

ELMAR-2016 PROGRAM

Monday, September 12	Tuesday, September 13	Wednesday, September 14
8:30 - 16:30 Registration	9:00 - 12:00 Registration	9:00 - 15:30 Registration
9:00 - 9:30 OPENING SESSION: Welcome Speeches	9:00 - 10:15 Session 4 & 5	9:00 - 10:15 Session 7 & 8
9:30 - 9:45 Welcome Cocktail	10:15 - 10:45 Session Break	10:15 - 10:45 Session break
10:00 - 11:30 PLENARY SESSION: Keynote Talks	10:45 - 12:30 Special session 2 and Session 6	11:00 - 12:30 Special Session 3 and Session 9
11:30 - 13:00 INVITED TALKS		
13:00 - 14:00 Lunch Break	13:00 - 20:00 Excursion by Ship* <i>*Lunch included</i>	12:45 - 14:00 Lunch Break
14:00 - 17:00 Special Session 1 and Session 1, 2 & 3		14:00 - 15:30 Session 10 & 11
17:15 - 20:00 Guided Zadar Sightseeing		15:30 - 16:45 Special Session 4
21:00 ELMAR-2016 Symposium Gala Dinner		16:45 Closing Cocktail
	20:30 Dinner	

ELMAR-2016 PROGRAM

Monday, 12 September 2016

8:30 - 16:30 Registration	
HALL A	
9:00 - 9:30	OPENING SESSION: Welcome Speeches
9:30 - 9:45 WELCOME COCKTAIL Bar at Hotel "Donat"	
HALL A	
10:00 - 11:30	PLENARY SESSION: Keynote Talks
11:30 - 13:00	INVITED TALKS
13:00 - 14:00 Lunch Break	
HALL A	HALL B
14:00 - 15:45 SPECIAL SESSION 1: From 3G to 5G	14:00 - 15:45 SESSION 1: Multimedia Communications
16:00 - 17:00 SESSION 2: Speech and Audio Processing	16:00 - 17:00 SESSION 3: Power Electronics and Automation
17:15 - 20:00 GUIDED ZADAR SIGHTSEEING <u>Meeting Point:</u> Hotel "Funimation", Main Entrance, 17:15	
21:00 ELMAR-2016 SYMPOSIUM GALA DINNER <u>Meeting Point:</u> Hotel "Funimation", 21:00	

ELMAR-2016 PROGRAM

Tuesday, 13 September 2016

9:00 - 12:30		Registration	
HALL A		HALL B	
9:00 - 10:15 SESSION 4: Image Processing 1		9:00 - 10:15 SESSION 5: Telecommunications	
10:15 - 10:45		Session Break	
10:45 - 12:30 SPECIAL SESSION 2: Intelligent Transport Systems		10:45 - 12:30 SESSION 6: Radar Systems	
13:00 - 20:00 EXCURSION BY SHIP <u>Meeting Point:</u> Hotel "Funimation", Main Entrance, 12:45 <i>Lunch will be served at the ship</i>			
20:30 DINNER			

ELMAR-2016 PROGRAM

Wednesday, 14 September 2016

9:00 - 15:30		Registration
HALL A	HALL B	
9:00 - 10:15 SESSION 7: Image Processing 2	9:00 - 10:15 SESSION 8: Antennas and Propagation	
10:15 - 10:45 Session Break		
11:00 - 12:30 SPECIAL SESSION 3: Computer Vision for New Emerging Applications	11:00 - 12:45 SESSION 9: Wireless Communications	
12:45 - 14:00 Lunch Break		
14:00 - 15:30 SESSION 10: Image Processing 3	14:00 - 15:30 SESSION 11: Smart Systems and E-learning	
15:30 - 16:45 SPECIAL SESSION 4: Sea and Port Ecology		
16:45 CLOSING COCKTAIL Bar at Hotel "Donat"		

Monday, 12 September 2016

8:30 - 16:30 **Registration**

HALL A

Monday, 12 September 2016

9:00 - 9:30 **OPENING SESSION: Welcome Speeches**

Session Chairs: **Branka Zovko-Cihlar, Mario Muštra**

9:30 - 9:45 **WELCOME COCKTAIL**
Bar at Hotel "Donat"

10:00 - 11:30 **PLENARY SESSION: Keynote Talks**

Session Chair: **Branka Zovko-Cihlar**

Borko Furht, Florida Atlantic University; USA

Industry/University Collaboration in Creating Advanced Multimedia Systems and Tools

Ebroul Izquierdo, Queen Mary, University of London; UK

Cloud-Based Media Processing for Improved Broadcasting Applications

**Krešo Antonović, Ministry of Maritime Affairs, Transport and Infrastructure;
CROATIA**

Strategy for Transition to the New System of Digital Terrestrial Television

11:30 - 13:00 **INVITED TALKS**

Session Chair: **Branka Zovko-Cihlar**

13:00 - 14:00 **Lunch Break**

14:00 - 15:45 **SPECIAL SESSION 1: From 3G to 5G**

Session Chairs: **Sonja Zentner Pilinsky, Alberto Teković**

Angelo Gary Markoč, Gordan Šišul; CROATIA
Monitoring Techniques at WCDMA Radio Network Controller

Filip Turniški, Siniša Lacković, Sonja Zentner Pilinsky, Alberto Teković; CROATIA
Analysis of 3G and 4G Download Throughput in Pedestrian Zones

Mehmet Alp Ilgaz, Boštjan Batagelj; SLOVENIA
Proposal for Distribution of a Low-Phase-Noise Oscillator Signal in Forthcoming Fifth-Generation Mobile Network by Radio-Over-Fibre Technology

Alberto Teković, Davor Bonefačić, Robert Nađ, Jan Pidanic, Zdenek Nemeč; CROATIA/CZECH REPUBLIC
On Performance of Filter used for Interference Mitigation between LTE and DVB-T Networks in Digital Dividend Spectrum

Zvonimir Zelenika, Tihomir Pušnik; CROATIA
Reinventing Telecom OSS Toolkit as an IoT Platform

16:00 - 17:00 **SESSION 2: Speech and Audio Processing**

Session Chairs: **Gregor Rozinaj, Juraj Kacur**

Martin Hilovsky, Jozef Gressak, Martin Lojka, Jozef Juhar; SLOVAKIA
MAPL - Microphone Array Processing Library

Tomas Koctur, Jan Stas, Jozef Juhar; SLOVAKIA
Unsupervised Acoustic Corpora Building based on Variable Confidence Measure Thresholding

Juraj Kacur, Marek Vančo, Ivan Minarik; SLOVAKIA
Modifications of KNN Classifier for Speaker Identification System

17:15 - 20:00 **GUIDED ZADAR SIGHTSEEING**
Meeting Point: Hotel "Funimation", Main Entrance, 17:15

21:00 **ELMAR-2016 SYMPOSIUM GALA DINNER**
Meeting Point: Hotel "Funimation", bar at the pool, 21:00

14:00 - 15:45 **SESSION 1: Multimedia Communications**

Session Chair: **Pavol Podhradsky**

Krešimir Šakić, Vedran Bubalo, Sonja Grgić; CROATIA
Video Coding Choice for Future DVB-T2 Networks in Croatia

Ana Katalinic Mucalo, Kresimir Mazor, Ivana Drazic Lutilsky; CROATIA
Impact and Benefits of Transition to DVB-T2 Standard and Assignment of Second Digital Dividend

Ivan Zupancic, Matteo Naccari, Marta Mrak, Ebroul Izquierdo; UK
Studying Rate Control Methods for UHD TV Delivery Using HEVC

Jan Kufa, Ladislav Polák, Tomáš Kratochvíl; CZECH REPUBLIC
HEVC/H.265 vs. VP9 for Full HD and UHD Video: Is There Any Difference in QoE?

Juraj Matejka, Pavol Podhradský, Juraj Londák; SLOVAKIA
Security Manager for Hybrid Broadcast Broadband Architecture Evolution

16:00 - 17:00 **SESSION 3: Power Electronics and Automation**

Session Chair: **Jelena Božek**

Robert Kudelić, Alen Lovrenčić; CROATIA
More General Minimum Feedback Arc Set: Statistically Defining Information System Digraph

Muhammad Bilal Saif, Yingjie Xu, Klaus Hofmann; GERMANY
Comparison of Charge Pump and Boost Circuits for High Voltage & Low Power Voltage Conversions

Iordache Cosmin Alexandru, Grecu Cristian, Bodea Mircea; ROMANIA
Computer Controlled Unit for Electronic Devices Characterization

17:15 - 20:00 **GUIDED ZADAR SIGHTSEEING**
Meeting Point: Hotel "Funimation", Main Entrance, 17:15

21:00 **ELMAR-2016 SYMPOSIUM GALA DINNER**
Meeting Point: Hotel "Funimation", bar at the pool, 21:00

Tuesday, 13 September 2016

9:00 - 12:30 **Registration**

HALL A

Tuesday, 13 September 2016

9:00 - 10:15 **SESSION 4: Image Processing 1**

Session Chair: **Jarmila Pavlovičová**

Michal Kajan, Miloš Oravec, Jarmila Pavlovičová, Veronika Kurilová; SLOVAKIA
Determination of Bright Lesions in Fundus Images

Lubos Rejcek, Jan Pidanic, Ladislav Beran, Pavel Chmelar, Tomas Zalabsky, Michal Reznicek; CZECH REPUBLIC
Checking of Wrongly Scaled Ionograms by Using of Virtual Height of Ionospheric Layers

Isidora Stankovic, Wei Dai; MONTENEGRO/UK
Reconstruction of Global Ozone Density Data using a Gradient-Descent Algorithm

10:15 - 10:45 **Session Break**

10:45 - 12:30 **SPECIAL SESSION 2: Intelligent Transport Systems**

Session Chairs: **Mario Muštra, Sadko Mandžuka**

Miroslav Vujic, Bia Mandzuka, Pero Skorput; CROATIA
Multimodal Traveler Information Systems in Maritime Environment

Pero Skorput, Sadko Mandzuka, Hrvoje Vojvodic; CROATIA
The Use of Unmanned Aerial Vehicles for Forest Fire Monitoring

Tomislav Erdelić, Martina Ravlić, Tonči Carić; CROATIA
Travel Time Prediction Using Speed Profiles for Road Network of Croatia

Krešimir Kušić, Nino Korent, Martin Gregurić, Edouard Ivanjko; CROATIA
Comparison of Two Controllers for Variable Speed Limit Control

Mario Muštra, Juraj Fosin, Tonči Carić; CROATIA
Comparison of Calculated and Measured Travel Times with PND Prediction

Martina Ravlić, Tomislav Erdelić, Tonči Carić; CROATIA
Optimizing Charging Station Locations for Fleet of Electric Vehicles Using Multi-Source Weber Problem

13:00 - 20:00 **EXCURSION BY SHIP**
Meeting Point: Hotel "Funimation", Main Entrance, 12:45
Lunch will be served on ship

20:30 **DINNER**

HALL B

Tuesday, 13 September 2016

9:00 - 10:15 **SESSION 5: Telecommunications**

Session Chairs: Jan Pidanic, Zdenek Nemec

Alen Begović, Namir Škaljo, Narcis Behlilović; BOSNIA AND HERZEGOVINA
An Analytical Model of Copper Local Loop in FTTB Environment

Yevgeniya Sulema, Gregor Rozinaj; UKRAINE/SLOVAKIA
Multimodal Information in Telecommunication Systems: Analysis of Technological Readiness

Martin Matis, Lubomír Dobos, Jan Papaj; SLOVAKIA
A Brief Comparison of Fundamental Routing Methods for Mobile Multihop Networks (MANET)

Gabriel Bugár, Dusan Levický; SLOVAKIA
Steganography in Data Networks based on PDU Retransmission

Sanja Bauk, Diego Garcia Gonzales, Anke Schmeink; MONTENEGRO/SPAIN/GERMANY
Examining Some ZigBee/RFID Safety System Performances at Seaport

10:15 - 10:45 **Session Break**

10:45 - 12:30 **SESSION 6: Radar Systems**

Session Chairs: Sonja Zentner Pilinsky, Alberto Teković

Valeriy Bezruk, Grigori Khlopov, Zdenek Nemec; UKRAINE/CZECH REPUBLIC
Recognition of Unknown Meteorological Objects in Radar Probing

Vaclav Vlasak, Jan Pidanic; CZECH REPUBLIC
The Analysis of Small RCS Target Detection in Primary Radar System

Tomas Zalabsky, Tomas Hnilicka; CZECH REPUBLIC
Duplexer Based on a Cavity Resonators for PSR

Michal Reznicek, Pavel Bezousek, Tomas Shejbal; CZECH REPUBLIC
Clutter Supression in Passive Coherent Radar Systems

Mirko Jukl, Siniša Lacković, Fran Pregernik; CROATIA
Radar Transmitter and Two Targets Simulator for Surveillance Radar System

13:00 - 20:00 **EXCURSION BY SHIP**
Meeting Point: Hotel "Funimation", Main Entrance, 12:45
Lunch will be served on ship

20:30 **DINNER**

Wednesday, 14 September 2016

9:00 - 15:30 **Registration**

HALL A

Wednesday, 14 September 2016

9:00 - 10:15 **SESSION 7: Image Processing 2**

Session Chairs: Lidija Mandić, Jelena Božek

Ingmar Besic, Zikrija Avdagic; BOSNIA AND HERZEGOVINA

Automated Test Environment for Image Processing in Laser Triangulation 3D Scanning

Miloš Brajović, Irena Orović, Miloš Daković, Srdjan Stanković; MONTENEGRO

Representation of Uniformly Sampled Signals in the Hermite Transform Domain

Miloš Brajović, Irena Orović, Miloš Daković, Srdjan Stanković; MONTENEGRO

Compressive Sensing of Signals Sparse in 2D Hermite Transform Domain

Matteo Zanetti, Mariolino De Cecco, Alberto Fornaser, Malvina Leuci, Nicola Conci; ITALY

The use of INTER-EYE for 3D Eye-Tracking Systematic Error Compensation

10:15 - 10:45 **Session Break**

11:00 - 12:30 **SPECIAL SESSION 3: Computer Vision for New Emerging Applications**

Session Chairs: Irena Galić, Časlav Livada

Krešimir Romić, Irena Galić, Hrvoje Leventić; CROATIA

Influence of the Input Image Resolution on the Staircase Detection

Hrvoje Leventić, Krešimir Nenadić, Irena Galić, Časlav Livada; CROATIA

Compression Parameters Tuning for Automatic Image Optimization in Web Applications

Marian Špilka, Gregor Rozinaj; SLOVAKIA

Face Recognition Methods by Using Low Resolution Devices

Attila Mátyás Nagy, Vilmos Simon; HUNGARY

A Crowdsensing Platform for Mass Surveillance

Konstantinos Georgopoulos, Grigorios Chrysos, Pavlos Malakonakis, Antonis Nikitakis, Nikos Tampouratzis, Apostolos Dollas, Dionisios Pnevmatikatos, Yannis Papaefstathiou; GREECE

An Evaluation of Vivado HLS for Efficient System Design

12:45 - 14:00 **Lunch Break**

14:00 - 15:30 **SESSION 10: Image Processing 3**

Session Chairs: Ana Katalinić Mucalo, Krešimir Šakić

Eva Cetinic, Sonja Grgic; CROATIA

Genre Classification of Paintings

Vladimir Hajduk, Dusan Levický; SLOVAKIA

Cover Selection Steganography

Younghyeon Park, Hiuk Jae Shim, Khanh Quoc Dinh, Byeungwoo Jeon; SOUTH KOREA

Visible and Near-Infrared Image Separation from CMYG Color Filter Array based Sensor

Nikola Filo, Lidija Mandić, Ante Poljičak; CROATIA

Adjustment of Visual Information for Visually Impaired People

Codruta O. Ancuti; SPAIN/ROMANIA

Variational Segmentation under Variable Illumination Conditions

15:30 - 16:45 **SPECIAL SESSION 4: Sea and Port Ecology**

Session Chair: Irena Jurdana

Astrid Zekić, Renato Ivče, Đani Mohović; CROATIA

Analysis of Compounds from Antifouling Paints in Croatian Part of Adriatic Sea

Damir Ivanković, Vlado Dadić, Dalibor Jelavić, Stipe Muslim, Toni Mašće; CROATIA

Supervision of Construction Works at Sea using Automatic Meteo-Oceanographic Station

Goran Bakalar, Myriam Beatriz Baggini; CROATIA/USA

Automated Remote Method and System for Monitoring Performance of Ballast Water Treatment System Operation on Ships

Mateo Sokač, Patrik Đurasek, Iva Bačić, Staša Puškarić; CROATIA

UAV Application in Ecology: Data Collecting with Quad-Copter Equipped with Arduino based Measurement Platform

16:45 **CLOSING COCKTAIL**
Bar at hotel "Donat"

9:00 - 10:15

SESSION 8: Antennas and Propagation**Session Chair: Mario Muštra****Andrey I. Semenikhin, Diana V. Semenikhina, Yury V. Yukhanov; RUSSIA**
Binary Anisotropic Coatings on a Base of Impedance Metasurface for RCS Reduction**Tomas Shejbal, Pavel Bezousek, Michal Reznicek; CZECH REPUBLIC**
Model Order Estimation of Highly Correlated Signals Applied on Measured Data**Yury V. Yukhanov, Tatiana Y. Privalova, Valentin A. Lesov; RUSSIA**
Influence of Impedance Flange on Radiation Characteristics of Planar Semi-Infinite Waveguide Array

10:15 - 10:45

Session Break

11:00 - 12:45

SESSION 9: Wireless Communications**Session Chair: Gordan Šišul****Martin Klaus Müller, Martin Taranetz, Victor Stoyanov, Markus Rupp; AUSTRIA/
BULGARIA**
Abstracting Indoor Signal Propagations: Stochastic vs. Regular**Ivan Lapin, Peter Farkaš; SLOVAKIA**
Peak-to-Average Power Ratio of Two-Dimensional Orthogonal Complete Complementary Codes**Leonard Novosel, Gordan Šišul; CROATIA**
Chaotic Direct Sequence Spread Spectrum Software Defined Radio System Model Using LabView**Yunsung Choi, Jihyun Shin, Dongwoo Kim; KOREA**
Secure Outage Performance of Zero-Forcing Beamforming with "Torch Nodes"**Igor Vitas, Dijana Tralic; GERMANY/CROATIA**
Wireless Technologies for Position Awareness

12:45 - 14:00

Lunch Break

14:00 - 15:30

SESSION 11: Smart Systems and E-learning

Session Chairs: Dijana Tralić, Juraj Petrović

Emre Acay, Nihan Kahraman, Murat Taskiran, Tuba Kıyan, Halime Usta Yogun; TURKEY

Hardware Application of Human-Machine Interface in Smart Air Conditioners Using Hand Tracking

Juraj Petrovic, Dijana Tralic, Predrag Pale; CROATIA

Time Aspects of Using Audience Response Systems

Emir Žunić, Bahira Žunić, Almir Djedović, Dušanka Bošković, Dženana Đonko; BOSNIA AND HERZEGOVINA

Successful E-learning Concepts and Platform in the Field of Biomedical Engineers Education

Norbert Gyurian, Ivan Drozd, Gregor Rozinaj; SLOVAKIA

Multimodal Interface for Smart Home

Davor Virkes, Tomislav Kos, Josip Vuković; CROATIA

Sense Usage Forecasting Method for Navigational Multimodal Interfaces

16:45

**CLOSING COCKTAIL
Bar at hotel "Donat"**