

	<p align="center">6th World Congress on Nature and Biologically Inspired Computing (NaBIC2014)</p> <p align="center">Porto, Portugal, 30th July to 1st August, 2014</p> <p align="center">http://www.mirlabs.org/nabic14</p>
Title of Session	Evolutionary Strategies in Computational Engineering
Objectives and scope	<p>Evolutionary techniques are becoming increasingly used in the most diverse areas of application in engineering and other sciences.</p> <p>Concerning to the computational engineering scientific fields we can think about the use of these approaches not only in the context of the computational modeling of a certain phenomena in order to predict its real behavior, but also aiming to achieve optimal solutions for a new system design or for system's rehabilitation purposes.</p> <p>Therefore, we welcome the presentation of research and review studies considering the application of fuzzy models, neural networks, genetic algorithms, swarm intelligence algorithms, among many other evolutionary strategies applied to system's modeling and optimization.</p>
Topics of Interest	<p>Without excluding other possibilities and just for illustration purposes, a list of relevant topics within the context of this session is:</p> <ul style="list-style-type: none"> Genetic algorithms Swarm intelligence strategies Differential evolution Neural networks Fuzzy models Surrogate models Hybrid systems
Session Chair / Co-chair	Joaquim Infante Barbosa
Scientific Committee	<p>Joaquim Infante Barbosa, Universidade de Évora</p> <p>Amélia Loja, Instituto Superior de Engenharia de Lisboa</p> <p>João Calado, Instituto Superior de Engenharia de Lisboa</p>
Contact Information	jib@uevora.pt
Brief Biography of the session Organizers	<p>PhD in Mechanical Engineering in the field of Structural Optimization from IST/Technical University of Lisbon</p> <p>Agregação (Habilitation) in Structural Mechanical from Universidade de Évora;</p> <p>Senior Researcher at IDMEC - Mechanical Engineering Institute since 1995, IST/Technical University of Lisbon;</p>

Associate Professor at Escola Superior Náutica Infante D. Henrique from 1994 to 2008;
Invited Associate Professor from 1998 to 2009 at Universidade de Évora;
Associate Professor with Habilitation at ISEL - Instituto Superior de Engenharia de Lisboa from 2008 to 2013;
Invited Full Professor at Universidade de Évora since 2009;
Full Professor at ISEL since 2013.

keywords that best describe expertise:

Structural Analysis using Finite Element Methods; Structural optimization; Sensitivity analysis; Composite Materials; Laminate adaptive plates and shells; Vibration Suppression; Piezoelectric, electromagnetic and magnetostrictive actuators and sensors; Multifunctional structures : Modelling, optimal design, testing and damage identification.