

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

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 Robotics 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 nab-in-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 validation

Simulation in Industrial and Product Design

Simulation of product design; Planning and control; Reconfigurable responsive computing and process re-engineering; Integrated product and process modelling; 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.

Simulation in Engineering Processes

The Modeling in Engineering Processes track focuses on the application of simulation in mechanical and structural engineering. Oscillations 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

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 Dynamics , Optimization and Control of Mechanisms , Articulated and Telescopic Multibody Systems , Air, Land and Sea Multibody Systems Applications

pecial 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 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, HLA 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 question "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 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 the 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, CASE-tools, 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
SPECIAL FEATURE; EU Networks of Excellence Meetings

WORKSHOPS



Workshop on Modelling and Simulation in the Textile Industry
Textile processes simulation: modelling and simulation in clothing, dyeing 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 textiles.

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, ncluding 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.

Workshop on Agents for Autonomous Simulation
More information will be posted on the web.
Workshop MATN ((Multimedia: Applications, Technologies and Networks).

Topics: - Multimedia and applications: a.. E-learning b.. Collaborative work c.. Telemedicine - Multimedia and technologies: a.. QoS (RSVP, Diffserv, SBM, etc.) b.. Protocols (RTP/RTCP, RTSP, SDP, SIP, IPv6, etc.) c.. Programming languages (Java, SML, Windows API, etc.) - Multimedia and networks: a.. Multimedia in wireless networks (UMTS, GPRS, 802.11, etc.) b.. Multimedia in Content Delivery Networks (Web caching, simulations, etc.) c.. Multimedia in corporative networks (cases of study)

CONFERENCE LOCATION

Valencia is located at the mid point of the Spanish east Mediterranean coast, 350 kms east of Madrid and 350 kms south of Barcelona. It is a cosmopolitan city, its openness making it the meeting point of various civilizations over the years. Today, due to its privileged geographical situation and its extensive infrastructure, Valencia is easily accessible and well connected to the important Spanish and European capitals
The autonomous region of Valencia is comprised of three provinces: **Castellón, Valencia and Alicante**, and it occupies the central portion of Spain's eastern coastline. Wide **fine sand beaches**, year round gentle climate, **endless sunshine** and the **sparkling Mediterranean** makes, this a region exceptionally popular with tourists. Valencia is a prosperous region, a patchwork of **orchards, rice paddies** and **vineyards**. Some farmland, however, has given way to industry since the 1960's, for Valencia is a key manufacturing center for textiles, toys, and footwear. The Valencia of today owes much to the early Moors, who occupied the region. They introduced the complex irrigation systems that insure Valencia's fertility and also began the **cultivation of oranges and rice** that has remained the mainstay of the region's agriculture. Today orange groves blanket the northern province of Castellón, while pancake-flat rice fields dominate the province of Valencia close to the coast. To the west mountains loom, and it is in these higher elevations that wine is produced. It was also during Moorish times that a **silk** industry grew up, **paper** manufacturing began in the Xàtiva area, and distinctive **ceramics** began to be fashioned at Manises.



A company visit will be envisaged to

CONFERENCE SITE

The ISC'2003 conference is held at the Universidad Politecnica de Valencia (UPV), Camino de Vera SN, E-46071, Valencia, Spain. Http://www.upv.es



CONFERENCE PRICES

EUROSIS Members: **475 EURO**,
All other: **525 EURO (prices include Proceedings, lunches, conference dinner, get-together party and coffee breaks, a visit to FORD and a one year membership to EUROSIS**

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First Name: Presenting a paper, by submitting a full paper
 Surname: Presenting a short paper (by submitting an extended abstract)
 Occupation and/or Title: Participating in the industrial program
 Affiliation: Organizing a vendor session
 Mailing Address 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:
 Zip code:..... City:
 Country:
 Telephone:
 Fax:
 E-Mail:

Yes, I intend to attend the **Euromedia 2003** **ECEC'2003** **ISC'2003**
 The provisional title of my paper / exhibited software package is: With the following highlights:

The paper belongs in: TICK THE CATEGORY

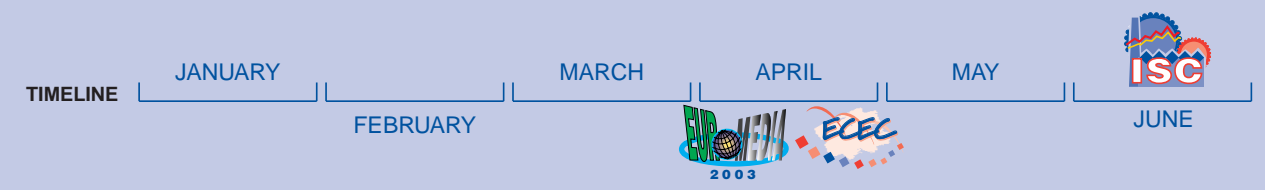
EUROMEDIA'2003	ISC'2003
WEBTEC <input type="checkbox"/> Internet Viewers and Programs <input type="checkbox"/> Visual Programming Languages <input type="checkbox"/> 3D Web Programs <input type="checkbox"/> Video and Audio Streaming on the Web <input type="checkbox"/> AI on the Web <input type="checkbox"/> Software for Web-based Business Applications MEDIATEC <input type="checkbox"/> Multimedia Techniques and Telecom <input type="checkbox"/> Multimedia Authoring Tools and Software <input type="checkbox"/> Multimedia Building Blocks AUDIOTEC <input type="checkbox"/> COMTEC <input type="checkbox"/> Telecommunications Technologies <input type="checkbox"/> Networks <input type="checkbox"/> Network Security <input type="checkbox"/> Mobile Communications <input type="checkbox"/> TV Technology <input type="checkbox"/> QoS APTEC <input type="checkbox"/> Telematics Consumer Applications <input type="checkbox"/> Cooperative Consumer Application <input type="checkbox"/> Tele-Education <input type="checkbox"/> Integrated Enterprise Software and Groupware <input type="checkbox"/> Telemedicine ETEC <input type="checkbox"/>	<input type="checkbox"/> Modelling Methodology <input type="checkbox"/> Analysis Methodology <input type="checkbox"/> Discrete Simulation Languages and Tools <input type="checkbox"/> Simulation in Manufacturing <input type="checkbox"/> Simulation in Automotive Systems <input type="checkbox"/> Simulation in Robotics <input type="checkbox"/> Simulation in Electronics, Computers and Telecom <input type="checkbox"/> Simulation in Electronics Manufacturing <input type="checkbox"/> Simulation in Logistics, Traffic, Transport and Harbour Simulation <input type="checkbox"/> Complex Systems Modelling <input type="checkbox"/> Simulation in Aerospace <input type="checkbox"/> Simulation in Industrial and Product Design <input type="checkbox"/> Simulation in Engineering Processes <input type="checkbox"/> Simulation in Energy and Power Systems <input type="checkbox"/> Simulation in Multibody Systems <input type="checkbox"/> Simulation in Chemical and Petroleum Engineering <input type="checkbox"/> Simulation in Military and Defense <input type="checkbox"/> Verification, Validation and Accreditation <input type="checkbox"/> The Future of Industrial Simulation <input type="checkbox"/> Modelling and Simulation in the Textile Industry <input type="checkbox"/> Intelligent Transport Systems <input type="checkbox"/> Agents for Autonomous Simulation <input type="checkbox"/> MATN
ECEC'2003	
<input type="checkbox"/> E-Business in CE <input type="checkbox"/> Organization and Management <input type="checkbox"/> Supporting Technologies <input type="checkbox"/> Engineering Data Management and Information Modelling <input type="checkbox"/> Process Management <input type="checkbox"/> Collaborative CE Environments for Virtual Teams <input type="checkbox"/> Practical Applications and Experiences	

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EUROSIS THE EUROPEAN SIMULATION SOCIETY
CONFERENCE PROGRAMME
JANUARY-JUNE 2003

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



DEADLINES LEGEND: ■ ABSTRACT SUBMISSION DATE ■ NOTIFICATION ■ PAPER SUBMISSION ■ CONFERENCE

Dear Colleagues,
 Best wishes for 2003 and welcome to the first **EUROSIS** newsletter. The newsletter of the new European Simulation Society, which under the impulse of the European Community, will strive to stimulate research and international scientific cooperation through international projects, EU networks of excellence, workshops and conferences. All of the aforementioned information will be online, from January 2003 onwards on the **EUROSIS** web page. (www.eurosis.org). This booklet covers the first three **EUROSIS** conferences for 2003. The **EUROMEDIA** and **ECEC** conferences, and last but not least the **Industrial Simulation Conference (ISC)**, our flagship spring event (**extended information on the conferences are available from our website**). The major change for 2003 is that next to the fact, that we accept **ONLY abstract and paper submissions in electronic format (PDF and/or Windows Doc files)**, we have installed a new abstract and paper submission website in cooperation with the University of Plymouth, where authors are encouraged to post their papers, so that the programme committee can review the papers online and authors can download the comments from the website straight away together with the author instructions from the appropriate webpages. Furthermore, I have listed, as complete as possible, all upcoming events after June 2003, so you can prepare your future conference schedules.

Best Regards
Philippe Geril

EUROSIS FUTURE CONFERENCE CALENDAR

July- December 2003	January - June 2004	July- December 2004
September: MESCS'2003, TBA	January STATS 2004, TBA	September MATN 2004, Spain
October: IMSC'2003, Venice, Italy	March FUBUTEC 2004, Paris, France	September MESCS'2004, TBA
November Game-On 2003, London, UK	April Euromedia-ECEC'2004, TBA	November Game-On 2004, London, UK
December MECC, 2003, TBA	May PDM 2003, Lisbon, Portugal	December MECC, 2004, TBA
	June: ISC'2004 TBA	
	June: Euro-SISO 2004, TBA	
	June FOODSIM 2004, TBA	Events in North-America and Asia will start in 2004

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@rug.ac.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.



Euromedia 2003

April 14-16, 2003



Plymouth - UK



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DEADLINES

JAN 25 FEB 25 MAR 15 APR 14-16



CONFERENCE TOPICS

The 9th Annual Euromedia conference brings together three individual conferences (WEBTEC, MEDIATEC 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, AI 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.

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 under MEDIATEC concentrating on Audio Technology, called AUDIOTEC.

ETEC is this year a special track under APTEC.

This year will also feature a one day workshop on ZOPE.

ACCOMMODATION

A number of rooms have been set, aside at several hotels in Plymouth in the vicinity of the University. The listing of hotels will be posted on the official EUROMEDIA 2003 and ECEC'2003 websites.

CONFERENCE PRICES

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

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ECEC 2003

April 14-16, 2003



Plymouth - UK

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JAN 25 MAR 5 MAR 15 APR 14-16

CONFERENCE TOPICS

The 10th annual European Concurrent Engineering Conference covers the following topics:

- E-Business in CE** (e.g. Organizational influences of e-business, B2B business models for 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, e-supply, e-engineering)
- Organization and Management**, (e.g. Principles of CE, Multi-disciplined team-working and project team organization, Global product development and international collaboration, Life-cycle cost and quality, Business process re-engineering and outsourcing, Supply chain management, Measurement of profitability by the introduction of CE)
- Supporting Technologies** (e.g. Digital Mock-Up, Virtual prototyping, Rapid prototyping, Synthetic environments and simulation on the factory floor, Reverse engineering, Assembly and disassembly, High precision manufacturing, Intelligent manufacturing, Sensor and robot assisted machining)
- Engineering Data Management and Information Modelling** (e.g. Integration of geometrical data and product definition, Product data interchange (PDI) and standards, Data handling, distribution and transformation, Data version control and release management, Corporate technical memory, Design rationale and intent)
- Process Management** (e.g. Engineering process modeling, CE metrics, CE process planning, scheduling and simulation, Workflow-management in CE, Project and team coordination, Process planning in continuous, discrete and hybrid processes, Process modeling, monitoring and control, Diagnostics and maintenance, Automated inspection and quality control, Production planning, scheduling and control)
- 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)

WORKSHOP

The ZOPE seminar: (<http://www.zope.org>) on the second day of the conference a special seminar will be provided free of charge to conference participants on the use of ZOPE technology. ZOPE is a leading open source application server, specializing in content management, portals, and custom applications. ZOPE enables teams to collaborate in the creation and management of dynamic web-based business application such as intranets and portals.

CONFERENCE SITE

As with the EUROMEDIA 2003 conference the ECEC 2003 conference is co-located at the UNIVERSITY OF PLYMOUTH. From a small fishing village in the Middle Ages, Plymouth became over the following centuries one of the most important naval harbours in the British Isles. In the 1720s Daniel Defoe wrote: 'Plymouth is a town of consideration and of great importance to the to the public. The situation of it between 2 very large inlets of the sea and in the bottom of a large bay, which is very remarkable for the advantage of navigation', which more or less summed up the city's importance. As times change, however, the Naval bases and shipyards were closed and now only retain facilities for warship refurbishment.

A company visit will be envisaged to DML (Devonport Shipyard)



ACCOMMODATION

A number of rooms have been set aside at several hotels in Plymouth in the vicinity of the University. The listing of hotels will be posted on the official ECEC 2003 and EUROMEDIA'2003 websites.

CONFERENCE PRICES

Participants: 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.)



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ISC 2003

June 9-12, 2003



Valencia, Spain

DEADLINES

FEB 15 FEB 28 MAR 5 APR 30 MAY JUN 9-12

EARLY BIRD SUBMISSION JANUARY 25TH, 2003

The full Programme can be viewed at www.eurosis.org

CONFERENCE TOPICS

The ISC'2003 annual Industrial Simulation Conference covers

The Industrial Simulation Conference 2003 (ISC-2003) 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-2003. ISC'2003 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 students.

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

Analysis Methodology

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 modelling.

Simulation in Robotics Robot Systems

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 Robots in Assembly Systems Assembly Systems and Components, Processes Product Development and Design, Wiring Technology Robots in Technical Production Planning 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 Semiconductor Manufacturing,

(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 Description and Verification Languages, ASIC Design Techniques and Applications, VHDL and Design Design Methodologies, Fault Design and Testability Analysis, Microelectronics and CIM, Mixed Analogue/Digital VLSI)

Cleanroom Manufacturing

(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, Rapid Prototyping) -

(Development, optimisation and modelling of coating processes, integrated process development and management, production-orientated equipment, development of coating processes into production, quality concepts for complex coating processes, surface characterization) Coating Technology, Simulation Based Scheduling, (Supply Chain Planning Semiconductor Manufacturing, Maintenance and Repair, Scheduling and Control and Schedule Evaluation)

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 modelling.

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;