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| 著者                      | 室蘭工業大学の教授による総合的な講座
|                           | その他の cameo の参加者による
|                           | 講義メモリによる学習支援プログラム
| 出版社                     | 総合的な講座
| 出版年                     | 2016-03-25
| URL                       | http://hdl.handle.net/10258/00008612

The papers in the Specials of this issue of the Memoirs of the Muroran Institute of Technology were presented at the fourth joint symposium on the Mechanical Engineering, Industrial Engineering, and Robotics 2015 (MIER2015) aimed to interchange students and academics, and to enhance research and education relationship between Muroran Institute of Technology and Chiang Mai University. The symposium is a forum to disseminate information on the recent research in mechanical engineering, industrial engineering, and robotics. The first symposium was held at Chiang Mai in Thailand on November, 2010 (Thailand-Japan International Symposium in Industrial Engineering, Mechanical Engineering and Robotics 2010, TJIEME-CMU-MuroranIT-2010). The second one was at Muroran and Noboribetsu in 2012 (Joint Symposium on Mechanical-Industrial Engineering, and Robotics, MIER2012), and the third one was at Chiang Mai in 2013 (MIER2013). These symposia are held alternatively between Japan and Thailand, which are the forums to disseminate information on the recent research in Mechanical Engineering, Industrial Engineering, and Robotics. The fourth symposium was hosted by the courses of Mechanical Engineering and Robotics of Muroran Institute of Technology during 29-30 May, 2015 at Muroran, Japan.

The MIER2015 intends to improve interdisciplinary interaction; therefore, the presentations include various topics related to the mechanical engineering, industrial engineering, and robotics. The typical topics of the symposium includes: modeling and simulation of mechanical system; mechanical system design and application; manufacturing engineering and technology; industrial engineering and production management; robotics and automation; sensing and measurement; medical application and biomechanics; and energy and information technology. The papers in this section are the manuscript submitted after the symposium and have subsequently undergone the review process by multiple reviewers.

On behalf of the Organizing Committee, we highly appreciate the contributions from the authors and their co-authors. We take the opportunity to acknowledge all reviewers for taking time to review these articles. We would also like to thank the students and staff of Chiang Mai University and Muroran Institute of Technology for their thoughtful consideration and cooperation.

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