WEDNESDAY, 3 JULY, 2019

13:15 - 13:30: WELCOME
13:30 - 14:30: PLENARY LECTURE

"Signal Processing Techniques and Considerations for Successful FFT Analysis"
by
Dr. Thomas L. Lago
CTO & Chairman of QIRRASOUND TECHNOLOGIES AB, Sweden

PARALLEL SESSIONS WEDNESDAY 14:30 -15:50

Wednesday, July 3rd 14:30-15:50 Room : NIKI

“MODERN WIRELESS COMMUNICATION SYSTEMS BASED ON VLC OF FSO TECHNOLOGY”

INVITED SESSION
Organized by: Prof. H.E. Nistazakis
National & Kapodistrian University of Athens

Chairmen: Tsigopoulos A.D., Stassinakis A.N.

14:30-14:50 “Outage Performance Study of a Multi-Hop AF Relay System Approximated by a Dual-Hop Scenario over Rician Fading Wireless Channels”

14:50-15:10 “VLC Performance Enhancement Using a Band-Pass Optical Filter”


15:30-15:50 “Non-Line of Sight Underwater Optical Wireless Communications Systems”
Menounou S., Stassinakis A.N., Tsigopoulos A.D., Nistazakis H.E., Tzanakaki A., Tombras G.S.

Wednesday, July 3rd 14:30-15:50 Room : ATHENS

“APPLICATIONS OF OPTIMIZATION METHODS IN TAIWAN”

INVITED SESSION
Organized by: Prof. A.H.I Lee
Chung Hua University, Taiwan

Chairmen: Hsieh L.-F., Lee A.H.I.

14:30-14:50 “Construction of Operational Performance Evaluation Model for Taiwan High-Speed Railway Stations”
Hsieh L.-F., Lan J.-E., Gerelsuren T., Hung S.-Y.

14:50-15:10 “A Preliminary Study for Senior Daycare Center Evaluation”

15:10-15:30 “Modeling and Optimizing the Multi-Period Vehicle Routing Problem with
PARALLEL SESSIONS  
WEDNESDAY 16:20 -18:00

Wednesday, July 3rd 16:20-18:00 Room : NIKI

“AEROSPACE APPLICATIONS IN NAVAL OPERATIONS”

INVITED SESSION
Organized by Prof. I. Koukos
Hellenic Naval Academy

Chairmen: Koukos I., Pothitos A.

16:20-16:40 “Design and Integration of a Cubesat for Maritime and Defense Applications over Exclusive Economic Zones (EEZ)”
  Gouskos-Katsaros K., Koukos I.

16:40-17:00 “Determination of a Cubesat’s Orbit Degradation. Use of MS EXCEL™ to Produce a Lifespan Estimate”
  Gouskos-Katsaros K., Koukos I.

17:00-17:20 “Cybersecurity Threats to Picosatellite Links and Onboard Processors”
  Papastamatis T., Koukos I.

17:20-17:40 “Stratospheric Balloons in a High Altitude Surveillance and Telecommunications Platform Network”
  Pothitos A., Koukos I.

17:40-18:00 “Feasibility Analysis of Telecommunication Links between MALE Drones and LEO Picosatellites”
  Karanagnostis K., Koukos I.

Wednesday, July 3rd 16:20-17:40 Room : ATHENS

“MULTIPHASE FLOW MODELING AND SIMULATION IN INDUSTRIAL APPLICATIONS”

INVITED SESSION
Organized by: Prof. D.I. Margaris
University of Patras, Greece

Chairmen: Margaris D., Samaras V.C.

16:20-16:40 “Resemblances and Differences in Performance of Several Scales Air-Lift Pumps”
  Samaras V.C., Androulakis D., Margaris D.P.

16:40-17:00 “Aerodynamic Degradation of a Three Bladed Horizontal Axis Wind Turbine Operating During a Hailstorm”
  Douvi D.C., Georgakopoulos K.A.-G., Lekkas I.D., Douvi E.C., Margaris D.P.

17:00-17:20 “Two- and Three-Dimensional Computational Investigation of the Separation Efficiency of an Air-Water Mixture Flowing through an Inclined T-Junction Branch”
  Makrygiannis G.K., Margaris D.P.

17:20-17:40 “Computational Analysis of Air Lubrication System for Commercial Shipping and Impacts on Consumption”
  Fotopoulos A.G., Margaris D.P.
PARALLEL SESSIONS  THURSDAY  09:00 -10:20

Thursday, July 4th  09:00-10:20  Room : NIKI

MINI SYMPOSIUM
“MADM PRINCIPLES”
SESSION I – MODELING IN SIMULATION AND OPTIMIZATIONS
Organized by: Prof. Chin-Tsai Lin
Ming Chuan University, Taiwan
Chairmen: Chin-Tsai Lin, Hei Chia Wang
09:00-09:20  “Designing an Optimal CUSUM Control Charts via Support Vector Machine”
09:20-09:40  “Extracting Network Preferential Information with Bootstrapping Method”
Cheng, Y.F., Wang, H.C.
09:40-10:00  “Establishing Intuitionistic Fuzzy Regression Models: A Mixed Approach“
Chen L.-H., Nien, S.-S., Li Y.-C.
10:00-10:20  “Exploring the Relations between Perceived Teacher Support and Student
Academic Learning Engagement”
Chou H.-W., Tsao Y.-J.

PARALLEL SESSIONS  THURSDAY  11:00 -12:40

Thursday, July 4th  11:00-12:20  Room : NIKI

MINI SYMPOSIUM
“MADM PRINCIPLES”
SESSION II – MODELING IN SIMULATION AND OPTIMIZATIONS
Organized by: Prof. Chin-Tsai Lin
Ming Chuan University, Taiwan
Chairmen: Chin-Tsai Lin, Yi-Hsien Wang
11:00-11:20  “Comparative Study on Information Effect of A Chain of Mergers and
Acquisitions: An Information Asymmetry Perspective”
11:20-11:40  “Solving the Maximum Entropy Doubly Constrained Distribution/Assignment
Problem”
Chen H.-K., Yen Y.-H.
11:40-12:00  “A Preference Relation Method Based on Hesitant Fuzzy Linguistic Terms for
Decision-Making Problem”
Chen C.-T., Cheng H.-L.
12:00-12:20  “Exploring the Determinants To Improve Hot Spring Customer Satisfaction: A
Relational Analysis Using ISM with Fuzzy Micmac Approach”
Mi C.-M., Chen Y.-T., Ng J.C.Y., Lin C.-T.
Thursday, July 4th 11:00-12:40  
**Room**: ATHENS  

**“SMART TECHNOLOGIES”**  

*Chairmen: Mykoniatis G., Dossis M.*  

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| 11:00-11:20 | “Demand Capacity Balancing in Multi-Modal Transportation through Optimization and Simulation”  
**Mykoniatis G., Puechmorel S., Moracamino F., Zerrouki L., Richard M.** |
| 11:20-11:40 | “System Framework to Support Interactive IoT Smart Museums”  
**Dossis M., Kontogiannis S., Kazanidis I., Valsamidis S., Kokkonis G.** |
| 11:40-12:00 | “Mechanical Characterization of Aluminium Sandwich Structures under Tensile, Bending and Crack Propagation Loading Modes for Infrastructure Engineering”  
**Zaoutsos S.** |
| 12:00-12:20 | “Parallelization of 2D-ATCP with Alternating Direction Implicit Scheme on MPI”  
**Ewedafe S.U.** |
| 12:20-12:40 | “Sustainable Development in Green Energies and the Environment”  
**Omer A.** |

12:30 - 13:30 **PLENARY LECTURE**  

"The Challenge of the Passenger Centric Transportation – Smart4PAX"  
by  
**Dr. George Mykoniatis**  
Head of Business Development for the Research ENAC LAB, Toulouse France  

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**PARALLEL SESSIONS**  
**THURSDAY 14:30 -15:50**  

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| 14:30-15:50 | **MINI SYMPOSIUM**  
**“MADM PRINCIPLES”**  
**SESSION III – MODELING IN SIMULATION AND OPTIMIZATIONS**  
Organized by: Prof. Chin-Tsai Lin  
Ming Chuan University, Taiwan  

*Chairmen: Chin-Tsai Lin, Pin-Ju Juan*  

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<th>Time</th>
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| 14:30-14:50 | “How Should National Tourism Organization Offices Abroad Improve Competitiveness Through Managing Interactions with Travel Agents”  
**Goay Y.-H., Lin C.-T.** |
| 14:50-15:10 | “Sailing to Rainbow: Consolidating the Gay Tourists’ Perspective Relative to Taiwan and Mainland China on Structuring the Selection Model Regarding Cruise Travel”  
**Chen W.-Y., Hsu P.-F.** |
**Juan P.-J., Juan P.-Y., Chen Y.-S.** |
| 15:30-15:50 | “Prioritizing Senior Travel Assessment Criteria in Travel Services: Using the Analytic Network Process Model”  
**Hsu S.-C., Tsai C.-H., Lai T.-C.** |
MINI SYMPOSIUM
“ADVANCES IN STRUCTURAL AND GEOTECHNICAL ENGINEERING”
SESSION I
Organized by: Assoc. Prof. Dr. D.-P.N. Kontoni
University of the Peloponnese, Greece
Chairmen: Kontoni D.-P.N., Farghaly A.A.
14:30-14:50 “Effectiveness of Tuned Mass Dampers and Spring Dampers in the Seismic Response Control of a Cable-Stayed Bridge including Soil-Structure Interaction” Kontoni D.-P.N., Farghaly A.A.
15:30-15:50 “Efficiency of Open and In-Filled Trenches in Reducing the Railway-Induced Vibrations on an Adjacent High-Rise Building” Kontoni D.-P.N., Farghaly A.A.

MINI SYMPOSIUM
“MADM PRINCIPLES”
SESSION IV – MODELING IN SIMULATION AND OPTIMIZATIONS
Organized by: Prof. Chin-Tsai Lin
Ming Chuan University, Taiwan
Chairmen: Chin-Tsai Lin, Jung-Ho Lu
16:40-17:00 “A Crowd Wisdom Filtering and Recommendation Technology” Yang S.-T., Syue J.-T. Li M.-Y., Lin C.-Y.

MINI SYMPOSIUM
“ADVANCES IN STRUCTURAL AND GEOTECHNICAL ENGINEERING”
SESSION II
Organized by: Assoc. Prof. Dr. D.-P.N. Kontoni
University of the Peloponnese, Greece
Chairmen: Kontoni D.-P.N., Tavasoli O.
16:20-16:40 “Evaluation of the Seismic Response of Slopes due to Spatial Variability of Shear
FRIDAY, 5 JULY, 2018

PARALLEL SESSIONS

Friday, July 5th 10:00-11:20

MINI SYMPOSIUM
“PARAGON S.A. - THE ORPHEUS (COCKPIT AUDIO) AND PROPTIM (PRODUCTION FLOOR) SIMULATORS/OPTIMISERS”
SESSION I – ACTIVE SIMULATOR COCKPIT ENHANCEMENT – ASCENT PROJECT
Organized by: PARAGON S.A., Athens, Greece

Chairmen: Tsahalis H.-T., Tsahalis J.

10:00-10:40 “The Active Simulator Cockpit Enhancement (ASCENT) Project” INVITED PAPER
Tsahalis H.-T., de la Casa D., Dias T.

10:40-11:00 “ORPHEUS – 3D Audio System Concept for the Active Simulator Cockpit Enhancement (ASCENT) Project”
Tsahalis J., Tsahalis H.-T.

11:00-11:20 “ORPHEUS – 3D Audio System Implementation and Validation for the Active Simulator Cockpit Enhancement (ASCENT) Project”
Tsahalis J., Avgerinos N., Trypitsidis A., Tsahalis H.-T.

FRIDAY, 5 JULY, 2018

SIMULATION IN AUTOMOTIVE ENGINEERING

INVITED SESSION
Organized by: D.V. Koulocheris
National Technical University of Athens

Chairmen: Vossou C., Tsahalis D.

10:00-10:20 “Heavy Vehicle Dynamic Measurements as Metrics for Road Safety”
Koulocheris D., Vossou C., Tsiourva T

10:20-10:40 “A Novel Tank Vehicle Design Approach”
Vossou C., Koulocheris D.

10:40-11:00 “Structural Integrity of a 3-D Printed Suspension ARM”
Polydoras S., Vossou C., Koulocheris D.

PARALLEL SESSIONS FRIDAY 12:00 -13.20

Friday, July 5th 12:00-13:20 Room : NIKI

MINI SYMPOSIUM
“PARAGON S.A. - THE ORPHEUS (COCKPIT AUDIO)
AND PROPTIM (PRODUCTION FLOOR) SIMULATORS/OPTIMISERS”

SESSION II – PREDICTIVE COGNITIVE MAINTENANCE DECISION SUPPORT SYSTEM –
PRECOM PROJECT

Organized by: PARAGON S.A., Athens, Greece

Chairmen: Tsahalis J., Tsahalis H.-T.

12:00-12:40 “The Predictive Cognitive Maintenance Decision Support System (PRECOM) Project” - INVITED PAPER
Al-Najjar B. et al.

12:40-13:00 “Production Scheduling Optimisation (PROPTIM)”
Tsahalis J., Tsahalis H.-T.

13:00-13:20 “Production Scheduling Optimisation (PROPTIM) Enhancement for Predictive Maintenance and Application within PRECOM”

Friday, July 5th 12:00-13:20 Room : NIKI

“ENGINEERING APPLICATIONS”

Chairmen: Stamatelos D.G., Manopoulos C.

12:00-12:20 “Towards the Design of a Multispar Composite Aircraft Wing”
Stamatelos D.G., Labeas G.N.

12:20-12:40 “Finite Element Analysis of the Effect of Geometry Characteristics on Bending Stress of Asymmetric Helical Gears”
Zouridaki A.E.N., Vasileiou G.

12:40-13:00 “Non –Dimensional Characterization of the Operational Envelope of a Wet Friction Clutch”
Rogkas N., Vakouftsis C., Vasileiou G., Spitas V., Manopoulos C.

Gkimisis L., Manopoulos C., Kouzilos G., Spitas V.