Final Program

1-3 June 2015

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General Information

1.1 Conference Location

The Conference is held at

UPV (Universidad Politecnica de Valencia). On the UPV interactive map in buildings 8G and 4D Camino de Vera, s/n 46022 Valencia, Spain

The meeting room for Monday and Tuesday is the "Innova" Room, located on the 3rd floor of the Building 8G while on Wednesday the meeting room is "Salón de Grados" ETSIT Building 4D. Registration will start on Monday at 8.00 a.m. till 15.30 p.m. On Tuesday it will be from 8.30 a.m. - 15.30 a.m. with Wednesday registration only from 8.30 a.m.- 10.00. a.m.

Getting to Valencia and the University

By Plane

You will arrive by plane in Valencia at Valencia Manises Airport, which is located 8,5 km outside Valencia. From the airport you can take a taxi, an aerobus, bus or metro to the centre of Valencia.

By Metro/Tram

You can reach the University by Metro You can download the metro map here with zones and here without zones but more geographically correct. METRO VALENCIA. Use line 4-6. Stop Serrería for Monday and Tuesday. Stop La Carrasca for Wednesday.

By Bus

You can also reach the University by bus. You can find the map with the university stops here: You will also find a bus stop in front of the town hall. Buses depart here day and night for the rest of the city centre, the suburbs and the outlying communities. Take bus 1 or 41. Stops Tarongers-Fausto Elio and stop Tarongers-Aparcamiento for Monday and Tuesday**.** Stop Tarongers-Ramón Llull for Wednesday

General Information

ALL MAPS ARE AT THE BACK OF THIS PROGRAMME

1.2 Badges

Each registrant will receive a name badge upon registration. The badge must be worn in order to be admitted to the technical sessions, lunches and social event.

1.3 Tickets

Extra tickets for the social event and lunches are available from the Registration desk. (**at conference prices**)

Price: (or equivalent in another currency) for extra tickets. All participants will be issued with tickets for lunch and the conference dinner. **Or just the badge will apply.**

conference dinner:	**€ 60**
lunch	**€ 25**

1.4 Registration

The **ISC'2015** Registration Desk will be open for information and registration:

Monday, June 1 .....8.00 a.m. to 15.30 p. m.
Tuesday, June 2 .....8.30 a.m. to 15.30 p. m.

DIFFERENT BUILDING ON WEDNESDAY
Wednesday, June 3.....8.30 a.m. to 10.00 a.m.

1.5 Conference Proceedings

Each fully paid registrant will be provided with a copy of the Conference Proceedings (printed format). (Extra copies are available on a **cash and carry** basis at special rates during ISC-2015)

Price: (or equivalent in another currency) for an extra copy

ISC'2015 Proceedings	**€ 50**
Other Proceedings –see price list at desk	

Other Proceedings can be ordered using the forms available at the conference.

General Information

1.6 Meeting Room

The meeting room for Monday and Tuesday is the "INNOVA" Room Building 8G 3rd floor. The meeting room for Wednesday is the “Salón de Grados" ETSIT Building 4D**.** Directions to the rooms will be signposted.

1.7 Internet Connection

There is full free WIFI at the conference site.

1.8 Need Help?

Please see the conference desk for your questions

1.9 Social Events and Lunches

All registrants are invited:
To the **Coffee Breaks** and the **lunches** for 2 days **(Monday and Tuesday)** which will be served at Building 8G. Coffee breaks in the Contemplate Room.

Ciudad Politécnica de la Innovación
Universitat Politécnica de València
Edificio 8G
Camino de Vera s/n.
46022, Valencia

The **Coffee break** on the last day Wednesday will be served in building 4D

Universitat Politécnica de València
Edificio 4D
School of Telecommunications Engineering
Camino de Vera, s/n 46022
Valencia

General Information

To the **Conference Dinner**

The conference dinner will be held on the 2nd of June in the evening at the Taberna Alkazar, Calle Mosén Femades, 11, 46002 València, Valencia, Spain
Phone:+34 963 52 95 75

http://www.tabernaalkazar.com/en/

1.10 Best Paper Award

During the conference the papers, which were accepted as extended papers will be judged by the committee and participants in order to choose the best paper of the ISC'2015 conference. The best paper candidate receives a certificate signed by the General Conference and Program Chairs and also a free registration to any EUROSIS conference within 2 years of receipt of the prize.

1.11 Paper Legend:

Each paper is designated before each paper by its number. This number has to be entered on the form for the best paper award

The room has an LCD projector and an overhead projector

SESSION CHAIRPERSONS

ALL SESSION CHAIRPERSONS IN THIS PROGRAM ARE PROVISIONAL. Session Chairs are chosen on a voluntary basis by proposals by either authors or local committee members or are appointed by the Track Chairs, General Program Chair or General Conference Chair. They are responsible for their assigned session. They make sure their speakers are available, take care of the timing within the session, chair the discussion after each presentation and introduce each speaker based on the CV's given to them by the authors. **If a session chair is not available then the first author takes on the responsiblity to chair**

Sessions with extended papers: If you are a session chair in a session with extended papers make sure the session participants have a copy of the best paper award form and ask them to return them to you at the end of the session. After the session hand over the collected forms to Philippe Geril

General Information

THE NUMBERS NEXT TO THE PRESENTATIONS DENOTE THE PAGE-NUMBERS IN THE PROCEEDINGS. IF NO NUMBERS ARE MENTIONED THEN THIS PAPER IS NOT PUBLISHED IN THE PROCEEDINGS

THE AUTHORS WHO ARE UNDERLINED ARE NORMALLY THE PRESENTERS

ONLY PAPERS IN GREY BOXES ARE THE EXTENDED PAPERS ELIGIBLE FOR THE BEST PAPER AWARD

MONDAY, 1st JUNE 2015 BUILDING 8G	
08.00-15.30	REGISTRATION
09.00-09.15	OPENING SESSION
09.15-10.00	KEYNOTE ADDRESS BY DR. OSCAR LAZARO
10.00-10.30	COFFEE BREAK
10.30-12.00	SESSION
	MEETING ROOM INNOVA
	LARGE BODY SIMULATION
12.00-13.00	SESSION
	MEETING ROOM INNOVA
	ELECTRONICS SIMULATION
13.00-14.00	LUNCH BREAK
14.00-15.00	SESSION
	MEETING ROOM INNOVA
	VR IN MANUFACTURING
15.00-15.30	COFFEE BREAK
15.30-17.30	SESSION
	MEETING ROOM INNOVA
	KNOWLEDGE MANAGEMENT SIMULATION
FREE EVENING	

TUESDAY, 2nd JUNE 2015 BUILDING 8G	
08.30-15.30	REGISTRATION
09.00-10.30	TUTORIAL BY PROF. JOSE P. GARCIA-SABATER
10.30-11.00	COFFEE BREAK
11.00-13.00	SESSION
	MEETING ROOM INNOVA
	TRAFFIC AND TRAFFIC NAVIGATION MANAGEMENT SIMULATION I
13.00-14.00	LUNCH BREAK
14.00-15.00	SESSION
	MEETING ROOM INNOVA
	TRAFFIC AND TRAFFIC NAVIGATION MANAGEMENT SIMULATION II
15.00-15.30	COFFEE BREAK
15.30-17.30	SESSION
	MEETING ROOM INNOVA
	LOGISTICS SIMULATION
19.30–22.30	CONFERENCE DINNER.

WEDNESDAY, 3rd JUNE 2015 – BUILDING 4D	
08.30-10.00	REGISTRATION
08.30-09.00	INVITED TALK SUMO
09.00-10.30	SESSION
	MEETING ROOM SALON DE GRADOS
	MANUFACTURING OPTIMIZATION
10.30-11.00	COFFEE BREAK
11.00 12.30	SESSION
	MEETING ROOM SALON DE GRADOS
	ENGINEERING SIMULATION
12.30-12.45	CLOSING SESSION AND BEST PAPER AWARD IN MEETING ROOM SALON DE GRADOS

Monday, 1st June 2015 BUILDING 8G

HALLWAY

Registration

08.00 - 15.30

09.00 – 09.15

MEETING ROOM INNOVA **WELCOME**

Opening ISC2015 and Welcome

Welcome Address

Carlos Enrique Palau Salvador, UPV, Valencia, Spain
ISC'2015, General Conference Chair

09.15 – 10.00

KEYNOTE SPEECH
Chair: Carlos Enrique Palau Salvador, UPV, Valencia, Spain

High Performance Industrial Simulation: European Roadmap, Challenges and Success Stories.
Dr. Oscar Lazaro (INNO) - FITMAN Digital Factory Platform Leader "ICT for manufacturing in Europe"

Monday, 1st June 2015 BUILDING 8G

10.00 - 10.30
COFFEE BREAK

10.30 – 12.00

MEETING ROOM INNOVA-10.30-12.00 **BODY**
LARGE BODY SIMULATION
Chair: Vicent Pla, Polytechnic University, Valencia, Spain

METH_01
Lateral Diffusion in Finite Difference Schemes for Avalanche Simulation
Ángel Rodríguez-Cerro, Nuria Molner, Ignacio García-Fernández and Rafael J. Martínez-Durá **153**

METH_03
Water Distribution Network Optimization using Genetic Algorithms
Bartłomiej Fajdek, Marcin Stachura and Jan Studziński **159**

CHEM_04
A Numerical Analysis of Supercritical CO_2 Injection into Geological Formations
Kamal Jawher Khudaida and Diganta Bhusan Das **165**

12.00 – 13.00

MEETING ROOM INNOVA-12.00-13.00 **ELEC**
ELECTRONICS SIMULATION
Chair: Jan Studziński, Polish Academy of Science, Warsaw, Poland

ELEC_01
Analysis of vertical handoff in UMTS network using simulation approach based Opnet
Wafa Benaatou, Adnane Latif and Vicent Pla **121**

ELEC_02
Incorporating SHA-1 with OFB to realize a Novel Encryption Method
Raaed K. Ibraheem, Ali Sh. AlKhalid and Roula AJ. Kadhim **124**

Monday, 1st June 2015 BUILDING 8G

13.00 - 14.00
LUNCH BREAK

14.00 – 15.00

MEETING ROOM INNOVA-14.00-15.00 **MANUF**
VR IN MANUFACTURING
Chair: Jocelyn Bellemare, UQAM, Montréal (Québec), Canada

VR_01_MANUF
Combined Simulation and Animation of Automated Manufacturing Plants
Juergen Rossmann, Roland Wischnewski and Florian Bluemel **43**

MANUF_01
Motion Capturing for the Simulation of Manual Industrial Processes
Frank Heinze, Fabian Wolf, Kirsten Weisner, Jürgen Rossmann, Jochen Deuse and Bernd Kuhlenkötter **48**

15.00 - 15.30
COFFEE BREAK

15.30 – 17.30

MEETING ROOM INNOVA- 15.30-17.30 **MGMT**
KNOWLEGDE MANAGEMENT SIMULATION
Chair: Vicent Pla, Polytechnic University, Valencia, Spain

AGENT_01
Value Innovation: Opposite of Porter's 'Stuck in the Middle' Characteristic: An Agent Based Modelling
Morteza Mahmoudzadeh and Laleh Amir **5**

MGMT_02
Evaluating Efficiency of Collective Learning in Innovation Networks: Simulation based Experiments in SKIN
Morteza Mahmoudzadeh and Mahmood Alborzi **15**

Monday, 1st June 2015 BUILDING 8G

MGMT_04_HOS
Severe Brain Injured Patients: Model and Simulation to Improve Assistance Management
Giorgio Romanin-Jacur, Mauricio A. Trujillo Morales and Silvia Manea **21**

MGMT_01
The Other Application Area of Survey Sampling
William Conley **10**

FREE EVENING

Tuesday, 2nd June 2015 BUILDING 8G

HALLWAY

Registration

08.30 - 15.30

09.00 – 10.30

MEETING ROOM INNOVA- 09.00-10.30 **TUT**

TUTORIAL

Chair: Carlos Enrique Palau Salvador, UPV, Valencia, Spain

On Splitting information and material flows to generate more realistic Discrete Event Simulation Models

Prof. Jose P. Garcia-Sabater, Director OMP department "Simulation in Automotive Plants"

10.30 - 11.00
COFFEE BREAK

11.00 – 13.00

MEETING ROOM INNOVA- 11.00-13.00 **TRAF**

TRAFFIC AND TRAFFIC NAVIGATION MANAGEMENT SIMULATION I

Chair: Krzysztof Skrzypczyk, Silesian University of Technology, Gliwice, Poland

TRANS_02
Transportation Perspective
William Conley **85**

Tuesday, 2nd June 2015 BUILDING 8G

TRAF_02_DES
Design of Rail Passengers Safety and Comfort System as Three-Objective Discrete Static Optimization Problem
Adam Galuszka, Andrzej Swierniak, Tomasz Hejczyk, Bartlomiej Wszołek and Jakub Mlynczak **89**

TRAF_06
The Relevance of Preferences in a Voting System for Dynamic Parking Management
Jose F. García, Vicente R. Tomás, Luis A. García and Juan J. Martínez **95**

TRAF_01
Estimation of Signals Generated by AMR Sensors for the Simulation of Magnetic Models of Vehicles
Ramón V. Cirilo Gimeno, Marta Pla-Castells, Antonio García Celda and Juan José Martínez Durá **103**

13.00 - 14.00
LUNCH BREAK

14.00 – 15.00

MEETING ROOM INNOVA- 14.00-15.00 **TRAF**
TRAFFIC AND TRAFFIC NAVIGATION MANAGEMENT SIMULATION II
Chair: Adam Galuszka, Silesian University of Technology, Gliwice, Poland

TRAF_05
Influence of Percentage of Detection on Origin – Destination Matrices Calculation from Bluetooth and WIFI Mac Address Collection Devices
Javier Martínez Plumé, Ramon V. Cirilo Gimeno, Antonio García Celda and Francisco R. Soriano García **108**

TRAF_03_HOS
Objects Movement Prediction for Smart Electric Wheelchair Human Aware Navigation
Krzysztof Skrzypczyk **113**

Tuesday, 2nd June 2015 BUILDING 8G

15.00 - 15.30
COFFEE BREAK

15.30 - 17.30

MEETING ROOM INNOVA – 15.30-17.30 **LOGIS**
LOGISTICS SIMULATION
Chair: Jose P. Garcia-Sabater, UPV, Valencia, Spain

LOGIS_03
Freight Transportation in European Logistics: A Comparison of Northern and Southern Range Gateways
Francesco Russo, Corrado Rindone, Luciano Amodeo, Domenicantonio Lamari, Vincenzo Placido and Massimo Praticò **55**

LOGIS_02
Freight Transportation in Regional Logistics: Pick-up, Consolidation and Delivery Operations of a Road Carrier
Paolo D'Agostino, Cosimino Lanciano, Giuseppe Musolino, Tiziano Scattarreggia, Antonio Polimeni and Antonino **63**

LOGIS_01
Characterization of Containers' Logistic Chain
Ignacio Benítez, Irene Aguado, Francisco Blanquer, Fernando Martí-Belda, José A. Giménez and Eduardo Olmeda **68**

LOGIS_05
Using Simulation to Support the Resilience of Supply Chains
Vigínia Helena Machado, Ana Paula Barroso, Helena Carvalho and Virgílio Cruz-Machado **73**

Tuesday, 2nd June 2015

CONFERENCE DINNER – 19.30-22.30

The conference dinner will be held on the 2nd of June in the evening at the Taberna Alkazar, Calle Mosén Femades, 11, 46002 València, Valencia, Spain

Phone:+34 963 52 95 75

http://www.tabernaalkazar.com/en/

BEWARE WE MOVE BUILDINGS FOR THE WEDNESDAY JUNE THE 3rd SESSIONS
THE WEDNESDAY SESSIONS WILL BE HELD IN THE SALON DE GRADOS ETSIT BUILDING 4D

Conference Dinner - Tuesday

Wednesday, 3rd June 2015 BUILDING 4D

HALLWAY

Registration

08.30 - 10.00

08.30 – 09.00

MEETING ROOM SALON DE GRADOS - 08.30-09.00 INVITE
INVITED SPEECH
Chair: Carlos Enrique Palau Salvador, UPV, Valencia, Spain
Integration of SUMO in an anticipatory vehicle route-planning system
Speaker to be announced

09.00 - 10.30

MEETING ROOM SALON DE GRADOS - 09.00-10.30 MANUF
MANUFACTURING OPTIMIZATION
Chair: Morteza Mahmoudzadeh, Tabriz Islamic Azad University, Iran

MANUF_05
Generic Product Creation System
Iris Graessler **173**

MANUF_04
An Improved Genetic Algorithm for Optimising a Manufacturing Production Process
Zhonghua Shen, Keith J. Burnham and Leonid Smalov **29**

DES_04
Simulation in Industrial and Clothing Product Design for Personalization and Customization Approach
Jocelyn Bellemare **34**

10.30 - 11.00
COFFEE BREAK

Wednesday, 3rd June 2015 BUILDING 4D

11.00 - 12.30

MEETING ROOM SALON DE GRADOS - 11.00-12.30 ENGIN ENGINEERING SIMULATION

Chair: Vicent Pla, Polytechnic University, Valencia, Spain

ENGIN_01
Tuning an Electrohydraulic Rotary Servomechanism by Numerical Simulation and Experiment
Daniela Vasiliu, Nicolae Vasiliu, Marius Daniel Bontoş and Ion Manea..... **133**

NET_01
An Approach of Static Modelling of Sewage Networks based on The Hydraulic Formulas
Grażyna Petriczek and Jan Studziński **138**

CAR_01
Driving Simulator Development: Phase I – From State of Art to State of Work
Alexandra Tuca, Valerian Croitorescu and Thomas Brandmeier..... **144**

12.30 - 12.45

MEETING ROOM SALON DE GRADOS - 12.30-12.45 BEST PAPER

CLOSING SESSION AND BEST PAPER AWARD

Chairs: Carlos Enrique Palau Salvador, UPV, Valencia, Spain and Philippe Geril, EUROSIS-ETI, Ostend, Belgium

ISC'2016

SEE YOU ALL
JUNE 6-8, 2016 FOR ISC'2016
POLITECHNICA University of Bucharest, Bucharest, Romania

Track proposals and tutorial proposals can be sent in by September 30th, 2015 to philippe.geril@eurosis.org

If you are interested in hosting an ISC conference, just contact EUROSIS.

Conference Site Map

The conference takes place in buildings 8G(Mo-Tu) and 4D (Wo) on the map.

Conference Site Map

NOTES

Conference Notes

ISC'2015 Registration Form

Please legibly print or type and fill out completely. (Check appropriate boxes where necessary)

FIRST NAME	LAST NAME	M.I.
COMPANY OR AFFILIATION		
Mailing address (tick one): [ ] HOME [ ] BUSINESS		
STREET		
CITY		
ZIPCODE	COUNTRY	
TELEPHONE	FAX	
E-MAIL		
DATE	SIGNATURE	

1. [ ] EUROSIS member € 560 **Member Number**:_____	€_____
2. [ ] Members of Sponsor or Affiliate Society € 560	€_____
3. [ ] Non-Member Participant € 605	€_____
4. [ ] Students, **who are not authors** but who wish to attend the conference, or **ONE DAY PARTICIPANTS** pay: € 445	€_____
(Above registration fees include, one copy of the PROCEEDINGS, all midday meals, cocktail, refreshments, coffees and social program,) One Day Participants and Non-Author Students cannot participate in the conference dinner.	
5. [ ] Conference Dinner Ticket for Companion € 55 **[] Lunch Ticket** for Companion € 25/day	€_____
6. [ ] Extra Conference Proceedings € 50 **Cash and Carry**	€_____
VAT Number if applicable: _____	
TOTAL AMOUNT DUE	€_____
	€_____
ADD BANK CHARGE of € 15 in case you pay by BANK or CHEQUE.	€_____
TOTAL AMOUNT REMITTED	€_____

[ ] 1) Make payment by **BANK TRANSFER** to account **IBAN CODE: BE03 0014 0814 7784** EUROPEAN TECHNOLOGY INSTITUTE, ETI Bvba, BNP PARIBAS FORTIS BANK, Torhoutsesteenweg 356, B-8400 Ostend, Belgium**, SWIFT CODE: GEBABEBB MENTION YOUR NAME and ISC'2015**

[ ] 2) Or pay by **CHEQUE** and send it to Philippe Geril, EUROSIS-ETI, European Simulation Office, Greenbridge Science Park, Ghent University – Ostend Campus, Wetenschapspark 1, Plassendale 1, B-8400 Ostend, Belgium.

[ ] 3) Or pay by **CREDIT CARD** and fill in the information below:

Charge my (tick one): [ ]Visa [ ] Euro/Mastercard [ ] American Express

CARD NO: __ __ __ __ : __ __ __ __ : __ __ __ __ : __ __ __ __ EXP.DATE: __ __ / __ __

Authorizing Signature:

Print Signature in CAPITALS

EUROSIS was borne out of discussions with the European Community to set up a new kind of Society, which would be project driven instead of driven by pure membership and conferences.

The aim of EUROSIS is to set up topic related Technical Committees which will link directly to European Projects in the field of computer simulation and related areas and to act as a knowledge pool for future European Networks of Excellence, like MOSAIC.

If you would like to receive more information about EUROSIS, please contact

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.....
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Telephone.....
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Email: .....