

---

## Introduction

---

### Yang Ping

School of Mechanical Engineering,  
Jiangsu University, Zhenjiang, 212013 China  
E-mail: yangpingdm@ujs.edu.cn  
E-mail: yangping1964@163.com

**Biographical notes:** Yang Ping is a Professor at the Jiangsu University in China, and is also currently an editorial member of the *International Journal of Materials and Product Technology*, Associate Editor of the *International Journal of Materials and Structural Integrity*, a Director of the China Precision Machine Society. He received his PhD in mechanical engineering from Huazhong University of Science & Technology (HUST) in 2001. He was engaged in sciences research in Concordia University. His research interests focus on the theoretical aspect and CAD of mechanical systems for the purposes of design and control.

---

Research papers were invited for the *IJPD* special issue on Design, analysis and development for product technology. The purpose of this special issue is to publish recent research outputs on product engineering employing design method, analysis and development technologies. In last few decades, both academic literature and practice have put growing emphasis on the importance of design, analysis and development technologies as a key factor in establishing durable competitive advantages in product engineering. The objective of the special issue is to provide a means for the publication and interchange of information, on an international basis, on all aspects of Design, analysis and development for product technology.

This special issue includes the contents about response surface methodology application for product design, optimisation for pump impeller using mathematical techniques, parametric approach for satellite gear mechanism, simulation method for product design, experimental analysis and design method for improving engine performance, optimisation for CNC tool path planning by using adaptive grid generation, synchronised collaborative design between heterogeneous CAD systems based on web service, modelling approach for cymene-Si-oil damping shock absorber based on neural network algorithm etc.

The aim of this special edition of *International Journal of Product Development* is to describe the actual state of art in the product development, as well as the recently developed new progressive design technologies.

I am very grateful to all authors and reviewers and to Dr. M.A. Dorgham, the Editor-in-Chief to his support of this Special Issue.