

# **LIST OF FREQUENTLY USED KEYWORDS** **Please circle 5 Keywords for your paper**

**EUROSIS PAPER NR:** \_\_\_\_\_

## **APPLICATIONS**

Aerospace  
Agriculture  
Automatic control  
Behavioural science  
Biology  
Business  
Chemical engineering  
Civil engineering  
Communications  
Computer Aided Design (CAD)  
Computer Aided Engineering (CAE)  
Computer Integrated Manufacturing (CIM)  
Computer Integrated Manufacturing and Engineering (CIME)  
Computer performance  
Computer software  
Computer systems  
Concurrent Engineering  
Control systems  
Corporate planning  
Criminology  
Cybernetics  
Ecology  
Education  
Electrical engineering  
Electronics  
Energy  
Entertainment  
Environmental science  
Finance  
Forestry  
Gaming  
Geophysics  
Government  
Graphics  
Health care  
Health sciences  
Hydrology  
Hypermedia  
Image processing  
Industrial control  
Industrial engineering  
Industrial processes  
Information systems  
Labour  
Management science  
Manufacturing  
Marine  
Marketing  
Mechanical engineering  
Military  
Multimedia  
Natural resources  
Naval  
Neurosciences  
Nuclear engineering  
Operations research  
Pattern recognition  
Petroleum engineering  
Pharmacokinetic  
Physics  
Physiology  
Political science

Production  
Psychology  
Resource management  
Scheduling  
Signal processing  
Social science  
Speech synthesis  
Speech recognition  
Telecommunications  
Test equipment  
Thermodynamics  
Transportation  
Training  
Urban affairs  
Virtual reality  
VLSI & simulation

## **COMPUTERS AND COMPONENTS**

Analog computers  
Analog/digital converters  
Array processors  
Calculators  
Communications processors  
Computer networks  
Distributed processors  
Function generators  
Hybrid computers  
Man-machine interfaces  
Microcomputers  
Minicomputers  
Multiprocessors  
Personal computers  
Signal processors  
Simulators  
Special-purpose processors

## **LANGUAGES**

Combined  
Continuous  
Discrete  
Financial planning  
Network

## **MANAGEMENT AIDS**

Decision-making  
Decision support systems  
Forecasting  
Management games  
Policy-making  
Risk analysis

## **MATHEMATICAL METHODS**

Data enrichment  
Differential equations  
Data compression  
Dynamic programming  
Error analysis  
Estimation  
Filtering  
Function generation  
Integration  
Least-squares methods

Linear programming  
Mathematical programming  
Nonlinear programming  
Numerical methods  
Optimization  
Parallel methods  
Partial differential equations  
Random number generation  
Regression analysis  
Sampling  
Spectral analysis  
Statistical analysis  
Stiff equations  
Time series analysis  
Transforms

## **MODEL AND SIMULATION MANAGEMENT**

Computer-aided analysis  
Documentation  
Model acceptance  
Model analysis  
Model credibility  
Model design  
Model evaluation  
Model testing  
Model transfer  
Software cost analysis  
Software engineering  
Software management  
Standards

## **MODELLING METHODOLOGY**

Approximation techniques  
Arrival generation  
Bond graphs  
Delphi techniques  
Dynamic modelling  
Model reduction  
Parameter identification  
Performance analysis  
Sensitivity analysis  
Truncation error  
Validation  
Variance reduction  
Verification  
Virtual Reality

## **SIMULATION METHODS**

AI in simulation  
Combined simulation  
Continuous simulation  
Discrete simulation  
Emulation  
Gaming  
Hybrid simulation  
Interactive simulation  
Man-in-the-loop simulation  
Real-time simulation  
System dynamics

## **SOFTWARE**

AI-supported simulation  
Animation software  
Database management systems  
Differential equation solvers  
Graphics packages  
Intelligent simulation environments  
Interactive programs  
Microprogramming  
Operating systems  
Program generators  
Report generators  
Scientific visualisation software  
Simulation interfaces  
Statistical packages

## **SYSTEM OPERATION**

System analysis  
System engineering  
System identification  
System management

## **THEORY**

Catastrophe theory  
General systems theory  
Philosophy

## **TYPES OF MODELS**

Compartmental  
Corporate  
Decision  
Deterministic  
Dynamic  
Econometric  
Event-oriented  
Expert system  
Feedback  
Global  
Grid  
Hierarchical  
Interactive  
Linear  
Lumped parameter  
Markov-chain  
Matrix  
Meta  
Microanalytic  
Monte Carlo  
Neural network  
Nonlinear  
Qualitative  
Queueing  
Object-oriented  
Probabilistic  
Process-oriented  
Real-time  
Regional  
Stochastic  
Synthetic Environments  
Topological  
Vector  
World