# **FINAL PROGRAMME**

# 2<sup>nd</sup> PCNS Passive Components Networking Symposium

### September 10-13<sup>th</sup> 2019, Bucharest, Romania

Event location: Library of University Politehnica Bucharest, Splaiul Independeței, 313, Bucharest

media partner:

BOID'S POWER Systems °

sponsored by:





## Passve Components Institute

Europear

jointly organised by:

## Pre-Event Day 10<sup>th</sup> September 2019

ltelcond

13:00-17:00h Passive Components Mounting Guidelines Workshop

17:00-19:00h Politehnica Bucharest University Tour

# Main Conference & Networking Day 11th September 2019

9:00-11:30h Welcome and Keynotes; Chairman: Tomas Zednicek; EPCI

- Passive Components Keys to enabling Advanced Future System Designs; Ron Demcko; Technical Sales Group Manager; AVX fellow
- Design Challenges of Capacitors What about downsizing, robustness and energy density for future applications?;

Stephan Menzel; Product Development Manager Capacitors; Würth Elektronik eiSos

- Shortage of Products Market Mechanisms and How to avoid Fake-Products; Rüdiger Scheel; VP Automotive, Murata Electronics Europe
- Passive Components Teaching and Learning;
  Paul Svasta, Emeritus Professor; Politehnica University of Bucharest

#### 11:30-13:00h Speakers and Organisations Flash Presentations

• 5min flash presentations to introduce speakers, universities and companies and its hot subjects

### 14:00-17:50h Advanced Passive Components Workshop



- Murata: 3-terminal ceramic capacitors, Common mode choke coils, Ferrite beads
- AVX: Supercapacitors, ESD protection and multilayer varistors
- Würth Elektronik: How to choose the best Inductor for a DC/DC converter and consider EMI
- Kemet: Tantalum capacitor advances, Commercialisation of space and ceramic capacitors
- KOA Europe: Resistor technology overview

### 18:00 Kelcome Drink

## Panel Discussion & Sessions Day 12th September 2019

### 9:00-11:00h Hot Topic Panel Discussion MLCC Class II DC BIAS & Ageing Capacitance Loss

- Manufacturers and end users discussion on definition/reference conditions on capacitance loss with DC BIAS on MLCC class II capacitors
- Panelists (Tentative list): Valeo, AVX, Kemet, Murata, Continental

tutorial paper and facilitation by: Tomas Zednicek; EPCI

#### 11:20-12:20 Session 1 NEW DEVELOPMENT; Chairman: Ron Demcko; AVX Corporation

- **1.1. A Disruptive Nano-laminate Polymer Capacitor Technology for Electric Drive Applications**; Angelo Yializis; POlyCharge America Inc; United States
- 1.2. Integrated and discrete capacitors based on carbon nanostructures with capacitance densities in excess of 200nF/mm<sup>2</sup>; Sascha Krause; Smoltek AB; Sweden
- 1.3. Advances in Film Resistor Technology; Stephen Oxley; TT Electronics; United Kingdom

13:20-14:40 Session 2 TECHNOLOGY & ROADMAPS; Chairman: Vlad Bande; TU of Cluj

- 2.1. Energy Harvesting is not Fiction anymore; Lorandt Fölkel; Würth Elektronik eiSos; Germany
- **2.2. Analysis of Multi-Layer Ceramic Capacitors used in Power Distribution Networks**; Marcel Manofu; Continental; Romania
- 2.3. Guidelines How to Downsize MLCCs Efficiently; Yuki Nagoshi; Murata; Germany
- 2.4. Capacitor Trends and Challenges; Martin Barta; TTI; Germany

15:00-16:30 Session 3 QUALITY & RELIABILITY; Chairman: Alexander Teverovsky; NASA/GSFC

- 3.1. COTS procurement for space mission; Denis Lacombe; ESA ESTEC; Netherlands
- 3.2. Most Reliable, Most Efficient and Price Effective Solid Tantalum Capacitors; Yuri Freeman; Ed Jones; Kemet; USA
- 3.3. Real Environment Aluminium Electrolytic Capacitor LifeTime Evaluation and Modelling; Luca Primavesi; ItelCond and Univeristy of Milano; Italy
- 3.4. Supercapacitor Degradation and Life-time; Vlasta Sedláková; Brno University of Technology; Czech Republic
- 16:30 **KENET** Gala Dinner (bus coach to country restaurant)

### Sessions Day & Closing 13th September 2019

9:00-11:00 Session 4. MATERIALS & PROCESSES; Chairman: Lorandt Fölkel, Würth Elektronik eiSos

- **4.1. High Bs ferrite material development for high power applications**; JC Sun; Bs&T Frankfurt am Main GmbH
- **4.2. High efficient new Hybrid magnetic EMI filter design for Low Voltage DC distribution**; Thomas Ebel; Wai Keung Mo; Centre for Industrial Electronics, University of Southern Denmark; Denmark
- 4.3. Conductive hybrid threads and their applications; Tomas Blecha; University of West Bohemia; Czech Republic
- 4.4. Tin Whisker or not Whisker; Jean Edmond Le Calvé; Valeo; France
- 4.5. Stable and reliable tantalum supply chain; Roland Chavasse; T.I.C.; Belgium

11:20-12:20 Session 5. MEASUREMENT & TEST; Chairman: Luca Primavesi; Itelcond

- 5.1. Degradation of ESR in Polymer Tantalum Capacitors during High Temperature Storage; Alexander Teverovsky; NASA/GSFC; United States
- 5.2. Investigation and Experimental Comparison of Magnetic Core Loss for High-Saturation Ferrite Material; Chang Wang; JC Sun; TU of Denmark; Denmark
- 5.3. Evaluation of Active Balancing Circuits for Supercapacitors; Ciprian Ionescu; Politehnica University of Bucharest

#### 12:20-12:40 Closing Ceremony

#### **PCNS Fee Rates:**

Regular Conference Admission Fee	Registration Rates
	Standard Rate
pre-event Workshop Only	140 EUR
Main Symposium	320 EUR
Symposium + pre-event Workshop	390 EUR
Speaker	220 EUR
Speaker + pre-event Workshop	320 EUR
Exhibition Stand	300 EUR*
Administration booth person and spouse**	55 EUR

Academic Conference Admission Fee	<b>Registration Rates</b>
	Standard Rate
Main Symposium Academic	270 EUR
Symposium + pre-event Workshop Academic	340 EUR
Exhibition Stand Academic	free

Notes:

\* the exhibitor fee does not include conference admission fee

\*\* social events admission only

## www.passive-components.eu/pcns