Harbour Simulation (Bulk Terminals, Container Terminals, Harbour Services, Industrial Facilities, Navigation Lines, Multimodal Transports, Oil Terminals, Passenger Terminals Bailways Bo-Bo Terminals Ships and Platforms Supply Chains and Warehouses, Harbour Management, Safety in Maritime Environments, Vessel Traffic

#### **Complex Systems Modelling**

- Design and Simulation, - Process Control and Optimisation, - Information Technology Systems. - Space and Airborne Systems - Communication Networks. -Cybernetics and Control, - Building Engineering and Urban Infrastructures - Nonlinear Systems) Integration of AI Techniques and Simulation, Knowledge Elicitation and Representation for Complex Models. Drawing Understanding and Pattern Recognition. Machine Learning, Neural Networks and Genetic Algorithms, Simulation in Bobotics and Automation Continuous Simulation of Technical Processes Fuzzy Models in Simulation Wireless Communication Mobile Communication Networks Satellite Communication, LAN and WAN Protocols, Simulation of Switching Equipment, Design and Coding of Communication Handling Software

#### Simulation in Aerospace

Low Costs Simulation Environments, Rapid Simulation Prototyping, Simulation Based Design, Simulation of Satellite Navigation, systems (space segment and terrestrial applications) simulation of satellite constellations, real-time hardware-in-the-loop nabin-the-loop simulation, flight simulation, distributed interactive simulation and HLA standards. Graphical simulation (virtual environments and virtual reality) applied to aerospace. Modelling and Simulation standards, rationalisation efforts, repositories and reuse. Simulation in support of system specification and design, simulation in support of system assembly, integration and testing. Simulation in support of flight software

Simulation in Industrial and Product Design Simulation of product design; Planning and control; Reconfigurable responsive computing and process re-engineering; Integrated product and process modeling; Modelling and simulation in virtual global enterprises; Simulation based design; Qualitative and fuzzy modelling and simulation in engineering design; Modal logistics in systems design; Simulation in support of system specification and design.

The Modeling in Engineering Processes track focuses on the application of simulation in mechanical and structural engineering. Oscilations and Waves, Stability and Control, Computational Mechanics, Numerical Analysis, Mathematical Methods in Engineering Sciences, Optimization Advanced simulation of dynamic systems, Simulation-based design, Qualitative modelling and simulation in engineering, Fuzzy modelling and simulation. Evolutionary synthesis and evolutionary methods in design. Rapid prototyping, CASE systems in engineering design, Modal Logic systems in design, Simulation in support of system specification and design, Construction Engineering and Project Management

# Simulation in Energy and Power Systems Track Chair: Janos Janosy-Sebestyen, KFKI, Hungary

Simulators: Real-Time simulation methods, GUI, Advanced modelling tools. Trainees' performance evaluation. Simulator Projects Simulation

Studies: Simulation during design, Safety and environmental hazard estimation, Production optimisation. Methodology: Real-time simulation and visualisation tools, Parallel and distributed simulation

Simulation in Multibody Systems General: FE-Methods and Modelling of Flexible Bodies, Non-holonomic Systems and Geometrical Concepts in Multibody Dynamics, Numerical Aspects of Multibody Dvnamics , Optimization and Control of Mechanisms , Articulated and Telescopic Multibody Systems , Air, Land and Sea Multibody Systems Applications

Special Sessions on: Multibody Systems in Space: Flexible Body Systems, Orbital Injection, Satellite Injection, Rendezvous and Docking of Spacecraft, Simulation of Space Station Construction and Assembly

## Simulation in Chemical and Petroleum Engineering – Simulation in the Mining

Simulation of Chemical Plants, Flow simulation, Plant control systems, network simulation, geological simulations, drilling simulations, oil transport simulations.

#### Simulation in Military and Defense

Military simulation - fidelity, exercise management, tools and modelling techniques. applications: Local, global, real and non-real time simulations, applications and results: Web-enabled simulation, local and remote invocation, GUI- advanced modelling tools. education: Simulators - hardware/persons-in-the-loop HI A compliance: Animated visualisation of simulation; Component-oriented simulation. Maasively Parallel Computing Techniques, Distributed Simulation, Synthetic Environments, Embedded Simulation, Networked Simulation and Interoperability, Campaign Analysis, Unmanned Aerial Vehicles, Logistics, Agents Modeling, Weapon and Communication Systems, Footmen, Dogs and Robots, C4I and Military Applications

#### Verification Validation and Accreditation

The term validation is applied to those processes, which seek to determine whether or not a simulation is correct with respect to the "real" system. More prosaically, validation is concerned with the auestion "Are we building the right system?". Verification, on the other hand, seeks to answer the question "Are we building the system right?" This track is interested in simulation validation methodologies: methodologies to

#### CONFERENCE PRICES

Authors and EUROSIS members: 485 EURO, All other: 535 EURO (prices include Proceedings, lunches, conference dinner, get-together party and coffee breaks, a visit to the Picasso Museum and to the Malaga Science Park, and a one year membership to EUROSIS

support the process of constructing a simulation model and then aiding the validation of this model to the "real" system. These system models can be discrete, continuous or hybrid. Application areas range from information systems to engineering and scientific systems. Relevant parameters include performance, properties given by formal or informal requirements, exception handling etc. In this conference track, contributions from all areas of simulation and validation are solicited. Topics include, but are not limited to those given below.

VV&A methodology (effective VV&A, VV&A planning, confidence levels, risk estimation, organisation, documentation, standards, cost estimation, technique application, result presentation, subject matter expert (SME) selection, formal model specification, fidelity, automation potential), VV&A technology (documentation, CASEtools, cross checking, requirements specification, knowledge based systems. configuration management, tool overview, simulation environments)

#### The Future of Industrial Simulation Roundtable

Simulation Standards, Future of Simulation Software, What's Virtually Possible. Real-Time Control, Equipment Interface, Supply Chain Opportunities, Customer Focus, Making Simulation relevant.

#### **WORKSHOPS**

# Workshop on Modelling and Simulation in the Textile Industry Track Chair: Vladan Koncar, ENSAIT, France

Textile processes simulation; modelling and simulation in clothing, dveing and finishing process simulation, production units simulation, textile logistics, spinning mill, spinning simulation, sales forecasting, weaving and knitting simulation Textile products and materials simulations: textile products simulation and textile chemistry : composite materials, dynamical behaviour of textile structures. fireproofing simulation, flame retardant products, new textiles properties evaluation by simulation, smart and communicating clothes, chemical processes simulation in

#### Workshop on Intelligent Transport Systems

A broad range of diverse technologies, known collectively as intelligent transportation systems (ITS), holds the answer to many of our transportation problems. ITS is comprised of a number of technologies, including information processing, communications, control, and electronics. Joining these technologies to our transportation system will save lives, time and money. ITS enables people and goods to move more safely and efficiently through a state-of-the-art, intermodal transportation system. Simulating this aspect of transportation is one of the major challenges of our time.

#### NANOSIM Workshor

Simulation in long-term interdisciplinary research, simulation of supramolecular, And macromolecular architectures, simulation in nanobiotechnologies, simulation of nanometric scale engineering techniques for creating materials and components. simulation of manipulator devices, simulation in nano applications. Related to chemicals and energy. Simulation of knowledge based multifunctional Materials. Simulation of nano production processes and methods.

#### **CONFERENCE LOCATION**



Birthplace of Picasso, the attractive, cosmopolitan city of Malaga lies on a beautiful sweep of bay in Andalusia. Capital city of the Costa del Sol and second largest port in Spain, Malaga is a city of some 550,000 plus inhabitants As you would expect from the region it has



visit to the new museum Picasso.

the foot of the majestic hill of Gibralfaro, atop which rise a Moorish castle and the Alcazaba fortress, the museum sits beside a Roman theater and a Renaissance-style

where he was baptized, are only a five-minute walk away.

A second visit is envisaged to the Malaga Science Park, where the participants will be able to visit several companies working closely together with the University of Malaga.

#### CONFERENCE SITE

The ISC'2004 conference is held at the University of Malaga. (www.uma.es) FTS de Ingenieria Informatica, http://www.informatica.uma.es/ Dpto. de Electronica http://www.el.uma.es Campus de Teatinos s/n. 29071 Malaga Spain Tel : (+34) 952 13 13 90 - Fax : (+34) 952 13 33 24 The General Conference Chair for the ISC'2004 is Javier Marin, University of Malaga, Department of Electronics, Malaga, Spain.



Sponsored by:

# **FOODSIM 2004**

June 16-18, 2004

## Ede The Netherlands



The FOODSIM 2004 Conference is the **3rd International Conference on Simulation** in the Food Industry: Model development and industrial implementation

### SCOPE

During the last decades several research groups developed mathematical models with increasing relevance for practical application in the food industry. The next step is to implement these models into both R&D and process operation in the industry. In doing this, new issues arise such as standardisation and coupling of different simulation models.

The conference, established in 2000 by ENITIAA will bring together model developers, food experts and (potential) industrial users of model simulation tools. The conference will present the state-of-theart in using computer models in development and operation of food products. Special attention is given to the industrial implementation, use and benefits.

#### **CONFERENCE TOPICS**

- The development and use of model simulation in risk analyses. food safety, fermentation, texture and flavour of food products. How simulation models can help to manufacture a consumerfriendly food product on specs with a shorter time-to-market.; The state-of-the-art in modelling of complex food properties
- The use of models in process and plant control. Process control based on a set of product specs by application of neural networks, fuzzy logic, cost models and mechanistic models: Traceability and logistics management
- Knowledge management. Data bases for model development; Models for training
- Software development. User friendly interfacing; Web-enabled applications; Standardization and maintenance; Available (commercial) modelling tools
- Workshop: Experience with model simulation tools for the industry. Simulation models applied in industry (e.g. Aspen, gProms, Premia, CFD-software); Key parameters for successful implementation of simulation models

#### INVITED SPEAKERS

- The following speakers have been invited to give (keynote) lectures:
- Dr. Julio Banga (CSIC, Spain)
- Dr. Kristel Bernaerts (Catholic University Leuven, Belgium) Prof. dr. Solke Bruin (former Unilever, Eindhoven University of
- Technology, the Netherlands) Prof. dr. Felix Janszen (Erasmus University Rotterdam, the
- Netherlands
- Dr. Tom Malik (ICI, United Kingdom)
- Dr. Leon Rothkrantz. (TU Delft, the Netherlands) • Ir. Rudy de Wit (Friesland Coberco Dairy Foods, the Netherlands)
- Dr. Anton Sweere (Campina, the Netherlands)
- Prof. dr. Marcel Zwietering (Wageningen University, the
- Netherlands)

### **CONFERENCE PRICES**

Authors and EUROSIS members: 475 EURO. All other: 525 EURO (prices include Proceedings, Junches, conference dinner, get-together party, coffee breaks and company visits and a one year membership to EUROSIS)

**JAN 30** FEB 15 The full programme can be viewed at

http://biomath.ugent.be/~eurosis/conf/foodsim/foodsim2004/index.html

#### WORKSHOPS

Special workshops will be organized regarding modelling tools (e.g. NIZO Premia, Premic, CDadapco, Aspen, Chermo) and their experience by industrial users.

#### **EXHIBITIONS**

Suppliers of hardware and software companies are invited to exhibit their products relevant to the subject of the conference.

#### CONFERENCE LOCATION

Ede is located in the Food Valley: knowledge, innovation and industry centre for the agri-food sector in Europe.

### ACCOMMODATION

A number of rooms have been set aside at several hotels in Ede in the vicinity of the Conference Centre. The listing of hotels will be posted on the official FOODSIM'2004 websites.

### THE SPONSOR

About NIZO food research (www.nizo.com) Consumers demand food products that are convenient, healthy, safe, give pleasure and support their well being. To meet these demands food manufacturers need to innovate rapidly without any concession to the quality and reliability of their products. NIZO food research assists companies to achieve this. We solve technological issues for innovations in the areas of flavour, texture. health, food safety and processing. Based on 55 years of industry experience and a profound understanding of microbiology, food physics and process technology, we help companies building sustainable competitive advantage.

We work on a confidential basis for our clients in the dairy, ingredients, food & beverage and pharmaceutical industries. NIZO food research owns the largest in Europe, food-grade pilot plant for scaling up from laboratory set-up to production level. The pilot plant is available for clients to test and optimise potential new production processes before committing to investment in new equipment.

NIZO food research is recognized as one of the pioneers in developing models for industrial applications and has a large track record in the food industry. The last 15 years the industry benefits from reduced production costs and decreased time-to-market of new food products by using model-based simulation tools.

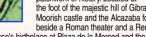


The Museo Picasso Málaga lies in the old quarter of the city. where the urban landscape is a patchwork of history. Located at

striking architecture, Malaga has many places of historic interest One of the social events is the

cathedral. Picasso's birthplace at Plaza de la Merced and the Iglesia de Santiago,





far more to offer than just sea and sunshine. With its wide leafy boulevards and often

MAY 5

First Name:         Surname:         Occupation and/or Title:         Affiliation:         Mailing Address	Presenting a paper, by submitting a full paper     Presenting a short paper (by submitting an extended abstract)     Participating in the industrial program     Organizing a vendor session     Proposing a panel discussion (please mention names of panelists)     Contributing to the exhibition     Without presenting a paper Other colleague(s) interested in the topics of the conference is/are: Name: Address:
Fax:E-Mail:	Address:
Yes, I intend to attend the FUBUTEC'2004 Euromed The provisional title of my paper / exhibited software package is: The paper belongs in:	With the following highlights:
FUBUTEC'2004         Statistical Analysis and Data Mining         Discrete Event Simulation and Queueing Systems         Agents in Business Automation and Economics         Simulation in Business and Economics         Simulation in Business Games         Simulation in OR and Knowledge Management         Emergency management & Risk Analysis         Management         Simulation in E-Management, Government etc         EUROMEDIA'2004         WEBTEC         Internet Viewers and Programs         Visual Programs         Visual Programs         Video and Audio Streaming on the Web         Al on the Web         Software for Web-based Business Applications         Multimedia Techniques and Telecom         Multimedia Building Blocks         AUDIOTEC         Telecommunications Technologies         Networks         Networks         Network Security         Mobile Communications         TV Technology         QoS         APTEC         Telematics Consumer Application         Tele-Education         Integrated Enterprise Software and Groupware         ECEC'2004         Coparization and Management	FOODSIM'2004
<ul> <li>Organization and Management</li> <li>Supporting Technologies</li> <li>Formal Methods and techniques</li> <li>Engineering of Embedded Systems</li> </ul>	Please send or fax Philippe Geril this Card to EUROSIS- European Technology Institute Ghent University

# EUROSIS CONFERENCE PROGRAMME

**JANUARY-JUNE 2004** 

# THIS LEAFLET CAN ALSO BE DOWNLOADED FROM WWW.EUROSIS.ORG

JANUARY TIMELINE FEBRUARY DEADLINES LEGEND: ABSTRACT SUBMISSION DATE NOTIFICATION PAPER SUBMISSION CONFERENCE

Dear Colleague.

Best wishes for 2004 and welcome to the EUROSIS January/June newsletter. As you can see this newsletter features a new event called FUBUTEC. The aim of this event is to become the third major simulation event in Europe next to ISC (the Industrial Simulation Conference) and the ESM (European Simulation and Modelling Conference). While the ISC deals with industrial simulation and ESM deals with methodology in computer science, FUBUTEC has at its aim to cover all aspects of simulation related to business and management applications. We are very happy that INSEAD has cordially provided the facilities for this first event. People often ask me, what does the early bird submission mean? Well, it means that when you submit on this date, that the programme committee can already start reviewing and thus avoids the burden of a great number of submissions to review on the submission date. With regard to the EUROSIS website, a dedicated webpage will be online at the beginning of next year, where you will be able to download all the forms needed for your paper submission. Other sections will also be upgraded, such as a publications and software overview section. The other aim is also to completely integrate credit card payments into the website environment, so you will be able to pay your fees direct without going through me first.

The aims for 2004 are to build out the structure for EUROSIS. (All of you, who became members in 2003 will be invited to take up positions in the society) and to further integrate the society with EU activities. So these will be challenging times!

# EUROSIS FUTURE CONFERENCE CALENDAR

July- December 2004	January - June 2005	July- December 2005	
September: MESM'2004, TBA	March FUBUTEC 2005, Fontainebleau, France	September: MESM'2005, TBA	
October 25-27 ESM'2004, Nafplios, Greece	April Euromedia-ECEC'2005, Toulouse, France	October ESM'2005, Porto, Portugal	
November Game-On 2004, London, UK or Paris, France	June ISC'2005, Berlin, Germany	November Game-On 2005, Wolverhampton, UK	
	June: Euro-SISO 2005, TBA	FOODSIM2006, June 2006 South-Korea	
		October ESM'2006, Toulouse, France	

Would you like to get involved in one of our conferences, or would you like to host one of our events, or get involved in the European Simulation Society, send me an email. Philippe.Geril@ugent.be

THIS CONFERENCE BOOKLET IS SENT OUT TWICE A YEAR AND AS WE WANT TO DO OUR BIT FOR NATURE BY CUTTING DOWN ON PRINTED MATERIALS. WE WOULD THEREFORE APPRECIATE YOUR HELP TO BE KIND AND INFORM US IF YOU HAVE CHANGED ADDRESSES, YOUR EMAIL ADDRESS OR IF YOU WANT TO BE DELETED FROM OUR DATABASE, THIS CAN BE DONE BY USING THE FORM AT THE BACK OF THIS PROGRAMME. ALL UPDATES ABOUT THE EVENTS ARE EMAILED ONLY

# THE EUROPEAN SIMULATION SOCIETY



Best Regards Philippe Geril



The full programme can be viewed on http://biomath.ugent.be/~eurosis/conf/fubutec/fubutec2004/index.html

## **CONFERENCE AIM**

### As simulation and integrated knowledge management are regarded as the driving forces behind some of the world's largest and most successful organisations the 1<sup>st</sup> Annual FUture BUsiness TEchnology **Conference** aims to push business technology research onto the next evolutionary step beyond the building blocks of present day business practices such as "Operations Research" or 'Business Process Simulation" This conference is meant to integrate them all into an even higher level enterprise wide framework with its new work roles, responsibilities, reward systems methods and tools. In other words, attaining true knowledge management is about radical and fundamentally new ways to create retain share and leverage knowledge of people and organisations in ways that were simply not possible before. Next to the integral simulation part, the conference will try to provide a strategic business overview of knowledge management in all its varied applications. In this aspect the conference focus is on the latest knowledge strategies that business leaders need in order to become a Knowledge Organisation and to withstand the forces of the financial and management markets in the present day precarious environment, which is the global society.

## **CONFERENCE TOPICS**

The conference covers the following topics: Statistical Analysis and Data Mining of Business Processes, Discrete Event Simulation and Queueing Systems in Business and Economics, Agents in Business Automation and Economics, Simulation in Business and Economics. Simulation in Business Games. Simulation in OR and Knowledge Management, Emergency Management and Risk Analysis Management and Simulation in E-Management, E-Government, E-Commerce and E-Trade

## **CONFERENCE PRICES**

Authors and EUROSIS Members: 475 EURO, All other: 535 EURO (prices include Proceedings, lunches, conference dinner, get-together party and coffee breaks). The registration also includes a one-year membership to EUROSIS

## **CONFERENCE SITE**



Louis VII on the grounds of a monastery and used from Francois the first onwards as the hunting retreat of the French monarchy, just south of Paris. It is easily reachable from Paris by direct train link from Gare the Lvon in Paris

The conference will be

Fontainebleau, probably

Europe. Next to INSEAD,

Fontainebleau is famous

for it's Castle, built by

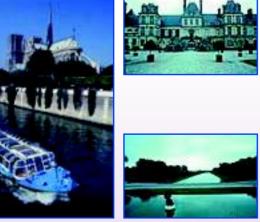
held at INSEAD.

(www.insead.edu).

the most prominent

Business School in

The direct train link between Paris and Fontainebleau takes about 45 mins.





# Euromedia 2004 April 19-21, 2004



## Hasselt - Belgium

Ear	D E A D L I N E S Early Bird Submission Decembe				
JAN 2	5	FEB 10		MAR 25	

The full programme can be viewed at http://biomath.ugent.be/conf/euromedia/euromedia2004/index.html

## **CONFERENCE SITE**



as well as a commercial one. The central "Grote Markt" may not be that big, but the friendly atmosphere around the cosy terraces and the numerous sidewalk cafés on the square certainly make up for the lack of "grandeur" that typifies the Belgian Market Square in cities such as Brussels and Antwerp. A famous flavored Gin, spiced with juniper berries and called "Jenever", is made in Hasselt; there are several factories, and a museum dedicated to its history. Easily reachable by direct train from Brussels and Liege The closest airports are Maastricht, Brussels International, Brussels South (Charleroi) and Cologne Airport.

A company visit will be envisaged



Huize Corsewarenh Maastrichterstraat 63 B-3500 Hasse http://www.gomlimburg.be/huis de corswarem.htm

Authors and EUROSIS members: 475 EURO, All other: 525 EURO (prices include Proceedings, lunches, conference dinner, get-together party, coffee breaks, company visit) and a one year membership to EUROSIS. All prices are exclusive VAT.









## **CONFERENCE TOPICS**

The 10th Annual EUROMEDIA conference brings together four individual conferences (WEBTEC, MEDIATEC, AUDIOTEC and COMTEC) culminating in an applications conference (APTEC).

WEBTEC covers: Internet Viewers and Programs, Visual Programming Languages, VRML and 3D Web Programs, Video and Audio Streaming on the Web, Al on the Web, Software for Web-based Business Applications and E-Commerce.

MEDIATEC covers: Multimedia Techniques and Telecommunications. Multimedia Authoring Tools and Software and Multimedia Building Blocks.

AUDIOTEC covers present research focused on music related contents available digitally, locally or remotely through networks.

**COMTEC** covers: Telecommunications Technologies, Networks Network Security. Mobile Communications. TV Technology, QoS.

APTEC covers: Telematics Consumer Applications, Cooperative Telematics Applications, Tele-Education, Integrated Enterprise Software, Groupware, Telemedicine and Domotics.

Furthermore, this year EUROMEDIA will feature also next to the "Partners for Projects Session" a special track on Knowledge Management and e-Mobility covering Knowledge warehouse, Knowledge acquisition and data-mining, E-blended learning and MPEG21 standards in e-mobility

## ACCOMMODATION

A number of rooms have been set, aside at several hotels in Hasselt in the vicinity of Huize Corsewaren. The listing of hotels will be posted on the official EUROMEDIA 2004 and ECEC'2004 websites.

## CONFERENCE PRICES





Sponsored by

**CONFERENCE TOPICS** 



The EUROMEDIA 2004 conference, co-located with the ECEC'2004 conference is co-located at HUIZE CORSEWAREN. Hasselt. Belgium Hasselt is the capital of the Belgian province of Limburg. It has a population of 68,000. and is located 70 kilometers east of Brussels. in the Maas-Rhine region. Hasselt has a verv contemporary demeanor. It is an administrative center







DADWURR CERYSLER

The 11h annual European Concurrent Engineering

• E-Business in CE (e.g. Organizational influences of

inter-organizational CE. Migration to e-business based

CE, E-business applications for CE, B2B portals for

CE, Emerging standards (e.g. XML), e-procurement,

CE, Multi-disciplined team-working and project team

international collaboration. Life-cvcle cost and quality.

Business process re-engineering and outsourcing,

• Organization and Management, (e.g. Principles of

organization. Global product development and

Supply chain management, Measurement of

• Supporting Technologies (e.g. Digital Mock-Up,

Virtual prototyping, Rapid prototyping, Synthetic

environments and simulation on the factory floor.

precision manufacturing. Intelligent manufacturing.

· Formal Methods and Techniques (e.g. Quality

optimization techniques and hybrid approaches)

• Process Management (e.g. Process planning in

continuous, discrete and hybrid processes, Process

modeling, monitoring and control, Diagnostics and

control, Production planning, scheduling and control)

**Modelling** (e.g. Integration of geometrical data and

product definition, Product data interchange (PDI) and

maintenance, Automated inspection and guality

Engineering Data Management and Information

transformation, Data version control and release

standards, Data handling, distribution and

• Engineering of Embedded Systems (e.g. HW/SW

Reverse engineering, Assembly and disassembly, High

function deployment. Total quality management. Global

co-design, system development process, specification

profitability by the introduction of CE)

Sensor and robot assisted machining)

Conference covers the following topics:

e-supply, e-engineering)

e-business, B2B business models for



Hasselt - Belgium





The full programme can be viewed on http://biomath.ugent.be/~eurosis/conf/ecec/ecec2004/index.html

> management, Corporate technical memory and Design rationale and intent)

- Engineering Process Management (e.g. Engineering process modeling, CE metrics, CE process planning, scheduling and simulation. Workflow-management in CE and Project and team coordination)
- Collaborative CE Environments for Virtual Teams (e.g. Cooperative problem solving, CSCW methods and tools, Information and application sharing, Computer-based video and audio conferencing, Conflict resolution techniques. Constraint management, Negotiation, blackboard and agent-based architecture, CORBA based environments and integrated frameworks. Architectures for building CE systems, CE languages and tools, Distributed computing environments, WWW based CE systems, mobile CE systems. Networking and distribution in CE)
- · Practical Applications and Experiences (e.g. Practical solutions, Systematic guide-lines, Pitfalls and success stories. Case studies, pilot projects and experiments)

## CONFERENCE SITE

As with the EUROMEDIA 2004 conference the ECEC 2004 conference is co-located at Huize Corsewaren in Hasselt. The city of Hasselt boasts several interesting museums. Two museums of interest are the Stedelijk Museum, an archive of fashion from 1830 onwards, and the Stedelijk Beiaardmuseum, dedicated to carillons. An very charming tourist attraction is the beautiful Japanese Garden on the outskirts of the city. Not far from Hasselt lies also the magnificent Open Air Museum of Bokrijk, dedicated to Flemish rural architecture of the past and the Flemish country life.

## A company visit will be envisaged



## ACCOMMODATION

languages)

Authors and EUROSIS Members: 475 EURO, All other: 535 EURO (prices include Proceedings, lunches, conference dinner, get-together party, coffee breaks, company visit and a one year membership to EUROSIS.) All prices are exclusive VAT

A number of rooms have been set aside at several hotels in Hasselt in the vicinity of the Huize Corsewaren...

The listing of hotels will be posted on the official ECEC 2004 and EUROMEDIA'2004 websites.



#### CONFERENCE TOPICS The ISC'2004 annual Industrial Simulation Conference covers

The Industrial Simulation Conference 2004 (ISC-2004) is the annual international Simulation conference, which aims to give a complete overview of industrial simulation related research and to provide an annual status report on present day industrial simulation research. With the integration of artificial intelligence, agents and other modelling techniques, simulation has become an effective and appropriate decision support tool, as well. The exchange of techniques and ideas among universities and industry, which support the integration of simulation in the everyday workplace, is the basic premise at the heart of ISC-2004. ISC/2004 consists of four major parts. A part concerns itself with simulation methodology, another with simulation applications, then there are the workshops, the exhibition and last but not least the poster sessions for

The methodologies section covers: Modelling and Analysis Methodologies. Languages and Tools, Artificial Intelligence, Knowledge Based Simulation, Virtual Reality, Synthetic Environments, Petri Nets and Performance Analysis related to industrial applications

Modelling Methodology Web Based Simulation, Optimization and Response Surfaces, Parallel and Distributed Systems, Virtual Worlds, Methods for Special Applications, Practice, Extensions, XML, Open Source, Model Development, Network Modeling, Distributed Simulation and Industry, Modeling Very Large Scale Systems, Aerospace Operations, Revising Simulations Components, Agent Based Simulation

Advanced Input Modeling, Simulation Optimization, Cross Entropy, Output Analysis, Input Modeling, Simulation Optimization, Input Analysis, Difficult Queueing Problems, New Output Analysis

Discrete Simulation Languages and Tools Discrete simulation languages; Object oriented modeling languages; UML and simulation; Model libraries and modularity; Component-oriented simulation; Special simulation tools and environments; Meta-models and automatic model generation; Graphical simulation environments and simulation software tools; Intelligent simulation environments; Database management of models and results; Java and Web enabled simulations. UML and OO Simulation.

The application section covers: Automation, CAD/CAM/CAE, Defense Electronics, Design Automation, Simulation in industrial Design, Industrial Engineering, Industrial and Process Simulation, Manufacturing, Simulations, Logistics and Transport, Power Plants, Multibody Systems, Aerospace, etc.,

#### Simulation in Manufacturing

The goal of this track is to exchange ideas, experiences, and research results between practitioners and researchers. It shall offer the opportunity not only for presenting work done but also for discussing new challenges emerging in this area. It focuses on innovative applications of simulation in the field of production and operation management. State-of-the-art applications covering any part of the value adding chain and any aggregation level are encouraged. This track will show the efficient utilization of simulation techniques and hybrid approaches for the optimization of manufacturing processes

This session covers: Computer Assisted Learning and Simulation Trainers, Customizing of ERP Systems using Simulation, Distributed Simulation Approaches, Hierarchical Simulation, Integrating Process Mapping and Simulation, Manufacturing Consulting, Manufacturing Controls, Model Integration Standards Optimization and Evaluation, Simulation Frameworks, Simulation of (Manufacturing) Processes in Virtual Enterprises, Virtual Factories, and Virtual Manufacturing Simulation Support Tools, Web-Based Workflow Modeling and Simulation , MRP systems; CAD; CAM; CIM; Process design; Process control; Embedded intelligent control systems; Scheduling; Automotive simulation; Robotics and automation. Manufacturing Applications Transportation and Material Handling, Best Modeling Methods, Integrating Simulation and Design, Manufacturing Modeling Architectures, Manufacturing Modeling Methods, Simulation of Manufacturing Operations

#### Simulation in Automotive Systems

Automotive simulation of Card Design, car behaviour, vehicle driver interaction, collision tests, vision enhancement and collision warning systems, vehicle dynamics and simulation, off-road vehicle design and modeling, drive train simulation

# Simulation in Robotics **Robots in Assembly System** Wiring Technology

Analogue/Digital VLSI) Cleanroom Manufacturin Rapid Prototyping) Surface Engineer

#### Simulation in Logistics, Traffic, Transport and Harbour Simulation

Factory and Logistics Planning Strategies and Concepts for Production and Logistics, Technical and Organizations Planning of Production and Logistics Systems, Value Stream Mapping, Integrated Factory and Logistics Planning, Innovative Planning Methods, tools and systems

Logistics: logistics supply chains, inbound logistics, materials management, Manufacturing Supply Chain Management, physical distribution, production planning and control, outbound and inbound logistics, Simulation of regional logistic systems, distribution centres, inventory management, warehousing decisions, materials management, handling and packaging, logistics information systems, information management in logistics systems, logistics network design and facility location, cost

Traffic: traffic flows, multi-modal systems, transit, transportation modes, urban city transport, transportation in logistics, transportation management, traffic demand, traffic control. traffic telematics. traffic performance, safety, macroscopic, mesoscopic and microscopic simulations:

CONFERENCE PRICES



UN 16-1

# The full programme can be viewed at

MAY 5

http://biomath.ugent.be/~eurosis/conf/foodsim/foodsim2004/index.html

Application of Industrial Robots, Service Robots, Control Technology, Development of Mechatronic Products. Innovation Management, Sensor Simulation, Simulation of Natural Environments Simulation of Agent-Environment Interaction /Intelligent Agents, Neural Networks and Simulation . Simulation of Collective Behaviour and Emergent Phenomena, Simulation of Learning and Adaptation Processes, Assessment Criteria and Assessment Methods for Simulators Quantitative and Qualitative Comparisons between Originals and their Simulations. Simulation of User-System Interaction

Assembly Systems and Components, Processes Product Development and Design.

**Bobots in Technical Production Plannin** 

APR

Technical Production Planning, Device and Equipment Technology. Production processes and Sequences, Information Technology

#### Simulation in Electronics, Computers and Telecom

Modeling and simulation of analogue circuits; Modeling and simulation of digital circuits at switch and/or at logic level: Hardware accelerators for circuit-level simulation; Hardware accelerators for logic simulation; Distributed simulation of circuits, components, and systems: Modeling and simulation of computer systems: Fault simulation: Parallel and distributed systems: High-speed networks: Network simulation software: Computer and telecommunication systems: Telecommunication devices and systems; Intelligent telecommunication networks; ISDN: ATM communications.

#### Simulation in Electronics Manufacturing

#### iconductor Manufacturin

(Wafer Fabrication, Material Handling, Scheduling and Dispatching, Modeling Methodology, Computer Aided Test and test Pattern Generation, High Level Synthesis and Technology Mapping, Semi Custom and Reconfigurable VLSI Analysis, Design for Testability, Simulation Algorithms, High Level Descipition and Verification Languages, ASIC Design Techniques and Applications, VHDL and Design Design Methodologies, Fault Design and Testability Analysis, Microelectronics and CIM, Mixed

(Cleanroom suitability test, microsystem technology, cleaning technology, manufacturing technology for clean environments information systems)

Manufacturing Technologies Information Technology

(Information Processing, Metrology and Testing Technology. Production Methods.

(Development, optimisation and modelling of coating processes, integrated process development and management, production-orientated equipment, development, integration of coating processes into production, guality concepts for complex coating processes, surface characterization

Simulation Based Scheduling, (Supply Chain Planning Semiconductor Manufacturing, Maintenance and Repair, Scheduling and Control and Schedule Evaluation)