
Editorial

J. Paulo Davim

Department of Mechanical Engineering,
University of Aveiro,
Campus Santiago, 3810-193 Aveiro, Portugal
E-mail: pdavim@ua.pt

Biographical notes: J. Paulo Davim received his PhD in Mechanical Engineering from the University of Porto in 1997 and Aggregation from University of Coimbra in 2005. Currently, he is an Aggregate Professor in the Department of Mechanical Engineering of the University of Aveiro and the Head of MACTRIB – Machining and Tribology Research Group. He has more than 24 years of teaching and research experience in manufacturing, materials and mechanical engineering with special emphasis in machining and tribology. He is the Editor of five international journals, Guest Editor, Editorial Board Member, Reviewer and Scientific Advisory for many international journals and conferences. He has also published more than 300 articles in journals and conferences (more 150 articles in ISI Web Science, h-index 15).

Nowadays, the use of composite materials has increased in various areas of science and technology due to their special properties, namely for these application in aircraft, automotive, defence and aerospace industries as well others advanced industries. Drilling is a frequently practiced machining process in modern industry owing to the need for component assembly in composite structures.

After the review process, five articles were select for inclusion in this special issue. The first two articles provides information on abrasive waterjet hole trepanning of thick Kevlar-epoxy composites for ballistic applications and electrical discharge drilling of carbon fibre reinforced composite materials. The following two articles deal with drilling thick composite materials using large diameter drills and effect of fibre contents and laminate thickness on the drilling behaviour of GSFRRP composites under varied drill geometries. Finally, the last article of this issue is focused on non-traditional drilling of SiC based ceramic matrix composites. The editor hopes that this special issue will stimulate more research on this topic.

The editor would like to thank all the authors and all the referees for their time and their thorough evaluations of these articles.