Editorial

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Biographical notes: Aitzol Lamikiz Mentxaka received his PhD in Mechanical Engineering from University of the Basque Country in 2003. He is an Associate Professor of Mechanical Engineering at University of Basque Country, Bilbao, Spain. His current research interest includes laser material processing and process modelling. Currently, he is working on laser cladding, laser hardening and laser cutting processes and collaborates also on machining process modelling and monitoring. He has over 12 years of experience in teaching and researching about manufacturing processes. As a result of the work, he has published more than 50 research papers on high impact international journals. He has been a reviewer and leads several funded research project.

This special issue of the *International Journal of Mechatronics and Manufacturing Systems* (*IJMMS*) includes nine research articles all related to laser material processing, considering different processes and methods. Laser material processing represents a large number of processes which are growing rapidly in different industrial applications. There are some processes that have been developed since 1980s and actually represent highly consolidated processes, such as cutting or welding. These processes are becoming more and more relevant for the industry and many new applications and developments have been presented recently. On the other hand, other processes are still at a pre-industrial stage. These processes, such as laser cladding or laser texturing, represent new alternatives to traditional manufacturing processes but have not achieved minimum reliability and industrial standards yet. Thus, this special issue includes high quality papers about laser cutting, laser bending, additive processes, laser surface hardening and other related processes including the following:

- parameter optimisation and quality evaluation in laser cutting processes
- mechanical properties characterisation in additive processes
- laser hardening modelling
- weld shape evaluation for laser welding operations
- evaluation of the efficiency of the laser-fibre coupling
- laser micro drilling of ceramic materials
- laser bending parameters and the effects of this process on the microstructural constituents

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