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Guest Editorial

This is the second part of the special issue on MATLAB/Simulink applications in Engineering Education. The first part appeared in Vol. 21, No. 4. This part along with the first one, provides the reader with a comprehensive view of MATLAB/Simulink applications in Engineering Education.

The first paper is presented by Ahlström and Christie; they report on a research project aimed to improve teaching and learning of heat conduction during welding. The principles involved in improving this aspect could lead the reader to reflect on more encompassing curriculum reforms. Next, Krysl and Trivedi present techniques that provide both undergraduate and graduate students with tools for numerical experimentation for structural analysis. In the third paper, Ramos *et al.* describe an experimental technique and an implementation of a numerical model of the moisture buffer capacity of building materials.

The next three papers discuss Control Systems laboratories. A distance laboratory system is introduced by Sartorius *et al.* The ease of the incorporation of new devices for testing controllers is a useful aspect of the system described. Interactive laboratories are discussed by Sánchez *et al.* Tornambè presents an approach based on a simple and inexpensive experimental apparatus that can be controlled in real-time from Simulink.

Tlale and Zhang discuss the development and teaching parallel manipulators using several techniques including MATLAB and Simulink.

Wahyudi and Albagul discuss an approach to improve the teaching of Control Engineering using a hardware system in combination with MATLAB/Simulink.

Isa and Jantan discuss the autonomous vehicle driving control system. The authors focus on the development of a simulation system for the use of engineering educators and practicing engineers.

Martins describes how MATLAB/Simulink can be used to apply the ITAE (the integral of time-weighted absolute error) criterion to calculate controller parameters. The approach presented in this work can enhance the learning progress of process control. It relates the topics of process control and optimization.

Smaili *et al.* present a MATLAB-based code to enhance the teaching and learning of the design of mechanisms and intelligent optimization methods.

Dabney and Ghorbel describe an approach to enhance an advanced engineering mechanics course through the incorporation of numerical simulation using MATLAB and Simulink.

The final three papers of this part of the special issue introduce the use of MATLAB/ Simulink for teaching and learning from varied points of view. Albagul *et al.* focus on Mechatronics. Habib discusses it from the point of view of deep learning of Mechanical Engineering. Salamon presents an approach from the point of view of teaching theory and applications of engineering design to students from varied engineering departments.

I would like to conclude by thanking all of the authors for their interest in this special issue and for their valuable contributions.

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