	16 <sup>th</sup> The International Conference on Intelligent Systems Design and Applications (ISDA'2016) Porto, Portugal, 14-16 December, 2016 <u>http://www.mirlabs.org/isda16/</u>
Title of Workshop	Nature and Biologically Inspired Multi-objective Optimization
Name and Affiliation Speakers	E. J. Solteiro Pires / P. B. De Moura Oliveira, UTAD University, Portugal
Duration	
Objectives and scope	Many scientific problems with real world applications have several design criteria that benefit from be simultaneously optimized. Usually, these problems have conflicting objectives and cannot be solved by traditional mathematical programming techniques. This kind of problems has been subject of significant research efforts in the last decades, through the development of Nature and biologically inspired approaches. The aim of this session is to allow the proposal of new issues and approaches in this area and promote their discussion.
Topics of Interest	<ul> <li>The Special Session will focus on, but not be limited to, topics such as:</li> <li>Theoretical aspects of multi-objective algorithms</li> <li>Real-World Applications</li> <li>Many Objective algorithms</li> <li>Diversity and Metric Techniques</li> <li>Multi-Objectivization and Visualization Techniques</li> <li>Hybrid Algorithms Approaches</li> <li>Parallel Implementations</li> </ul>
Contact Information	epires@utad.pt, oliveira@utad.pt
Brief Biography of the tutorial Organizers	<ul> <li>E. J. Solteiro Pires received the degree in Electrical Engineering at the University of Coimbra, in 1993. He pursued post graduate studies and obtained, in 1999, an MSc degree in Electrical and Computer Engineering at the University of Oporto. In 2006, he graduated with a PhD degree at UTAD University. Since 2006 he works as an Assistant Professor at the Engineering Department of UTAD University. His main research interests are in evolutionary computation, multi-objective problems, fractional calculus.</li> <li>P. B. De Moura Oliveira received the Electrical Engineering degree in 1991, from the UTAD University, Portugal, MSc in Industrial Control Systems in 1994 and PhD in Control</li> </ul>

Engineering in 1998, both from Salford University, Manchester in the UK. Currently he is an
Associated Professor with Habilitation at the Engineering Department of UTAD University
and a researcher at the INESC TEC institute. His research interests are focused on the fields
of control engineering, intelligent control, PID control, control education, evolutionary and
natural inspired algorithms for single and multiple objective optimization problem solving.