

EUROGEN 2009

Evolutionary and Deterministic Methods for Design, Optimization
and Control with Applications to Industrial and Societal Problems



Cracow, Poland
June 15 - 17



<http://www.eurogen2009.polsl.pl>

Objectives:

EUROGEN 2009 was the eighth of a series of International Conferences previously held in Las Palmas de Gran Canaria (1995), Trieste (1997), Jyväskylä (1999), Athens (2001), Barcelona (2003), Munich (2005) and Jyväskylä (2007), and devoted to Evolutionary Computing for Industrial Applications. It aims at bringing together specialists from Universities, Research Institutions and Industries developing or applying Evolutionary and Deterministic Methods in optimization of design and emphasizing on industrial and societal applications.

This series of conferences were originally launched by the European Thematic Network INGENET. EUROGEN'09 is an ECCOMAS Thematic Conference. Starting with EUROGEN 2009, ERCOFTAC, represented by its Special Interest Group (SIG) on Design Optimization, is the ECCOMAS associate of this ECCOMAS Thematic Conference. The conference will include invited lectures, contributed lectures, minisymposia and special technological session.

Major Application Areas

- Aeronautics
- Bio Engineering and Medicine
- Dependability
- Electromagnetics
- Electronics
- Energy
- Environment
- Games
- Manufacturing
- Material Science and Technology
- Paper Making Systems
- Statistical Shape Analysis
- Stochastics
- Transport
- Turbomachinery
- Telecommunications
- Logistics
- Risk Finance

Algorithmic topics

- Evolutionary algorithms - including Evolutionary programming, Evolution Strategies, Genetic Algorithms, Memetic Algorithms and Artificial Immune Systems
- Multi-objective evolutionary algorithms and constraint handling techniques
- Adjoint methods and One shot methods
- Hybridization with standard optimization tools (gradient based methods, combinatorial optimization methods)
- Response Surface methods and other embeddings of Machine learning technics.
- Parallel and distributed Evolutionary Algorithms (from LANs to GRID)
- Multi-disciplinary optimization methods
- Design with uncertainties
- Economic and Social simulations
- Multi criteria decision making tools.
- Robust Design with uncertainties

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*Referat otwierający prof. Z. Michalewicza:
„Applications of evolutionary methods for
complex industrial problems”*



STATISTICS:

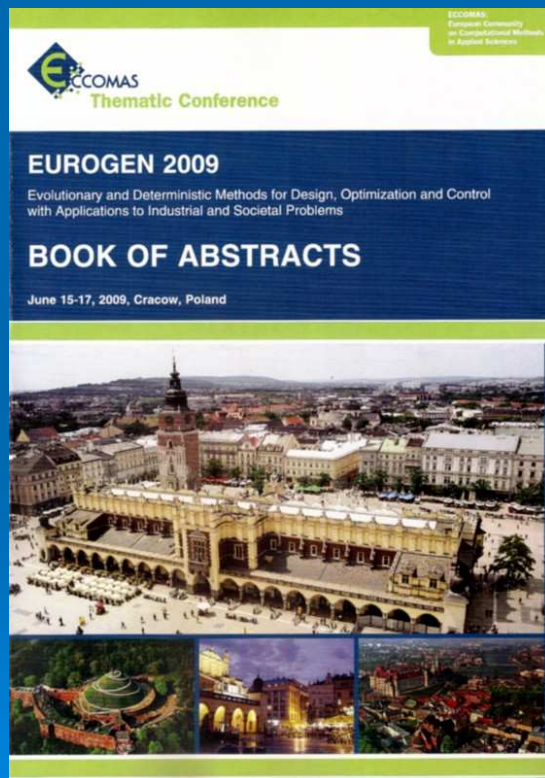
- **57 papers,**
- Participants from **15 countries:**
Australia, Belgium, Finland, France, Germany, Greece, Iran, Israel,
Italy, Japan, Poland, Spain, Sweden, United Kingdom, United States



- **5 Plenary Lectures**
- **7 Technical Sessions**
- **1 Special Technology Session**



Short papers were published as
the conference proceedings in
the book of abstracts.



Full papers will be published in the book:

EVOLUTIONARY METHODS FOR DESIGN, OPTIMIZATION AND CONTROL

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