

ELMAR-2015 PROGRAM

Monday, September 28	Tuesday, September 29	Wednesday, September 30
09:00 - 09:30 Registration	09:00 - 09:30 Registration	09:00 - 09:30 Registration
09:30 - 10:00 OPENING SESSION: Welcome Speeches	09:00 - 10:30 Session 4 & 5	09:00 - 10:30 Session 8 & 9
10:00 - 10:30 Welcome cocktail	10:15 - 10:45 Session break	10:30 - 11:00 Session break
10:30 - 11:45 PLENARY SESSION: Keynote Talks	11:00 - 13:00 Session 6 & 7 and Special session 4 & 5	11:00 - 12:00 Special Session 6
12:00 - 13:00 Session 1 and Special Session 1		
13:00 - 14:00 Lunch break	13:00 - 14:00 Lunch break	12:00 - 14:00 Lunch
14:15 - 16:30 Session 2 & 3 and Special Session 2 & 3	14:15 – 19:30 Excursion by ship	
17:00 - 20:00 Guided Zadar sightseeing		
21:00 ELMAR-2015 Symposium Dinner		

ELMAR-2015 PROGRAM

Monday, 28 September 2015

09:00 - 09:30 Registration	
HALL A	
09:30 - 10:00 OPENING SESSION: Welcome Speeches	
10:00 - 10:30 WELCOME COCKTAIL	
10:30 - 11:45 PLENARY SESSION: Keynote Talks	
12:00 - 13:00 SESSION 1: Wireless Communications	12:00 - 13:00 SPECIAL SESSION 1: Future of the UHF band - second digital dividend and digital terrestrial television
13:00 - 14:00 Lunch Break	
HALL A	HALL B
14:00 - 15:00 SPECIAL SESSION 2: Infrared Thermography (IRT) and Applications	14:00 - 15:15 SESSION 2: Multimedia Communications
15:15 - 16:30 SESSION 3: Image and Video Processing 1	15:15 - 16:30 SPECIAL SESSION 3: Technological Solutions for Implementation of Next Generation Broadband Networks
17:15 - 20:00 GUIDED ZADAR SIGHTSEEING <u>Meeting Point:</u> Hotel "Funimation", Main Entrance, 17:15	
21:00 ELMAR-2015 Symposium Dinner Meeting Point: Hotel "Funimation", 21:00	

ELMAR-2015 PROGRAM

Tuesday, 29 September 2015

09:00 - 09:30 Registration	
HALL A	HALL B
09:00 - 10:15 SESSION 4: Speech and Audio Processing	09:00 - 10:15 SESSION 5: Antennas and Propagation
10:15 - 10:45 Session Break	
10:45 - 11:45 SESSION 6: Telecommunications	10:45 - 11:45 SPECIAL SESSION 4: From 3G to 5G
12:00 - 13:00 SESSION 7: Power Electronics and Automation	12:00 - 13:00 SPECIAL SESSION 5: Sea and Port ecology
13:00 - 14:00 Lunch Break	
14:15 - 19:30 EXCURSION BY SHIP <u>Meeting Point:</u> Hotel "Funimation", Main Entrance, 14:15	

Wednesday, 30 September 2015

09:00 - 09:30 Registration	
HALL A	HALL B
09:00 - 10:30 SESSION 8: Image and Video Processing 2	09:00 - 10:30 SESSION 9: e-Learning and m-Learning
10:30 - 11:00 Session Break	
11:00 - 12:00 SPECIAL SESSION 6: Computer Vision for New Emerging Applications	
12:00 - 14:00 Lunch	

Monday, 28 September 2015

09:00 - 09:30 **Registration**

HALL A

Monday, 28 September 2015

09:30 - 10:00 **OPENING SESSION: Welcome Speeches**

Session Chairs: Branka Zovko-Cihlar, Mario Muštra

10:30 - 11:00 **WELCOME COCKTAIL**

10:00 - 11:45 **PLENARY SESSION: Keynote Talks**

Session Chair: Branka Zovko-Cihlar

Markus Rupp, Vienna University of Technology; AUSTRIA

Future Cellular Networks for a Society in Motion

Gregor Rozinaj, Faculty of Electrical Engineering and Information Technology,

Slovak University of Technology in Bratislava; SLOVAKIA

Smart Home - New Way of Life or Fiction?

Ivančica Urh, Head of the Electronic Communications Division, Ministry of Maritime

Affairs, Transport and Infrastructure, Zagreb; CROATIA

Croatian National NGN Plan – State of play

12:00 - 13:00 **SESSION 1: Wireless Communications**

Session Chair: Gordan Šišul

Alaa Eleyan; Mohammad Salman, Cemil Turan; TURKEY; KAZAKHSTAN

A Block LMS-type Algorithm with a Function Controlled Variable Step-size for Sparse System Identification

Martin Lerch; AUSTRIA

Experimental Comparison of Fast-Fading Channel Interpolation Methods for the LTE Uplink

Leonard Novosel, Gordan Šišul; CROATIA

Software Defined Radio DSSS System Model using $1/f$ Noise as Spreading Sequence

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

14:15 - 15:00 **SPECIAL SESSION 1: Infrared Thermography (IRT) and Applications**

Session Chairs: Darko Kolarić, Svetlana Antonini

Svetlana Antonini, Darko Kolarić, Željko Herceg, Tomislav Kuliš, Željko Ferenčić, Jadranka Katančić, Danijela Tomić Štorga, Marko Banić; CROATIA
Thermographic Visualization of Multicentric Breast Carcinoma

Iskra A. Nola, Darko Kolarić; CROATIA
Thermography in Biomedicine

Tonći Božin, Svetlana Antonini, Darko Kolarić, Željko Ferenčić, Tomislav Kuliš, Marko Banić; CROATIA
Thermography in Surveillance of Ulcerative Colitis – Case Report

Marko Banić, Darko Kolarić, Tonći Božin, Tomislav Kuliš, Mirjana Vukelić, Željko Herceg, Lidija Petričušić, Svetlana Antonini; CROATIA
Thermography in Abdominal Comorbidity in Gastric Carcinoma - Case Report

15:15 - 16:30 **SESSION 3: Image and Video Processing 1**

Session Chair: Mario Muštra, Dejan Šeatović

Sazonov V.V., Shcherbakov M.A.; RUSSIA
Digital Noise-Resistant SVD-Wiener Filter

Dejan Šeatović, James Mure-Dubois; SWITZERLAND
Analysis of Necessary Sensor Spatial Resolution for Reliable Plant Detection

Pavel Chmelar, Ladislav Beran, Lubos Rejfek, Nataliia Kudriavtseva; CZECH REPUBLIC
Effective Lens Distortion Correction for 3D Range Scanning Systems

K. Wegner, T. Grajek, D. Karwowski, J. Stankowski, K. Klimaszewski, O. Stankiewicz, M. Domański; POLAND
Multi-Generation Encoding Using HEVC All Intra Versus JPEG 2000

Andjela Draganić, Miloš Brajović, Irena Orović, Srdjan Stanković; MONTENEGRO
A Software Tool for Compressive Sensing based Time-Frequency Analysis

17:00 - 20:30 **GUIDED ZADAR SIGHTSEEING AND CONCERT AT ST. DONAT'S CHURCH**
Meeting Point: Hotel "Funimation", Main Entrance, 17:00

21:00 **ELMAR-2015 SYMPOSIUM DINNER**
Meeting Point: Hotel "Funimation", bar at the pool, 21:00

12:00 - 13:00**SPECIAL SESSION 2: Future of the UHF band - second digital dividend and digital terrestrial television****Session Chairs:** Krešimir Šakic, Miran Gosta, Ana Katalinić Mucalo**Miran Gosta, Branka Zovko Cihlar; CROATIA**

Challenges in Developing and Implementing the Strategy of DVB-T to DVB-T2 Transition

Krešimir Mazor, Ivana Dražić Lutilsky; CROATIA

Spectrum Pricing Overview for Digital Dividend in Europe

Ivana Dražić Lutilsky, Krešimir Mazor; CROATIA

Theoretical Approaches for Spectrum Pricing

Tomislav Vodopijak, Sonja Grgić; CROATIA

PPDR Network Implementation Options

13:00 - 14:00**Lunch Break****15:15 - 16:30****SESSION 2: Multimedia Communications****Session Chair:** Pavol Podhradský**Igor Dujlović, Zoran Đurić; BOSNIA AND HERZEGOVINA**

Cross-platform Web based Real-time Communication in Web TV and Video on Demand Systems

Iva Bačić, Krešimir Malarić, Emil Dumić; CROATIA

Empirical Channel Model for Communication in Urban Areas with a Hilly Region

Petar Franček, Igor Piljić, Leon Dragić, Hrvoje Mlinarić, Mario Kovač, Darko Gvozdanović; CROATIA

Overcoming E-health Interoperability Obstacles: Integrating PHR and EHR using HL7 CCD

Ondrej Lábjaj, Pavol Podhradský; SLOVAKIA

Policy-based Access Control using Biometric Authentication Mechanisms

Srećko Kunić, Zoran Šego; CROATIA

New HRT Regional Centre in Zadar

14:15 - 15:00

**SPECIAL SESSION 2: Technological Solutions for
Implementation of Next Generation Broadband Networks**

Session Chairs: Tomislav Majnarić, Zvonimir Šipuš

Marina Ravlić, Darko Bratković; CROATIA

Comparison of Different NGN Aggregation Networks Scenarios

Obuljen, Tonko; CROATIA

E-band Microwave Links in Fixed Broadband Networks

**Marko Šprem, Dario Bojanjac, Marko Bosiljevac, Tin Komljenović, Damir Muha,
Dubravko Babić, Zvonimir Šipuš; CROATIA**

Self-Seeded WDM-PON for Next Generation Broadband Access Networks

Cristian Anghel, Constantin Paleologu, Cristian Stanciu; ROMANIA

Performances Evaluation of CTC Turbo Decoder for LTE Systems

17:00 - 20:30

**GUIDED ZADAR SIGHTSEEING AND CONCERT
AT ST. DONAT'S CHURCH**

Meeting Point: Hotel "Funimation", Main Entrance, 17:00

21:00

ELMAR-2015 SYMPOSIUM DINNER

Meeting Point: Hotel "Funimation", bar at the pool, 21:00

Tuesday, 29 September 2015

09:00 - 09:30 **Registration**

HALL A

Tuesday, 29 September 2015

09:00 - 10:15 **SESSION 4: Speech and Audio Processing**

Session Chair: **Gregor Rozinaj**

**Vyacheslav A. Tykhonov, Nataliia V. Kudriavtseva, Pavel Chmelar; UKRAINE/
CZECH REPUBLIC**

Factorization of Speech Signals Parametric Spectra Using Multiplicative Linear Prediction Models

Cristian Contan, Marina Topa; ROMANIA

Scaling Factor Computation for EDSC Adaptation

Stefan Vujović, Irena Orović, Miloš Daković, Ljubiša Stanković; MONTENEGRO

Statistical Performance Analyzer for Compressive Sensing Gradient Algorithm

R. Rybárová, G. Rozinaj; SLOVAKIA

Speech Synthesis Using Compressed Database

Juraj Kacur, Peter Truchly; SLOVAKIA

Acoustic and Auxiliary Speech Features for Speaker Identification System

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

10:45 - 11:45 **SESSION 6: Telecommunications**

Session Chair: Markus Rupp

Dmitry S. Shalymov, Alexander L. Fradkov; RUSSIA
Simulation of MEPP via Speed-Gradient Principle

Ivona Zakarija, Frano Škopljanač-Mačina, Bruno Blašković; CROATIA
Discovering Process Model from Incomplete Log using Process Mining

Namir Škaljo, Alen Begović, Narcis Behlilović; BOSNIA AND HERZEGOVINA
Comparison Between Different Physical Layer Parameters Testing Scenarios

Hiroshi Yamauchi, Alen Luštica; CROATIA
Audio and Video Over IP

Dardan Maraj, Arianit Maraj; GREECE/REPUBLIC OF KOSOVO
Performance Analysis of WLAN 802.11g/n Standards using OPNET (Riverbed) Application

12:00 - 13:00 **SESSION 7: Power Electronics and Automation**

Session Chairs: Vladimir Roboz

A. Moudgil, K. Garg, B. Pandey, D M Akbar Hussain, Bhagwan Das, M.F.L. Abdullah; INDIA/DENMARK/MALAYSIA
GTL Based Internet of Things Enable Processor Specific RAM Design on 65nm FPGA

Vivek Kumar Sharma, Varun Anand, Vishakha Vaish, RajKumar Bharti; INDIA
A New Control Scheme for Modular Converters

Emir Sokic, Mina Ferizbegovic, Jasmina Zubaca, Kenan Softic, Melita Ahic-Djokic; BASNIA AND HERZEGOVINA
Design of Ultrasound-based Sensory System for Environment Inspection Robots

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

14:15 - 19:30 **EXCURSION BY SHIP**
Meeting Point: Hotel "Funimation", Main Entrance, 14:15

09:00 - 10:15

SESSION 5: Antennas and Propagation**Session Chair: Jelena Božek-Mouthuy****A.I. Semenikhin, D.V. Semenikhina, Y.V. Yukhanov; RUSSIA**

Modeling of MEMS Enabled Reconfigurable Frequency Selective Surfaces in Aperture of Waveguide Antenna Array

D.V. Semenikhina, A.V. Klimov, A.I. Semenikhin, Y.V. Yukhanov; RUSSIA

Metamaterial-Inspired Model of Broadband Twist-Polarizer

Andrej Galoić, Branimir Ivšić, Davor Bonefačić; CROATIA

Waveguide Calibration for Measuring Electric Properties of Textile Materials

Branimir Ivšić, Andrej Galoić, Davor Bonefačić; CROATIA

Embroidered Textile Logarithmic Spiral Antenna and Its Energy Efficiency

Mladen Jakovac; CROATIA

Measurement and Testing Pulsed Radar Emission and Parameters with Spectrum Analyser in Time Domain

10:15 - 10:45

Session Break

10:45 - 11:45

SPECIAL SESSION 4: From 3G to 5G**Session Chair: Sonja Zentner Pilinsky, Alberto Teković****Jasmina Uzelac, Siniša Lacković, Sonja Zentner Pilinsky; CROATIA**

Analysis of 2G and 3G Urban Area Coverage Measurements

Angelo Gary Markoč, Gordan Šišul; CROATIA

Fractional Pathloss Tuning in LTE Network

Urban Sedlar, Miha Rugelj, Mojca Volk, Janez Sterle; SLOVENIA

Multi-layer end-to-end mobile network monitoring

Ana Katalinic Mucalo, Gordan Simac, Alberto Tekovic; CROATIA

Criteria for Mobile Coverage Obligations – Overview in Europe

Zdenek Nemec, Jan Pidanic, Alberto Tekovic, Radovan Dolecek; CZECH REPUBLIC

Investigation of UHF System for Mobile Communication in Indoor Environments

12:00 - 13:00

SPECIAL SESSION 5: Sea and Port ecology

Session Chair: Irena Jurdana

Ernesto Madariaga, Francisco Correa, Jesús M. Oria, Jorge Walliser; SPAIN

Methodology for waste management of nautical ports in Croatia

Renato Ivče, Đani Šabalja, Srđan Žuškin; CROATIA

The Importance of Antifouling Application Monitoring on Leisure Boats

Vedran Jurdana, Saša Sladić; CROATIA

Green Energy for Low Power Ships

13:00 - 14:00

Lunch Break

14:15 - 19:30

EXCURSION BY SHIP

Meeting Point: Hotel "Funimation", Main Entrance, 14:15

Wednesday, 30 September 2015

09:00 - 09:30 **Registration**

HALL A

Wednesday, 30 September 2015

09:00 - 10:30 **SESSION 8: Image and Video Processing 2**

Session Chair: Mario Muštra

Martin Broda, Vladimír Hajduk, Dušan Levický; SLOVAKIA

Image Steganography Based on Combination of YCbCr Color Model and DWT

Miloš Orović, Tamara Pejaković, Andjela Draganić, Srdjan Stanković;

MONTENEGRO

MRI Watermarking in Compressive Sensing Context

**Oleg Granichin, Lev Klebanov, Dmitry Shalymov, Zeev Volkovich; RUSSIA/CZECH
REPUBLIC/ISRAEL**

Authorship Attribution Method Based on KNN Re-Sampling Approach

Vladislav A. Pavlov, Roman S. Shalymov, Dmitry S. Shalymov; RUSSIA

Arabic Manuscripts Clustering Based on Feature Relation Graph (FRG)

**J. Stankowski, D. Karwowski, K. Wegner, O. Stankiewicz, K. Klimaszewski, T.
Grajek; POLAND**

Analysis of CABAC Context Models Efficiency in the HEVC

10:30 - 11:00 **Session Break**

11:00 - 12:00

SPECIAL SESSION 6: Computer Vision for New Emerging Applications

Session Chairs: Irena Galić, Časlav Livada

Krešimir Romić, Irena Galić, Tomislav Galba; CROATIA

Technology Assisting the Blind - Video Processing Based Staircase Detection

Mirela Kundred, Irena Galić, Daniel Vasić; BOSNIA AND HERZEGOVINA/CROATIA

Human action identification and search in video files

Hrvoje Leventić, Časlav Livada, Irena Galić; CROATIA

Cardiac CT Image Enhancement using Wavelets and Pixel Profiling for 3D Heart Registration and Visualization

Ismail Shaykha, Ahmad Menkara, Michel Nahas, Milad Gbantous; LEBANON

FEER: A Non-Intrusive Facial Expression and Emotional Recognition for Driver's Vigilance Monitoring

13:00 - 14:00

Lunch Break

09:00 - 10:30

SESSION 9: e-Learning and m-Learning**Session Chairs: Juraj Petrović, Dijana Tralić****Krešimir Kavran, Nikola Majstorović; CROATIA**

Custom Applications for Information System for Higher Education in Croatia

Juraj Petrović, Dijana Tralić, Predrag Pale; CROATIA

Learning Benefits of Online Formative Self-Assessments

Ksenia Lomovskaya, Evgeniy Graznov; RUSSIA

E-learning Environment with Implantation of the Learning Strategy during CLIL Seminars

Leon Dragić, Igor Piljić, Petar Franček, Mario Kovač, Hrvoje Mlinarić, Darko Gvozdanović; CROATIA

Home Health Smart TV - platform for accessing multimedia e-health content

Igor Piljić, Leon Dragić, Petar Franček, Mario Kovač, Hrvoje Mlinarić, Darko Gvozdanović; CROATIA

Bringing Generations Together: Social Network Adapted for Elders

10:30 - 11:00

Session Break

13:00 - 14:00

Lunch