


Introduction to the special issue on PID control system design, automatic tuning and applications

The topics of PID control system design, automatic tuning and applications are very attractive to industrial engineers, students and academics because the PID control systems remain to be the fundamental building blocks for the control engineering applications. Many authors of this special issue have witnessed the enthusiasm on PID control in the control engineering community during the two recent PID control workshops held in the IFAC World Congresses (Berlin, Germany 2020 and Yokohama, Japan, 2023). In fact, some of the contributing authors to this special issue have devoted their entire careers to the research and development of PID control and have made significant contributions in this field.

This special issue consists of eleven articles. Among them is a review paper on feedforward compensation together with PID control by Guzman and Hagglund. Professor Hagglund is one of the pioneers in the automatic tuning of PID controllers and

the author of many books on PID control. In this special issue, there are three articles on relay feedback control for PID control applications. Optimisation based methods for PID control are highly featured in the special issue with three related articles. The remaining four articles are for new applications and new PID control algorithms.

We sincerely hope that the readers will enjoy reading this special issue on PID control.

Liuping Wang
RMIT University, Australia
 liuping.wang@rmit.edu.au

Antonio Visioli
University of Brescia, Italy