Nov. 14-15)**

**I am a**

- ❒ **Student**
- ❒ **Co-Speaker**

**Last Name *** | **First Name *** | **Mr./Ms./Title ***

**Company *** | **Job title**

**Street *** | **Department**

**Zip code *** | **City *** | **Country ***

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**Purchase order number / Tax ID number etc.**

**Date / Signature ***

**My company is a member of:**

- ❒ Bluetooth SIG
- ❒ EnOcean Alliance
- ❒ IQRF Alliance
- ❒ KNX Association
- ❒ LoRa Alliance
- ❒ Weightless SIG
- ❒ ZigBee Alliance

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**My choice**

| DAY 1 \| Wednesday \| November 14, 2018: | | DAY 2 \| Thursday \| November 15, 2018: | |
|---|---|---|---|
| ❒ S01: IOT/Networks | ❒ S07: Bluetooth | ❒ S08: WiFi | ❒ S14: Sigfox |
| ❒ S02: Security | ❒ T01: DECT | ❒ S09: Zigbee | ❒ S15: Antenna |
| ❒ S03: Industrial | ❒ T02: NB-IOT | ❒ S10: LPWAN | ❒ T05: IP 500 |
| ❒ S04: Energy Harvesting | ❒ T03: emb::6 | ❒ S11: Technology | ❒ T06: Narrowband |
| ❒ S05: Mobile Communication | ❒ T04: Li-Fi | ❒ S12: LoRa | ❒ T07: Sigfox |
| ❒ S06: DECT | | ❒ S13: Compliance | ❒ T08: Antenna |

| Conference fees | by Sept, 27 | after Sept, 27 |
|---|---|---|
| **One-Day** (Nov 14 **or** 15) | 690,- EUR | 870,- EUR |
| **Full Conference** (Nov 14 **and** 15) | 990,- EUR | 1.190,- EUR |

All fees plus VAT.

**Terms and Conditions:**

- The attendance fee includes participation on the booked conference days, proceedings, lunch and refreshments.
- You will receive a confirmation of your conference registration along with your invoice.
- Cancellations received in writing before or on October 24, 2018 will be subject to a service charge of EUR 50 for one-day registrations and EUR 100 for two-day registrations. For all cancellations received after October 24, 2018 the full conference fee remains payable.
- Substitutions within the same company are welcome at any time.
- The organizers reserve the right to make changes in the program and/or speakers or to cancel sessions/tutorials if conditions beyond its control prevail. Please check www.wireless-congress.com for the latest conference information.
- Students receive a 50 % discount (student ID required, please submit by fax to + 49 (0) 89 255 56 - 0155 or by email to JHeger@weka-fachmedien.de).
- Members of Bluetooth SIG, EnOcean Alliance, IQRF Alliance, KNX Association, LoRa Alliance, Weightless SIG and Zigbee Alliance receive a 10 % discount.
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- On-site registration: Please register in advance. For on-site registrations a surcharge of EUR 40 per attendee will apply.
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**Venue** (Congress will take place in parallel to electronica)**:**
ICM – International Congress Center Munich, Messegelände, 81823 Munich, Germany

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