

The background of the entire page is an abstract, high-contrast image. It features a bright, circular white light source in the lower center, from which numerous thin, green, fiber-like or beam-like structures radiate outwards in all directions. These beams create a sense of depth and energy, resembling a microscopic view of a material or a stylized representation of light or data flow. The overall color palette is dominated by vibrant green and stark white against a dark background.

IEEE 22nd International Symposium for Design and Technology in Electronic Packaging

20th – 23rd October 2016, Oradea, Romania

Advanced Programme

SIITME 2016

SIITME 2016 - Conference program

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Welcome to the 22nd edition of the International Symposium for Design and Technology in Electronic Packaging

SIITME, now at the 22nd edition, has become during its long existence a meaningful event focused on highlighting topics that are relevant to the electronic industry in our region. One of the main objectives of SIITME is to foster a strategic partnership between the academia and the electronics industry. This is a relevant goal especially since the electronics industry has become an important economic player in many parts of our region. In this context of unprecedented development of the electronics industry, in a globalized economic environment, it is natural to ask ourselves what course of action to take. Some time ago, Prof. Rao Tummala, President of the IEEE CPMT Society at that time, and current Director of the prestigious Packaging Research Center at Georgia Institute of Technology, said: ***“The global electronic industry acts as the engine for science, technology, advanced manufacturing, and the overall economy of the countries that participate in it.”*** As such, it is reasonable to be interested in the fact that countries in our region take part in the evolution of the electronics industry, which is why a strategic partnership between the industry and the educational environment involved in training human resource is a "sine qua non" condition. An ecosystem should be created to ensure positive effects on the prosperity of those involved. It is extremely important to establish dialogue, open communication between those who train the human resource and the economic environment. The resulting synergy leads to benefits for those involved, academia and electronics industry both. In the context of providing human resource able to be involved in the electronics industry, it is useful to note Professor James Morris's assertion during a communication at ECTC (Electronic Component Technology Conference), one of the most prominent manifestations of the electronics industry worldwide that is held annually in the United States. Among others he said: ***“Electronics packaging has become recognized as a critical technology for the continued growth of the nation's electronics industry.”*** This claim is consistent with the current educational environment necessary to be developed in our region to assure the electronic industry with proper human resource. If we want to remain

active players in the evolution of the electronics industry, we have to keep them in sight. We are aware that in harmonizing, sometimes diverging, interests of the "actors" involved, we are still at the beginning. However, it is extremely important that we have established a dialogue between the parties involved, with all "cards on the table", trying to identify mutual beneficial solutions. Towards this goal, this edition brings a continued direct and massive involvement of representatives of the electronics industry. Representatives of important companies participate in the Industry Exhibition. Some of them also hold keynote speeches or presentations. We hope that this trend continues in future editions and that SIITME will become a bridge between academia, research and industry.

Finally, to those who are present in the very nice city of Oradea at the 22nd edition of SIITME, we wish a pleasant stay, fruitful discussions and professional satisfaction.



Paul SVASTA,

SIITME General Chair



Delia UNGUR,

General Industrial Co-Chair



Dan PITICĂ,

General Academic Co-Chair



Dear participants and guests,

I'm pleased and honored, on behalf of the local organizing committee, to welcome you all at Băile Felix, Oradea. Romania, to the 2016 IEEE 22nd International Symposium for Design and Technology in Electronic Packaging (SIITME).

Oradea is a north-west border Romanian city, a multicultural town which is highly appreciated by the different ethnic groups living on the banks of the Crișul Repede River. Because the Romanian industry must cope with a fierce global competition, Oradea City Hall developed the Euro Business Industrial Park containing some important companies involved in electronic industry and manufacturing.

Băile Felix spa is located in the north-west of Romania, Bihor county, at a distance of about 9 km from Oradea and 22 km from the border crossing point Borș. Located in the Crișuri Plain, the resort has a moderate continental climate with mild winters and temperate summers, with Mediterranean influence, ideal for spa tourism. The whole year, Băile Felix spa offers relaxing conditions, vacation and recreation recovery.

University of Oradea is aware that a very important target in near future is to develop a network that promotes the development of human resources for innovation. So, the Electronics and Telecommunication Department is deeply involved in developing a strong connection between industry and technical academic courses and has a growing interest for electronic packaging.

Our local organizing committee is confident that SIITME 2016 will be a chance for companies involved in electronics industry and Romanian technical academic schools to unite their interests and activities.

We wish all SIITME 2016 participants a very pleasant and successful attendance!

Welcome to Băile Felix!

Prof. Cornelia GORDAN, Ph.D.

SIITME 2016 Conference Chair

University of Oradea, Romania



Thursday, October 20

- 14:00 – 19:00 **Registration (Registration desk, Hotel Lobby) / Free swimming session (Hotel swimming pool)**
- 19:30 – 21:00 **Welcome reception (Hotel Poienița restaurant)**
- 21:00 – 22:00 **Steering Committee Meeting (Steering Committee Room)**
- 22:00 – 23:00 **IEEE – CPMT Hu & Ro Joint Chapter Meeting (Steering Committee Room)**

Friday, October 21

- 07:00 – 08:00 **Breakfast (Hotel Casa Poienița restaurant)**
- 08:00 – 12:00 **Registration (Registration desk, Hotel Lobby)**
- 08:15 – 08:30 **Opening ceremony, Welcome words (Conference Room)**
- 08:30 – 10:15 **Plenary Session - Keynote Speakers (Conference Room)**
- 10:15 – 10:35 **Coffee Break**
- 10:35 – 11:35 **Technical Exhibition Opening - Industrial Session (Conference Room)**
- 11:35 – 13:15 **Oral Session 1 (Conference and Poster Room)**
- 13:15 – 14:15 **Lunch**
- 14:15 – 16:15 **Poster Session 1 (Conference and Poster Room)**
- 16:15 – 16:35 **Coffee Break**
- 16:35 – 17:50 **Oral Session 2 (Conference Room)**
- 17:50 – 19:50 **Poster Session 2 (Conference and Poster Room)**
- 19:50 – 21:30 **Dinner (Hotel Poienița restaurant)**
- 21:30 – 22:30 **AFCEA Romanian Student Club Meeting (Steering Committee Room)**

Saturday: October 22

- 07:00 – 08:00 **Breakfast (Hotel Poienița restaurant)**
- 08:00 – 10:00 **Registration (Registration desk, Hotel Lobby)**
- 08:00 – 09:45 **Plenary Session - Keynote Speakers (Conference Room)**
- 09:45 – 10:45 **Industrial Session (Conference Room)**
- 10:45 – 11:00 **Coffee Break**

11:00 – 12:15	Poster Session 3 (Conference and Poster Room)
12:15 – 13:30	Oral Session 3 (Conference Room)
13:30 – 14:30	Lunch
14:30 – 19:30	Cultural Program
19:00 – 19:30	Steering Committee Meeting (Steering Committee Room)
19:30 – 23:00	Conference Dinner and Awarding session (Hotel Poienița restaurant)

Sunday: October 23

07:30 – 09:00	Breakfast (Hotel Poienița restaurant)
09:00 – 10:00	Closing ceremony, looking forward to SIITME 2016 (Conference Room)
10:00 – 11:00	Farewell coffee, End of Symposium

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Keynote speaker:

Joseph Fjelstad,
 CEO Founder
 Verdant Electronics
 Seattle, Washington, USA
 Contact (joe@verdantelectronics.com)

Presentation:

"Solderless Assembly For Electronics (SAFE) - An Alternative Path to Fabrication"

Joseph (Joe) Fjelstad, founder and CEO of Verdant Electronics, is 45-year veteran of the electronics industry and internationally known expert in the field of electronic interconnection technology. He is a serial entrepreneur and certain of the concepts found in his 175 plus US patents are also found in nearly every electronic device manufactured today. Joe is also an author or coauthor of several books on electronics manufacturing and IC packaging technology including: The Printed Circuit Handbook, 7th Edition (2016) and Flexible Circuit Technology, 4th Edition (2012), both of which are the most widely read references on the topics and Electronic Packaging and Interconnection Handbook, 4th Edition and Chip Scale Packaging for Modern Electronics. He has given lectures at numerous universities and researcher centers including CERN and NASA-JPL and has keynoted several electronics conferences.

You can find out more about the personality of Joe Fjelstad reading the opinion of Mike Buetow published in Circuits Assembling (<http://www.circuitsassembly.com/ca/features-itemid-fix/395-caveat-lector/26345-caveat-lector-1609.html>):

"Joe Fjelstad, the nicest guy in the electronics industry, is used to hacking people off. That's because wherever he goes, Joe is a disrupter. Not of people, mind you. Of technologies. And thinking.

Joe was talking flex circuits before flex circuits were cool. Now they are ubiquitous. He conceived remarkable developments for chip-scale packaging, lead and ball attachment and, later, high-speed interconnection. A quick search of the US Patent Technology Office database reveals 118 inventions with his name on them. Even more ideas are in the pipeline. As often as not, however, Joe moved on before he had the chance to reap the benefits (financial or peer acclamation) of his work. For instance, he was the first corporate fellow at Tessera Technologies, the inventor of the μ BGA, but left before the company went public.

His latest rethink is the so-called Occam Process, which uses packaged ICs to build electronic assemblies in reverse order, thus eliminating the need for a separate PCB. The process calls for putting known-good IC packages and various discretes directly onto a carrier in predetermined locations and then encapsulating the components so they become a monolithic assembly. Then the assembly can be metallized with copper, and circuit patterns created to make the required interconnections between leads of all the various components. For multilayer designs, the process is infinitely repeatable, until all the connections are made.

You'll notice nowhere in that description is solder mentioned. That's because what Occam also does is eliminate the world's oldest joining material, a move guaranteed to do the technical equivalent to kicking the proverbial hornets' nests.

Occam debuted in the wake of RoHS and was marketed as an answer to lead-free solders. Yet I've often thought it was miscast in that role. Electronics aren't about the connecting material; they are about size and reliability and cost and function.

A decade on, although still aghast at the estimated \$90 billion that's been spent converting the industry to lead-free, Joe seems to recognize this. He's back to thinking structures first, instead of the other way around.

"At Tessera, we asked people to make new materials and processes in pursuit of a microvia CSP. This time we can use the existing infrastructure. It already exists. I'm hoping to create the will to pursue it."

That's key because, as the Semiconductor Industry Association noted in July with the release of its final roadmap, the shrinking of conventional silicon transistors is about out of steam. (See *Around the World*, pg. 11.) "Smaller" just can't get much smaller.

In a paper published last spring, Joe revealed results of a study in which a 140 x 100mm 12-layer board featuring a 442-pin FPGA with a 0.8mm ball pitch was reduced, using Occam, to a 30 x 40mm six-layer board using a 0.5mm lead pitch LGA. The design rules didn't change – 50µm lines and spaces – yet the new version is ~70% smaller in terms of total area and occupies a footprint of less than 20% of the original design, with minimal increase in assembly height. If fewer pins could be achieved, simpler routing (and probably faster CAD) are next in line. Libraries could be simplified as well. Can Occam spur a return to building structures with the fewest number of transistors, not the most?

Joe thinks so. To light a fire, he is sponsoring a competition for designers, aptly named the Occam Prize. "Redesign anything you've done before, pretend all the components exist and set yourself to the task," he says.

Joe, who will formally announce the Occam Prize this month at PCB West, relates the rethinking of electronics design to the pioneers of aviation. "Those early days were fraught with peril. But today, aviation is the safest way of transportation. If you want to fly, you have to leave the ground." Amid all these ever-shrinking products, Joe is always one to see the big picture. "I'm not going to make a lot of friends in the solder (or component) industries, but the motivation is for the four billion people who make \$2 a day and need products to last and be bulletproof. Those who adopt – and adapt – will be able to make product that is superior and less expensive than their competition."

Designers, it's time to fly."



Keynote speaker:

**Dipl.-Ing. Tomáš Zedníček Ph.D.,
President of European Passive Components
Institute**

e-mail: tom@passive-components.eu

**Presentation:
"Capacitor Technology Overview"**

- Electrotechnology Degree by Technical University of Brno, Czech Republic in 1993
- Ph.D. in Tantalum Capacitors in 2000
- over 21 years working for tantalum capacitor manufacturer
- more than 15 years in position of Worldwide Technical Marketing Manager
- more than 60 technical papers and 1 US/international patent
- 4 outstanding/best award technical papers at CARTS passive component conference
- 2005 Dr. Zandman award for a great contribution to passive component industry
- Lecturer of capacitor technologies, presentation skills and inter-culture communication
- July 2015 - Founder of the European Passive Components Institute



Keynote speaker:

Dr. Eng. Alexandru Romanescu

Ampleon, Nijmegen, Netherlands

e-mail: alexandru.romanescu@ampleon.com

Presentation:

"RF Power Semiconductor Devices: Current and Future Applications"

Dr. Alexandru Romanescu was born Romania in 1985. He received his degree in electronic engineering from the "Politehnica" University of Bucharest, Romania, in 2008 and his PhD in 2011 from the University of Grenoble, France.

Between 2005 and 2008 he was with the Center for Technological Electronics and Interconnection Techniques (CETTI) in Bucharest Romania and later with the Institute of Microelectronics (IMEP-LAHC) in Grenoble, France. In 2008 he joined ST Microelectronics Crolles, France and in 2012 GLOBALFOUNDRIES Dresden, Germany. He worked as device & integration engineer for the development of various RF CMOS & BiCMOS technologies based on 130nm down to 22nm nodes. Since 2015 he is with Ampleon Nijmegen, The Netherlands, working on LDMOS technologies for RF Power devices.



Keynote speaker:

Lorandt Fölkel M.Eng
Product Development Manager
Würth Elektronik eiSos GmbH

e-mail: Lorandt.Foelkel@we-online.de

Presentation:
"The Reality about Energy Harvesting"

Business Development Manager for Energy Harvesting, FAE for Eastern Europe, Baltic countries, Russia and Turkey

Lorandt Foelkel is application engineer for EMI/EMC situation and switched mode power supply (SMPS) design for industrial- and automotive electronics applications. He is the company spokesperson for EMC seminars and holds over the World, since 2005, more than 400 seminars to design engineers, giving training to easy understanding the EMC problems at board level.

Expertise: With over 29 years' experience in electronic design, including 17 years in product management for passive components at Würth Elektronik eiSos, Lorandt has widespread experience for EMC, filter design and efficiency improvement for SMPS. After his study at "University Transilvania Brasov" in Kronstadt, he works for 9 years as service engineer for consumer electronics then 4 years as design engineer for ATEX (explosion safety) remote controllers.

About the company: Würth Elektronik eiSos GmbH&Co.KG is one of European passive components manufacturer who design and manufacture EMC ferrites, inductors for power supplies, transformers for power converter, LAN transformers, capacitors, LED's, power converter modules, connectors and assembly components, offering design in service and support with local FAE's Worldwide.

**Keynote speaker:****Traian Cornel Cucu****Global Product Manager Solder Paste, Alpha, USA****e-mail:** tcucu@alent.com**Presentation:**

**"New Alloy Approaches on PCB Assembly Landscape -
Low Temperature Solder, High Mechanical
Performance with Low Processing Temperatures-"**

Traian Cucu is presently working as Global Product Manager Solder Paste at Alpha (former Cookson Electronics Assembly Materials) and is responsible for Planning, organizing and controlling all aspects of the solder paste product line from conceptual stage through product life cycles. He received his B.Sc. degree from "Politehnica" University of Timisoara, Faculty of Electrical and Power Engineering, Specialization: Industrial Power Systems and his PhD. from Politehnica University of Bucharest, Faculty of Electronics, Telecommunications and Information Technologies, Specialization: Electronic Technology. He was part of the technical team from Cookson Electronics that was implementing tin-lead SMT process in late 1990s during the transition from THT to SMT. Early 2000s he was involved in the development and implementation of the lead free technology for both wave and SMT processes, working for Cookson Electronics and Brady. He was working with major mobile phone OEMs in order to implement new processes that will enable a quicker transition to finer pitch designs and 3D assembly systems for the next generation devices. He was also actively involved, while working with Brady, in the process traceability in electronics with a big accent on the automotive industry. As part of the Alpha technical team he was continuing his work in the assembly process focusing on tin-lead and lead free processes for automotive, during a 3 years period starting 2007.

Keynote speaker:**Detlef Bonfert, PhD****Fraunhofer Institution for Microsystems and Solid State Technologies EMFT, Munich, Germany****e-mail:** detlef.bonfert@emft.fraunhofer.de**Presentation:****"Sensors and Sensor Systems for IoT Engineering at Fraunhofer EMFT "**

Detlef Bonfert is an electrical engineer with the Fraunhofer Society for more than 32 years. At the Fraunhofer EMFT he is now with the Business Development Department. Former to that he was in the Circuits and Systems Department, CS, working in the ATIS- Group. His activities included: electrical characterization of active and passive devices on silicon, thinned silicon, alumina, polymer, and textiles; electrical pulsed behavior of active and passive devices on different substrates; thermal and optical behavior of active, passive, and sensing devices; ESD and transient Latch-up; Laser- trimming of thin and thick film passive devices. He is senior member of IEEE, CPMT, EDS, ComSoc, MTT-S Societies, and member of the International Microelectronics and Packaging Society iMAPS. He acts as Technical Program Committee Chair, Steering Committee and Scientific Committee Member of the International Symposium for Design and Technology in Electronic Packaging, SIITME, and Steering Committee Member of the International Spring Seminar in Electronics, ISSE. He is also International Consultant Committee Member of the International Student Professional Contest „Design of Electronic Modules and Assemblies, TIE, an event which shows how academia from the middle and eastern part of the European Union responds to the industry demands for educating human resources according to company needs.

Friday, October 21

08:30 – 10:15 Plenary session **Keynote speakers**

Session Chairs:

Heinz WOHLRABE, Dresden University of Technology, Dresden, Germany

Dan PITICĂ, Technical University of Cluj-Napoca, Cluj-Napoca, Romania

K1 "Solderless Assembly For Electronics (SAFE) - An Alternative Path to Fabrication"

Joseph FJELSTAD, Verdant Electronics, Seattle, Washington, USA

K2 "Capacitor Technology Overview"

Tomáš Zedníček, *European Passive Components Institute, Brno, Czech Republic*

K3 "RF Power Semiconductor Devices: Current and Future Applications"

Alexandru Romanescu, *Ampleon, Nijmegen, Netherlands*

Friday, October 21

10:35 – 11:35 **Technical Exhibition Opening - Industrial Session**

Chaired by:

Cosmin MOISA, Continental Automotive Romania

Ciprian IONESCU, Politehnica University of Bucharest, Romania

Friday, October 21

11:35 – 13:15 **Oral Session I – Electronics Applications; Challenge in Education; Applied Reliability**

NOTE: Each author must deliver a 20 minutes slide show presentation of her/his work.

Session Chairs:

Zsolt ILLYEFALVI-VITÉZ, Budapest University of Technology and Economics, Hungary

Mihai BRÂNZEI, Politehnica University of Bucharest, Romania

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Eye Blinking Detection to Perform Selection for an Eye Tracking System Used in Assistive Technology

A. Păsărică, R. G. Bozomitu, V. Cehan and C. Rotariu

Battery Charger Circuit Enhancement

T. Dachin, D. Pitica, G. Chindris

Characterization of Tin Pest by Electrical Resistance Measurement

A. Skwarek, B. Illés, A. Géczy

Adaptive user interface for Higher Education based on web technology – Research and Innovation in Industry 4.0

M. Ciolacu, R. Beer

Friday, October 21

16:35 – 17:50 Oral Session II - Electronics Simulation & Modelling

NOTE: Each author must deliver a 20 minutes slide show presentation of her/his work.

Dissemination session of MECA (Micro Electronics Cloud Alliance) project,
www.meca-project.eu, Knowledge Alliance 562206-EPP-1-2015-1-BG-EPPKA2-KA;
 session supported by MECA

Session Chairs:

Radu BOZOMITU, “Gheorghe Asachi” Technical University of Iași, Romania

Nistor Daniel TRIP, University of Oradea, Romania

A Novel Optimization Algorithm for Thermal Design of MCMs

J. Yang, Z. Yuan, N. Zhao, N. Ye, H. Shen, J. Di

Coupled surface plasmon resonance on gold nanocubes - investigation by simulation

A. Bonyár, G. Szántó, and I. Csarnovics

Analysis of Crosstalk Effects on Single Ended Signal Lines Crossing Split Reference Planes

M. Manofu, R. Vlăduță and C. Negrea

Saturday, October 22

08:00 – 09:45 Plenary session **Keynote speakers**

NOTE: Each author must deliver a 20 minutes slide show presentation of her/his work.

Session Chairs:

Pavel MACH, Technical University of Prague, Czech Republic
Viorel NICOLAU, “Dunarea de Jos” University of Galati

K4 “The Reality about Energy Harvesting”

Lorandt Fölkel, Würth Elektronik eiSos GmbH

K5 “New Alloy Approaches on PCB Assembly Landscape -Low Temperature Solder, High Mechanical Performance with Low Processing Temperatures”

Traian Cornel CUCU, Alpha, USA

K6 “Sensors and Sensor Systems for IoT Engineering at Fraunhofer EMFT”

Detlef BONFERT, Fraunhofer Institution for Microsystems and Solid State Technologies
EMFT, Munich, Germany

Saturday, October 22

09:45 – 10:45 - **Industrial Session**

Chaired by:

Alexandru BORCEA, ARIES, Romania
Bogdan MIHAILESCU, APTE, Romania

Saturday, October 22

12:45 – 13:30 Oral Session III - Components, Assembling, and Manufacturing Technology

NOTE: Each author must deliver a 20 minutes slide show presentation of her/his work.

Session Chairs:

Carmen GERIGAN, Transilvania University of Braşov, Romania

Mihaela HNATIUC, Maritime University of Constanţa, Romania

Sensitivity of Resistance, Noise and Nonlinearity of Conductive Adhesive Joints to Changes in Adhesive

S. Barto, P. Mach, A. Duraj

Investigating the Effect of Solder Paste Viscosity Change on the Pressure during Stencil Printing

O. Krammer, B. Varga, D. Bušek

Enhancing Thermal Capabilities of Component Packaging

A. Fodor, G. Chindris, and D. Pitica

Posters Assessor Committee:

General Poster Session Chair: Heinz Wohlrabe, TU Dresden

Alpaslan TURGUT, Dokuz Eylül University Mechanical Engineering, Türkiye
 Atilla BONYÁR, Budapest University of Technology and Economics, Hungary
 Detlef BONFERT, Fraunhofer EMFT, Munich, Germany
 Radu BOZOMITU, "Gheorghe Asachi" Technical University of Iași, Romania
 Vlad CEHAN, "Gheorghe Asachi" Technical University of Iași, Romania
 Norocel CODREANU, "Politehnica" University of Bucharest, Romania
 Andrei DRUMEA, "Politehnica" University of Bucharest, Romania
 Carmen GERIGAN, Transilvania University of Brașov, Romania
 Tecla GORAȘ, "Gheorghe Asachi" Technical University of Iași, Romania
 Cornelia GORDAN, University of Oradea, Romania
 Mihaela HNATIUC, Maritime University of Constanța, Romania
 Balázs ILLÉS, Budapest University of Technology and Economics, Hungary
 Zsolt ILLYEFALVI-VITÉZ, Budapest University of Technology and Economics, Hungary
 Ciprian IONESCU, "Politehnica" University of Bucharest, Romania
 Laurențiu IONESCU, University of Pitești, Romania
 Andrei KECSEG – FONCE, Connectronics Romania
 Olivér KRAMMER, Budapest University of Technology and Economics, Hungary
 Emil LAZARCIUC, Continental Automotive Romania
 Ioan LIȚĂ, University of Pitești, Romania
 Pavel MACH, Technical University of Prague, Czech Republic
 Radu MATEESCU, COMTEST SRL, Romania
 Alin MAZĂRE, University of Pitești, Romania
 Bálint MEDGYES, Budapest University of Technology and Economics, Hungary
 Cosmin MOISA, Continental Automotive, Timisoara, Romania
 Viorel NICOLAU, "Dunarea de Jos" University of Galati
 Andrei NICORAȘ, PLEXUS SERVICES RO SRL
 Gheorghe PANĂ, "Transilvania" University of Brașov, Romania
 Dan PITICĂ, Technical University of Cluj-Napoca, Romania
 Ioan PLOTOG, "Politehnica" University of Bucharest, Romania
 Daniel TRIP, University of Oradea, Romania

Friday, October 21 **Presenter: Stick- up poster after registration!**

14:15– 16:15 Poster Session I (Conference and Poster Room)

NOTE: *Each author must deliver a 3 minutes slide show presentation of her/his work.*

Session Chair: Vlad CEHAN, Technical University “Gheorghe Asachi” Iași, Romania

Session Co-Chair: Balázs ILLÉS, Budapest University of Technology and Economics, Hungary

P1.1 VIBROMOD – An Electronic Equipment for Data Vibration Measurement and Analysis

I. Nacu, L. Luca, N. Roman, D. Aiordachioaie

P1.2 One Glass Solution Touch Panel Performance Variation over Temperature Exposure

H.-T. Cutlac, P. M. Svasta, S. Calea

P1.3 LabVIEW Simulator for Terrestrial MIMO Communications

L. Perisoara, D. Sacaleanu, R. Stoian

P1.4 Two high accuracy methods in microwave measurements for polymer samples

C. Hutanu, A. Tulbure

P1.5 Robust Audio Forensic Software for Recovering Speech Signals Drowned in Loud Music

R. Dobre, C. Elisei-Iliescu, C. Paleologu, C. Negrescu, D. Stanomir

P1.6 Machine-to-Machine Communications for Cloud-Based Energy Management Systems within SMEs

G. Suci, Al. Vulpe, O. Fratu, L. Necula, A. Pasat, V. Suci

P1.7 Testing Immunity to Portable Transmitters with Helical Antennas: Key concepts

A. M. Silaghi, A. De Sabata, Al. M. Silaghi

P1.8 Wireless sensor networks as part of emergency situations management system

C. Lung, A. Buchman, S. Sabou

P1.9 E-Bike Electronic Control Unit

F. Dumitrache, M. C. Carp, and Gh. Pana

P1.10 FFT Based Investigations on Light Flicker in New Lighting Systems

C. Ionescu, M. Dima, D. Bonfert

P1.11 An Arduino Platform for Remote Control and Bus Testing of Programmable Instruments

D. Tica, L. Perisoara, Al. Vasile

P1.12 Single-Phase Inverter for Solar Energy Conversion Controlled with DSpace DS1104

D. Petreus, P. Toma, R. Truta, R. Etz

P1.13 Wireless sensor node for fruit growing monitoring

D. Sacaleanu, L. Perisoara, R. Stoian, L. Sucu

P1.14 Thermophysical properties of some low temperature lead-free solder pastes dedicated to automotive applications

M. Branzei, I. Plotog, G. Varzaru, T. Cucu

P1.15 Thermal Simulation of Traffic Lights in Extreme Weather Conditions

N. Badalan, P. Svasta, C. Marghescu

P1.16 Analysis of LEDs Thermal Properties

N. Badalan, P.I Svasta

P1.17 Wi-Fi Add-On Module for Digital Energy Meter Enabling Integration with Cloud IoT Services

S. Teodoru

P1.18 Device Gateway for Replacing Proprietary GPS Tracking Software with Cloud IoT Services

S. Teodoru

P1.19 An Arduino Platform for Visible Light Communications

D. Sandu, L. Perisoara

P1.20 Obstacle avoidance algorithm

S. Sabou, C. Lung

P1.21 Comparison between Zubieta Model of Supercapacitors and their Real Behavior

R. Negroiu, P. Svasta, Al. Vasile, C. Ionescu, C. Marghescu

P1.22 Investigations on Available Bandwidth in Visible-Light Communications

A. Marcu, R. Dobre, M. Vladescu

P1.23 Formula Student Single User Race Car -Electronic Control

V. Lupu, C. Gerigan, and P. L. Ogrutan

P1.24 A Low-Cost Pavement Image Acquisition System

C. Chiculita, L. Frangu

P1.25 Remote control of sensorless permanent magnet synchronous motor

G. Varzaru, I. Plotog, B. Mihailescu

P1.26 A Study of SW150 Conductive Paste as a possible use in Solderless Assembly for Electronics

G. Varzaru, C. Marghescu, Alex. Vasile, P. Svasta and B. Buta

Friday, October 21

17:50 – 19:50 **Poster Session II** (Conference and Poster Room)

NOTE: Each author must deliver a 3 minutes slide show presentation of her/his work.

Session Chair: Gabriel CHINDRIȘ, Technical University of Cluj-Napoca, Romania

Session Co-Chair: Detlef BONFERT, Fraunhofer EMFT, Munich, Germany

P2.1 Bond-Graph Modelling of the Equivalent Circuit of an On-Chip Spiral Inductor

A. Grava, C. Grava

P2.2 The framework of using models for comparative assessment of traffic sensors

F. Nemtanu, I. Costea

P2.3 Developing a multi sensors system to detect sleepiness to drivers from transport systems

I. Costea, C. Dumitrescu, F. Nemtanu, I. Badescu, A. Banica

P2.4 Analysing of Half-Bridge Inverter Using the Simulink Platform

I. Baci, S. Pop, V. Bande

P2.5 Statistical methods for determining components' non-linearities, from thermoluminescent devices

M. Dima, D. David-Rus, C. Ionescu

P2.6 PSpice Discharge Model for Lead-Acid Battery

O. Pop, A. Taut, A. Grama, R. Fizesan

P2.7 Modelling and PSPICE simulation of a Photovoltaic/Thermoelectric system

P. A. Cotfas, D. T. Cotfas, O. Machidon

P2.8 Electro-thermal Simulation Study of Different Core Shape Planar Transformer

C. Ropoteanu, P.I Svasta and C. Ionescu

P2.9 Simulation & Modelling of a Tungsten Filament with COMSOL for Electrothermal Process

S. Cadar, R. Etz, Patarau Toma, D. Petreus, S. M. Fonou

P2.10 Stability Evaluation Method Using Phase Response Measurements

R. Belea, and S. Epure

P2.11 An Photovoltaic System Tester with Three-Phase Off-Grid Supply

M. Neamtu, N. D. Trip

P2.12 Failures Analysis in Distributed Power System of an Industrial Plant

A. Tulbure, C. Farcas and C. Hutanu

P2.13 An Improved Method for the Electrical Parameters Identification of a Simplified PSpice Supercapacitor Model

I. Ciocan, C. Farcas, and A. Tulbure

P2.14 Real-Time 3D Near-Field Visualization Using LED Field Sensors

A. Petrariu and E. Coca

P2.15 Characterization of the shape of gold nanoparticles prepared by thermal annealing

A. Bonyár, J. Kámán, I. Csarnovics

P2.16 Optimization of PCB Assembly Process

L. Tarba, P. Mach

P2.17 Investigations on Heat Transfer with Different PCB Substrates during Vapour Phase Soldering

L. Fazekas, D. Nagy, D. Busek, A. Géczy

P2.18 Reliability testing at high and low temperatures for data transmission routers

C. Patriche, D. Vârşescu, R. Marinescu, M. Bâzu, and I. Bacivarov

P2.19 Electrochemical migration of Sn and Ag in NaCl environment

B. Medgyes, D. Szivós, S. Ádám, L. Tar, P. Tamási, L. Gál, R. Berényi, G. Harsányi

P2.20 On Spectral Component Estimation using Neural Networks for Rolling Bearing Fault Diagnosis

V. Nicolau, M. Andrei

P2.21 Aspects of Using Low Layer Count PCBs for Embedded Systems with FPGA Devices in BGA Packages

A. Drumea, M. Pantazica

P2.22 Host Emulator for next Generation Battery Chargers

C. Grecu, M. Pantazica, C. Iordache

P2.23 3 ω Probe with Auto-zeroing

I. Ates, L.t Cetin, A. Turgut, M. Chirtoc

P2.24 Electromagnetic energy harvester

I. Porobic and A. Gontean

P2.25 Review of Tire Pressure Monitoring System Solutions

I. Porobic and A. Gontean

P2.26 Review of Efficiency Losses and Limitations of Schottky Diodes in Microwave Energy Harvesting Rectifiers

I. Porobic and A. Gontean

Saturday, October 22

11:00 – 12:15 **Poster Session III** (Conference and Poster Room)

NOTE: Each author must deliver a 3 minutes slide show presentation of her/his work.

Dissemination session of MECA (Micro Electronics Cloud Alliance) project, www.meca-project.eu, Knowledge Alliance 562206-EPP-1-2015-1-BG-EPPKA2-KA; session supported by MECA

Session Chair: Norocel CODREANU, “Politehnica” University of Bucharest, Romania

Session Co-Chair: Oliver KRAMMER, Budapest University of Technology and Economics, Budapest, Hungary

P3.1 Improved Tamper Detection Circuit Based on Linear-Feedback Shift Register

D.-C. Vasile, A. Marghescu, P. Svasta

P3.2 Mouse and Display Driver on a Single Microchip Tested on FPGA and Built for an ASIC

R. Szabo, A.I Gontean

P3.3 Creation of a Fight Game in Borland Pascal with the Possibility to be Ported on an FPGA

R. Szabo, A. Gontean

P3.4 Device for intercepting and disrupting the hidden headsets

C. Cherciu, and D.-I. Nastac

P3.5 Real Time System for Extraction and Playback of an Instrumental Sound

L. M. Ionescu, I. Lita

P3.6 Personalized Ring Oscillator-based True Random Number Generator Analysis using Non-Invasive Attacks

A. Marghescu, D.-C. Vasile, E. Simion, P. Svasta

P3.7 Revision of the Sampling Theorem

M. Bujor

P3.8 Thermal simulation in product design

A. Kotlar G. Caragea

P3.9 Development of underwater sensor unit for studying marine life

M. Hnatiuc, I. Lazar, A. Ghilezan

P3.10 High Reliability Wireless Sensor Node For Bee Hive Monitoring

M. Vidrascu, P. Svasta, M. Vladescu

P3.11 FPGA-enabled Hardware Multitasking Applications in Energy Harvesting Laboratories

O. Machidon, P. A. Cotfas, D. T. Cotfas

P3.12 Wireless Diagnosis and Monitoring System of Sensor Network from Civil Structures

S. Pop, V. Bande

P3.13 Implementation of a Microwave Elliptical low pass Filter with Radial Stubs

I. Mihai Alexandru, D. Pitica, L. Viman

P3.14 DSP Based Interconnection Circuit of the Renewable Energy Sources to a Smart Grid

N. D. Trip, O. Neamtu

P3.15 Remote Communication Interface for Sound and Vibration Sensors

D. Al. Visan, L. M. Ionescu and A. I. Lita

P3.16 Experimental Module for Assistive Technologies Applications

I. Lita, D. Al. Visan and A. Gh. Mazare

P3.17 Design and Setup of Power Analysis Attacks

M. Safta, A. Marghescu, M. Dima, P. Svasta

P3.18 Autonomous Robot – Educational Platform

I. Dumitrascu, C. Musat, Al. Buturuga, R. Constantinescu

P3.19 Continuous Respiratory Monitoring Device for Detection of Sleep Apnea Episodes

C. Rotariu, R. Bozomitu, Al. Pasarica, C. Cristea, and D. Arotaritei

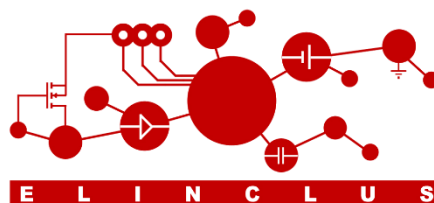
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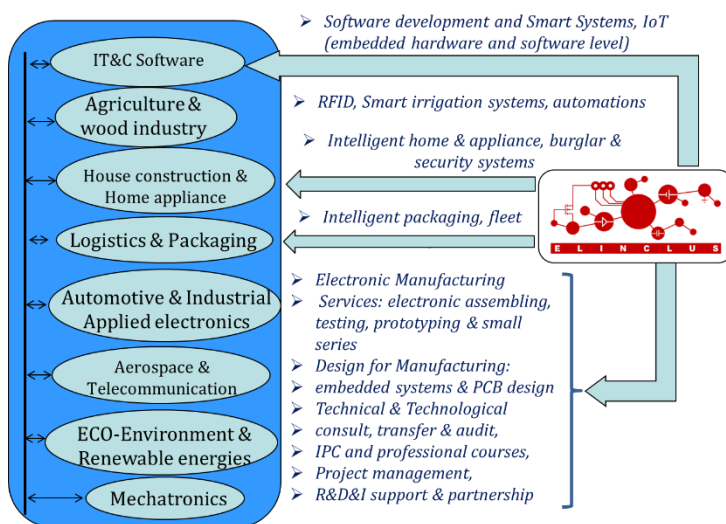
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Executive Manager: Lect. Eng. Bogdan Mihăilescu, Ph.D.



Founding member of Cluster Association from Romania - www.clustero.eu

- Member of Adriatic Danube Mechatronics Cluster Network
- International collaboration with Mecatech Cluster Wallonie and Wallonie Export Agency
- International collaboration with Omnipack Cluster Hungary (<http://omnipack.hu/>)



- European Cluster Excellence Initiative Bronze Label Certificate from ESCA in 2013

Sector of activity:

- Mechatronics, Automotive electronics, Aerospace electronics, Renewable energies, Communications, Agriculture and wood industry, Home appliance and consumer goods, ECO – environment

Cluster strengths:

- Research & Development of innovative new electronics products in area of mechatronics, aerospace, automotive and s.o.; Technical and technological support for prototyping and small series; IP technology transfer;

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Celestica is one of the leaders on Electronic Manufacturing Services market dedicated to delivering end-to-end product lifecycle solutions.

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Our high-energy environment and flexible, team-oriented culture attracts the kind of people who want to be empowered to use their knowledge and creativity to drive our customers' success.

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CONNECT GROUP

INTEGRATED SUBCONTRACTORS

Business profile

Connect Group is a leading certified supplier of technology, production systems, printed circuit boards and cable assembly services to Europe's industrial markets. Connect Group develops products to User Requirement Specifications from the concept stage onwards with optimal production, price and quality results.

Activities

Connect Group provides total EMS (Electronic Manufacturing Services) solutions for the professional Industry. Its activities divide into four main pillars – technology, module building, PCB assembly, cable assembly – with interaction between the pillars offering a unique range of possibilities.

Connect Group customers come from different professional markets, ranging from automotive, green energy to healthcare.

Connect Group offers added value with industrialization and engineering services, plus advice on materials and component selection and layout for the assembly of cables, printed circuit boards and modules.

With the extensive expertise our engineers have developed over the past twenty years, Connect Group is fully qualified to offer you the specific technical support you are looking for. The sooner we are involved in the development of your project, the higher the added value of our engineering team will be.

With our broad knowledge of technical and manufacturing possibilities, we can accompany your product development process from the concept stage onwards, to give optimal production, price and quality. Connect Group's engineering activities function here as an extension of its customers' own design teams, with open communication, sharing of knowledge and pro-active search for solutions to support our customers' success.

In whatever product group or market your company operates, Connect Group's engineers can provide development, industrialization and production support. Very fast prototyping, drawing and specifications writing allows us to move quickly into (volume) production and considerably narrow lead times from drawing board to market.



L & G Advice Serv SRL

L & G Advice Serv SRL is a member of IPC-Association Connecting Electronics Industries, the largest and representative international association, based in USA, which stands for electronics, v. <http://www.ipc.org> for more information. L & G Advice Serv SRL is an IPC authorized for Romania distributor for all IPC standards and documentations.

L & G Advice Serv SRL is a company authorized by the IPC to support and provide all training programs and certification / recertification training for instructors and /or specialists as follows:

- IPC-A-610F "Acceptability of Electronic Assemblies"
- IPC J-STD-001F "Requirements for Soldered Electric and Electronic Assemblies"
- IPC-A-600H "Acceptability of Printed Boards"
- IPC 7711/7721B "Rework, Repair and Modification of Electronic Assemblies"
- IPC/WHMA-A-620B "Requirements and Acceptance for Cable and Wire Harness Assemblies".
- Designer Certification Programs:
 - Certified Interconnect Designer Basic – CID
 - Certified Interconnect Designer Advance – CID+

Personnel of L & G Advice Serv SRL are member of IPC –A-610 Task Group (7-31B) and IPC J-STD-001 Task Group (5-22A).



Miele Tehnica Braşov is a subsidiary of Miele & Cie. KG, Germany. It was established in 2009 as a second electronics factory in the group, after the plant in Gütersloh.

The Miele plant in Braşov currently has 200 employees and produces electronic components for a wide range of Miele appliances, such as washing machines, tumble dryers, vacuum cleaners, ovens and others. The products Miele offers to its customers set the standards for durability, performance, ease of use, energy efficiency, design and service products.

In august 2015, in Braşov, a software development division was created. Within this new division the software for a wide variety of Miele appliances is developed.

The facility in Braşov is equipped with state-of-the-art technology and all quality requirements are respected according to the Miele Group's standards. This fact is acknowledged by all the certifications currently in place: ISO 9001, ISO 14001, ISO 50001, OHSAS 18001 and SA 8000.



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Net Digital Service S.R.L. was established in 2007, its main activities being photographic film printing of very high resolutions and very large dimensions for glass industry (automotive industry) and various electronic applications, **SMT laser stencil production** and CAD design.

The company, part of the Italian STV Group, offers a various type of stencils for SMT, both by laser cutting and by electroforming and photochemical etching (step-up stencils), being active on the East and West Europe market for a few years.

Nowadays the laser technology for producing stencils for SMT processes is the most used worldwide. Some of the laser technology advantages:

- Less operations for the production cycle.
- High precision dimensions.
- Aperture's constant geometry.
- Use of stainless steel stencils (increased resistance).
- Worldwide standard technology.

We can offer a great variety of stencils, any type of self-tensioning stencil frame, double or triple thickness stencils (made in photochemical etching, with a minimum step of 30 microns) or glued stencils on tissue frames. Our abilities regarding CAD processing of the files received from the client, as well as the quality of the last generation LPKF laser that we use, allow us to deliver high quality products.

Recently we've enlarged our products portfolio with the innovative SPACE SAVER glued stencil. This mesh mounted stencil, with 35x12 aluminum profile frame, combines the advantages of classical mesh glued with the advantage of a small thickness:

- No tensioning system required
- less storage space required, light, reduced transportation costs
- Easy handling
- Quick assembling in the printing machine
- Unbeatable price/quality ratio



NDS tries to be not just a simple stencil supplier, but to offer integrated solutions to your SMT assembly process, relying on a long STV Group experience and on a young, enthusiastic and well trained team. Our presence on Romanian and East European market allows us to be an active part of development of electronic industry in this part of Europe and to offer our technical and commercial support to the increasing number of companies located here.



NET DIGITAL SERVICE SRL
Sos. Borsului, nr.37, Oradea – Romania
 Tel. 0359.192.820, stencil@nds-service.com, www.nds-service.com



Plexus delivers optimized Product Realization solutions through a unique Product Realization Value Stream service model. This customer-focused services model seamlessly integrates innovative product conceptualization, design, commercialization, manufacturing, fulfillment and sustaining services to deliver comprehensive end-to-end solutions for customers in the America, European and Asia-Pacific regions.

Plexus is the industry leader in servicing mid-to-low volume, higher complexity customer programs characterized by unique flexibility, technology, quality and regulatory requirements. Award-winning customer service is provided to over 140 branded product companies in the Networking/ Communications, Healthcare/Life Sciences, Industrial/ Commercial and Defense/Security/Aerospace market sectors.



Engineering solutions.

With a global team of more than 350 creative and innovative design engineers, Plexus is able to take on any design challenge. We solve problems for our customers enabling them to get to market faster, develop new technologies and extend product life cycles, which ultimately increases their market share.

Manufacturing Solutions.

Plexus offers advanced end-to-end manufacturing solutions including circuit board assembly, complex system integration, full product build and sustaining services to meet customers' manufacturing needs. Each product is produced in the most cost-effective manner with a strong focus on time to market and quality.

Plexus builds tests, packages and ships products to customers, into distribution or directly to end users from ISO 9001 certified facilities. Our unique focus factories and customer focused teams provide the right solution for even the most complex manufacturing and fulfillment requirements. Common global toolsets, processes, and equipment ensure quality and agility, with dedicated customer teams driving flexibility and responsiveness to customer demand.

Our dedicated manufacturing transition teams facilitate the successful transition of products into global manufacturing facilities, ensuring all requirements are met.



ROHDE & SCHWARZ

De-a lungul a peste 80 de ani de existență, compania Rohde & Schwarz s-a făcut remarcată prin calitate, precizie și inovare în domeniul comunicațiilor radio. Grupul de companii ce activează în zona industriei

electronice și-a axat proiectarea, dezvoltarea și producția pe cinci direcții strategice: testare și măsurare, broadcasting și media, securitatea cibernetică, comunicații securizate, monitorizare și localizare radio. Compania se adresează clienților din domeniile radio mobil, radiocomunicații, broadcasting, industria echipamentelor electronice și automotive, industria aerospațială și de apărare, precum și din domeniile guvernamental, de securitate și infrastructură critică. Rohde & Schwarz este unul din liderii de pe piața mondială în domeniile în care activează. Compania este lider mondial în producția de echipamente și sisteme de testare și măsurare dedicate comunicațiilor radio, compatibilității electromagnetice, precum și broadcasting și televiziune digitală terestră.

La nivel mondial unul din două telefoane mobile sau smartphone-uri este dezvoltat și fabricat cu ajutorul echipamentelor de măsură și control de la Rohde & Schwarz. Rețelele LTE FDD și TD-LTE operează în prezent în Europa, SUA și Asia. Echipamentele noastre de măsură și control pentru LTE și LTE-Advanced aduc o contribuție decisivă la dezvoltarea tehnologiilor 4G. Rohde & Schwarz participă, de asemenea, la activitățile de cercetare pentru tehnologia 5G și lucrează deja la soluții de testare 5G. Grupul acoperă aproape toate tehnologiile de radio mobil și comunicații radio, de la UMTS / HSP (+), CDMA2000® la Bluetooth®, comunicații near field (NFC), GPS / Galileo și WLAN / Wi-Fi.

Indiferent de tehnologie, Rohde & Schwarz oferă un portofoliu complet de produse pentru cercetare, dezvoltare și producție de chipset-uri, echipamente terminale mobile și stații de bază. Operatorii de rețele de telefonie mobilă folosesc, de asemenea, aceste produse pentru planificarea, instalarea, optimizarea și întreținerea rețelilor. Compania oferă instrumente pentru realizarea unor activități cum ar fi măsurători ale calității rețelilor mobile, optimizarea rețelilor, monitorizarea calității serviciilor și soluții flexibile pentru analiza de rețea IP. Împreună cu filialele sale Ipoque GmbH și SwissQual AG, Rohde & Schwarz este singura companie care asigură întregul portofoliu de soluții de măsură și control pentru ciclul complet de viață al unei rețele de comunicații radio.

Grupul sprijină, de asemenea, producătorii de dispozitive electronice atunci când aceștia au nevoie să genereze semnale și să analizeze spectre sau rețele – începând de la gama audio până la frecvențe înalte de microunde. Pentru industria aerospațială și de apărare, Rohde & Schwarz dezvoltă soluții de testare și măsurare pentru sisteme radar și comunicații prin satelit. În plus, grupul oferă sisteme complete pentru EMC și măsurarea intensității câmpului electromagnetic, de exemplu pentru a detecta interferențele electromagnetice. Rohde & Schwarz oferă, de asemenea, expertiză în domeniul testării și măsurării pentru industria de automobile în cele mai diverse arii de interes, de la sisteme de informare și divertisment sau sisteme de conducere asistată la componentele audio și video și echipamente de comunicații radio în interiorul vehiculului.

Osciloscopul reprezintă încă un segment nou, compania extinzându-și continuu portofoliul cu noi modele, aplicații și accesorii. Pentru a-și spori prezența pe piața, Rohde & Schwarz a inclus unele din instrumentele sale de măsură și control de uz general în gama echipamentelor cu nivel mai redus de preț, produse regasite sub denumirea de "Value Instruments".

Rohde & Schwarz oferă o rețea de service dezvoltată la nivel mondial, ce asigură suport 24 de ore pe zi. Serviciile asigurate de grupul de companii sunt întotdeauna adaptate cerințelor clienților. În plus față de serviciile clasice, cum ar fi suport de sistem, calibrare, mentenanță, upgrade-uri de produs și reparații, portofoliul companiei include piese de schimb și asigurarea de service on-site, precum și cursuri de formare personalizate.

Centrele regionale de service, fabricile și filialele specializate ale Rohde & Schwarz oferă o gamă largă de servicii suplimentare. Acestea includ suport pentru aplicații speciale, dezvoltarea de instrumente specifice solicitate de client, producție la comandă, precum și integrarea, instalarea și punerea în funcțiune a sistemelor.





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Würth Elektronik eiSos GmbH & Co. KG

Würth Elektronik eiSos GmbH & Co. KG is a manufacturer of electronic and electromechanical components for the electronics industry. The company is part of the Würth Group, the global market leader for fastener technology. It employs 6,100 people. Würth Elektronik eiSos is active in 50 countries worldwide.

Manufacturing facilities in Europe, Asia and North America ensure delivery to a customer base that is growing worldwide. The product range covers EMC components, inductors, transformers, HF components, varistors, capacitors, power modules, LEDs, connectors, power elements, switches, assembly technology and fuse holders.

Würth Elektronik eiSos is one of Europe's largest manufacturers of passive components.

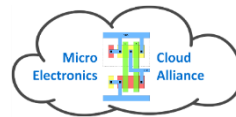
Würth Elektronik: **more than you expect!**

Further information at www.we-online.com

MECA

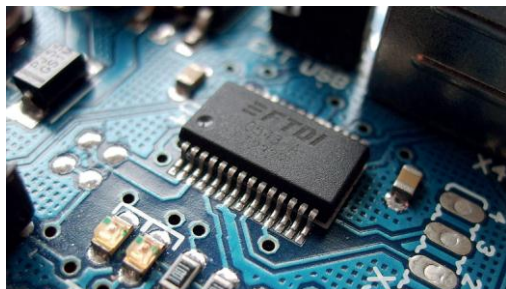
MicroElectronicsCloudAlliance

www.meca-project.eu/



ABOUT MECA

MECA brings together 18 partners, Higher Education Institutions (HEI) and Small and Medium Enterprises (SME), from nine European countries to develop a Cloud-based European infrastructure for education in microelectronics, providing a large range of Open Educational Resources (OER), remote access to educational & professional software tools and practice-based learning facilities.



OBJECTIVES

- * Analysing the needs of institutional teachers and students in a shared IT infrastructure for teaching materials and learning resources;
- * Networking of project partners to share ideas, methodologies and experiences to improve HE programmes and to develop job-specific training modules;
- * Development of mClouds system and realization of a shared server infrastructure, shared e-learning resources and the remote access to the CAD tools;
- * Implementation of jointly developed cloud-based OERs in microelectronics in the partners' educational contexts.

PARTNERS

EUROPEAN PROJECT ERASMUS+
KNOWLEDGE ALLIANCE
Microelectronics Cloud Alliance (MECA)



Project leader: TUS Sofia



Knowledge Alliance 562206-EPP-1-2015-1-BG-EPPKA2-KA

SIITME 2016|Conference Program 39

Location:

The conference and exhibition takes place at:

Hotel Poienita, Băile Felix, Oradea, Romania (see the map below).



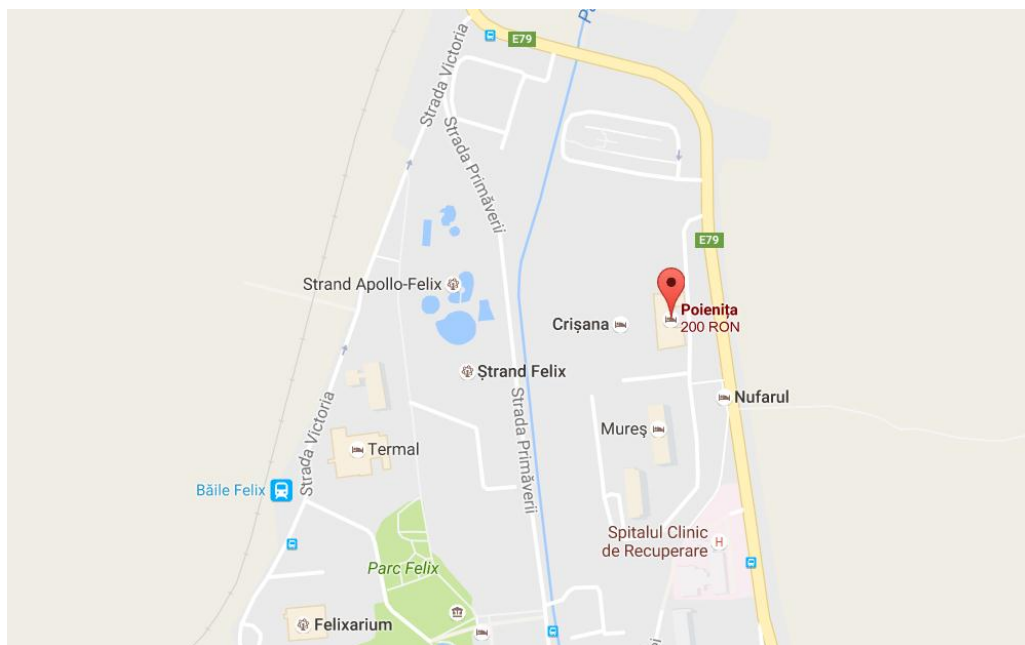
GPS coordinates:

N: 46.987591

E: 21.980292

General location:

- 500m from the Băile Felix resort center
- 10km from City of Oradea
- 15km from Oradea Airport



The Registration is at:

Hotel Poienita, Băile Felix, Oradea, Romania

For more information and access: <http://www.felixspa.com/ro/hoteluri/hotel-poienita>

CONFERENCE REGISTRATION

The conference fee includes the opening ceremony and welcome reception, full access to all technical (oral and poster) sessions, exhibition area, all meals (breakfasts, coffee breaks, lunches and dinners), three nights accommodation, printed abstracts proceedings, conference proceedings on memory stick, conference kit (conference bag, badge, booklet, pen, and other related objects), and participation to the cultural programme.

CONTACT INFORMATION

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Constanta welcomes SIITME Conference 2017!

It is my pleasure to invite you next year in Constanta at the 23rd edition of SIITME Conference.

Constanta lies on the western coast of the Black Sea and is the fourth largest port in Europe. Constanta is a city with a long and interesting past, many Roman vestiges, historic buildings and mosques.

We hope this conference will represent an opportunity for young researchers, including but not exclusively, from our university to meet specialists in their field and to present their research and also to discuss with industry representatives.

Our local organizing committee will make sure that the next edition of SIITME will continue the already established tradition of encouraging dialogue between academia and industry.

We look forward to seeing you next year!

Associate professor **Mihaela Hnatiuc** Ph.D.
Electronic and Telecommunication Department
Maritime University of Constanța, Romania



This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

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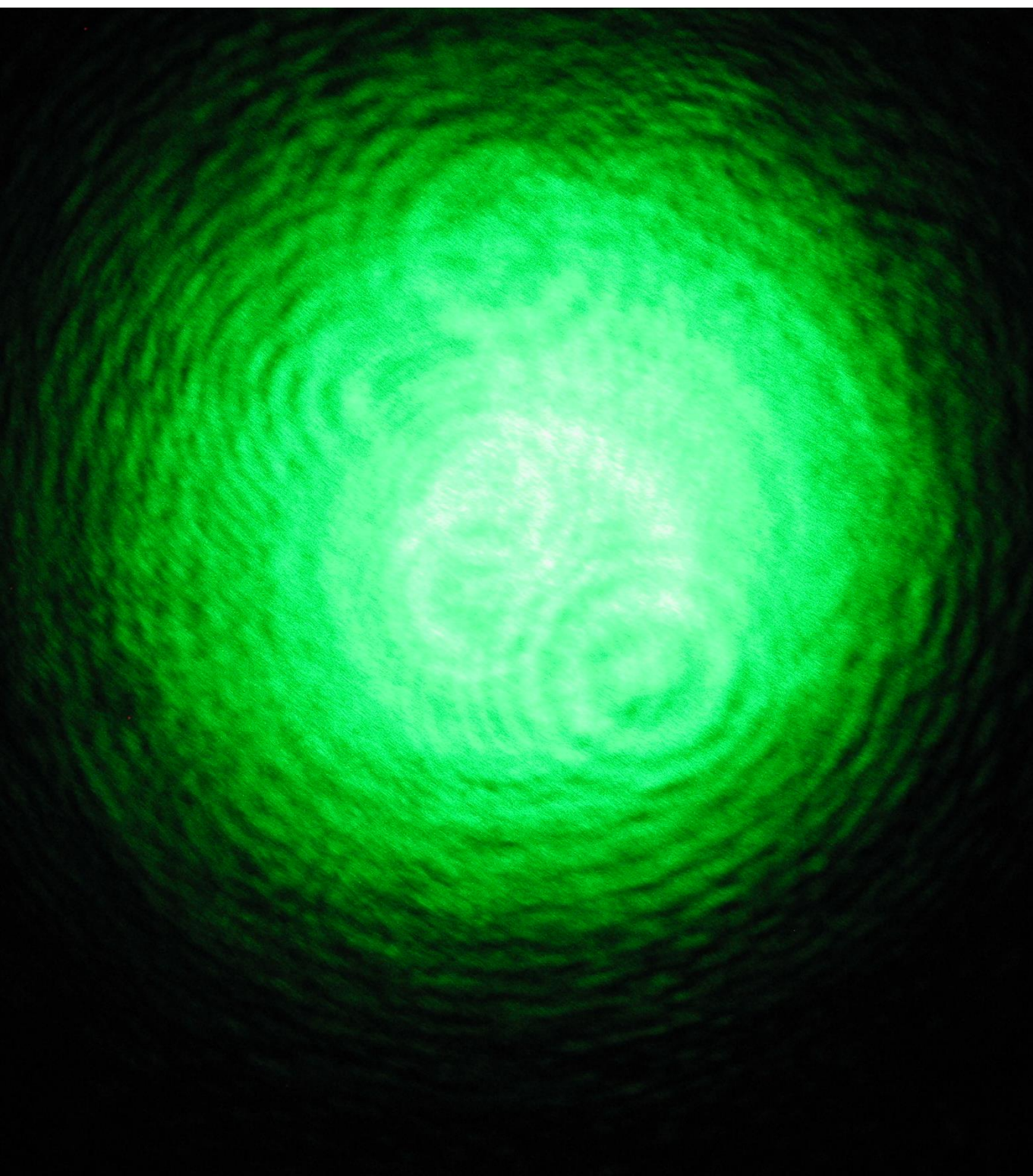
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