

Editorial of the 1st issue of *Journal on Teaching Engineering*

This is the first issue of the *Journal on Teaching Engineering* (JTE). The journal is published by the University of Porto and is dedicated to publishing novel, cutting-edge reports of broad interest to higher education, especially related to engineering. The journal provides a forum for scientists and engineers, physicists, and chemists to rapidly communicate on the most important topics in the field of teaching and education. Its comprehensive scope includes all articles related to the following topics:

What is the nature of engineering thinking and knowledge,
How people develop knowledge and competencies,
Institutional practices,
Engineering interdisciplinary and applied education,
How society, in general, contributes to science and technology processes and products, and
Development and use of assessment methods, instruments, and metrics.

The journal is open access, but no fees will be charged to the authors until the journal is indexed in the major databases. This journal is associated to the international conference on Science and Technology Education that takes place every year in October at the Faculty of Engineering of the University of Porto (www.fe.up.pt/ste2021). The editorial board of this journal is coincident with the scientific committee of the conference. It includes experienced researchers from all disciplines of science and technology who are involved in teaching issues. The papers presented in this first issue are varied. The first paper is a testimonial of 40 years' experience from an eminent professor of mechanical engineering, Prof Paulo Tavares de Castro, from the University of Porto. The second paper deals with teaching techniques that a professor can use to motivate his students, which is especially important when the subject is highly complex and conceptual such as mechanical vibrations. Again, this paper reveals 40 years' experience of a world-famous professor at the University of Bristol, Prof Robert D Adams. Transversal competences or soft skills are increasingly important and make a huge difference. This subject is treated in the paper of Cruz et al. (Delft University of Technology) in the form a game-based activity. Engineering is a topic that attracts every year a lot of students, and Duarte et al. (University of Porto) wanted to understand what drives the students to choose mechanical engineering. Finally, the last paper is about teaching in technical and professional contexts, by Barbosa et al. (University of Porto). Companies want to increase the quality of their products and for that they need their employers to have highly specialized training.

We would like to thank the authors for gently accepting to participate in this first issue. The papers presented are good examples of studies related to science and technology epistemologies, learning mechanisms, learning systems, and diversity and inclusiveness. They represent a good starting point for what is expected to be a dynamic forum of the last developments in teaching engineering.

July 2021

Lucas F. M. da Silva
E-mail: lucas@fe.up.pt

António M. Ferreira
E-mail: ferreira@fe.up.pt