2022 International Workshop on Fiber Optics in Access Networks (FOAN 2022)

Valencia, Spain
11 – 12 October 2022

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S_A: Research issue

Chair: Bojan Pajcin (University of Belgrade & IRITEL ad, Serbia)

15:30 *Frequency and Bandwidth Tunable Integrated Microwave Photonic Bandpass Filter...1*

Claudio Porzi (Scuola Superiore Sant'Anna, Italy); Manuel Reza (Sant'Anna School of Advanced Studies, Italy); Marc Sorel (University of Glasgow, United Kingdom (Great Britain)); Antonella Bogoni (CNIT, Italy)

15:50 *Coexistence Studies for DV-QKD Integration in Deployed RAN Infrastructure...6*

Dimitris Zavitsanos, Argiris Ntanos, Panagiotis Toumasis, Adam Raptakis and Christos Kouloumentas (National Technical University of Athens, Greece); Theofanis Stathopoulos (COSMOTE Mobile Telecommunications S. A, Greece); Fotini Setaki (COSMOTE Mobile Telecommunications S.A. Greece, Greece); Elina Theodoropoulou and George Lyberopoulos (COSMOTE Mobile Telecommunications S.A., Greece); Giannis Giannoulis and Hercules Avramopoulos (National Technical University of Athens, Greece)

16:05 *Performance Analysis of Mode Division Multiplexing (MDM) Based Hybrid PON FSO System Under Fog Weather Conditions...10*

Rajan Miglani (Lovely Professional University, India); Harjeevan Singh (Chandigarh University, Gharuan, India)

16:20 *Stabilization Concept for Maintaining Maximum Suppression of the Undesired Sideband in a Radio-Over-Fiber Link Using a Single Add/Drop Micro-Ring Resonator...16*

Kristjan Vuk Baliz and Bostjan Batagelj (University of Ljubljana, Slovenia)

16:40 *Hybrid PONs with RU Interconnection for Future Mobile Networks...20*

Yuan-Hui Wen (Electronic and Computer Engineering National Taiwan University of Science, Taiwan); Kuo-Chang Feng (National Taiwan University Of Science and Technology (NTUST) & Alcatel-Lucent (ALU), Taiwan); Lung-Wei Chung and San-Liang Lee (National Taiwan University of Science and Technology, Taiwan)

20:00 - WELCOME RECEPTION

Wednesday, October 12

9:00:9:30 COFFEE BREAK

D2.1: TELECOM

Chair: Bostjan Batagelj (University of Ljubljana, Slovenia)

9:30 *GPON / XGS-PON / NG-PON2 Evolution With a Comparison of Wi-Fi 6 Mesh Versus Wi-Fi 5 Mesh in a Residential Building - Experience in T-2...38*

Gorazd Penko (T-2 doo, Slovenia)

10:00 *Challenges in Building Broadband Fiber Optic Infrastructure in Rural Areas (Experiences From EU-Subsidized Projects)...N/A*

Dusko Zutic (Roaming Networks, Croatia)

10:20 *Software-Defined Passive Optical Network With Modular Optical Line Terminal*
Jakup Ratkoceri (Technetix, The Netherlands); Bostjan Batagelj (University of Ljubljana, Slovenia)

D2.2: Regulation challenges in Access and IoT Networks

Room: FOAN Room

Chair: Jakup Ratkoceri (Technetix, The Netherlands)

10:45 *Convergence of optical and radio access networks...26*
Vesna Prodnik (University of Ljubljana & Vafer Ltd, Slovenia); Janez Krc (University of Ljubljana, Faculty of Electrical Engineering, Slovenia); Bostjan Batagelj (University of Ljubljana, Slovenia)

11:10 *Municipalities - New Owners and Innovators of Fiber Optic Networks in Europe...N/A*
Cornel Barbut (Association of Fiber Optic from Romania & Vegacomp Consulting SRL, Romania)

11:35 *Data Generated by IoT: What Does the Regulation Say?...39*
Cristina Contero Almagro (Aphaia, Spain)

12:00 - 13:00 LUNCH BREAK

D2.2: SENSORS

Room: FOAN Room

Chairs: Petr Munster (Brno University of Technology, Czech Republic), Kimio Oguchi (National Taiwan University of Science and Technology, Taiwan)

13:00 *Ultrasensitive Nanoplasmonic Biosensor Based on Precisely Controlled Phase Singularity...N/A*
Shuwen Zeng (French National Centre for Scientific Research, France)

13:30 *An Energy Harvesting Technology for MPU-based IoT Device...30*
Hideaki Kimura (Chubu University, Japan)

14:00 *Diverse Optical Fiber Structures for Sensor Applications...N/A*
Gerd Keiser (Boston University & PhotonicsComm Solutions, USA)

14:45 *Two parameters detecting by using one Silicon core based fiber Bragg Grating...33*

Hua Chuan Weng (Feng Chia University, Taiwan); Yi-Lin Yu (Feng-Chia University, Taiwan); Kimio Oguchi (National Taiwan University of Science and Technology, Taiwan); Hiroki Kishikawa (Tokushima University, Japan); Shien-Kuei Peter Liaw (National Taiwan University of Science and Technology, Taiwan); Wen-Fung Liu (Feng Chia University, Taiwan)

15:00 *Thin-Film PV Cells in Powering Over Singlemode Fiber...N/A*

Edvin Skaljo (University of Sarajevo, Bosnia and Herzegovina); Emir Karamehmedovic (Doric Lenses Inc., Bosnia and Herzegovina); Aljo Mujčić (University of Tuzla, Bosnia and Herzegovina)

T1.0: Tutorial

Room: The location will be determined later

Chair: Edvin Skaljo (University of Sarajevo, Bosnia and Herzegovina)

20:00 - GALA DINNER

Room: The location will be determined later