The 30th Board of Directors of JIMA

President:
Toyokazu Nose (Osaka Institute of Technology)

Vice Presidents:
Masaaki Ohba (Nihon University)
Sadao Shibuya (The Institution of Professional Engineers, Japan)

Directors:
Yasutaka Kainuma (Tokyo Metropolitan University)
De-ri Cao (Keio University)
Yoichi Seki (Gunma University)
Naokazu Yamaki (Shizuoka University)
Aya Saito (Sanno University)
Shoichi Kaneko (Yamanashi Gakuin University)
Masaki Iijima (Aichi Gakuin University)
Hirokazu Kono (Keio University)
Hajime Mizuyama (Kyoto University)
Maasatsugu Shihara (Osaka Institute of Technology)

Auditors:
Katsuhiro Takahashi (Hiroshima University)
Masanobu Matsumaru (Tokai University)

The Editorial Board of the Journal of JIMA

Editorial chair:
Hisashi Yamamoto (Tokyo Metropolitan University)

Vice editorial chairs:
Takahiro Itohara (Sophia University) Masayuki Goto (Waseda University)

Editorial board members:
Yasunori Katsurayama (Waseda University) Masahiro Arakawa (Kansai University)
Koichi Nakade (Nagoya Institute of Technology) Mitsuhiko Karashima (Tokai University)
Yukiko Orito (Hirosima University) Hirotaka Mizuno (Tokai University)
Hirotaka Ooki (Tokyo Institute of Technology) Takashi Namatame (Senshu University)
Makoto Suzuki (Shonan Institute of Technology) Koji Shingyoji (Jumonji University)
Hideki Nagatsuka (Tokyo Metropolitan University) Shuhei Inada (Keio University)
Yasuhiro Takemoto (Prefectural University of Hiroshima)
Yosuke Sanbayashi (Tokyo Metropolitan College of Industrial Technology)
Atsushi Suzuki (Takasaki City University of Economics)

Reprographic Reproduction outside Japan

Making a copy of this publication

Please obtain permission from the following Reproduction Rights Organizations (RROs) to which the copyright holder has consigned the management of the copyright regarding reprographic reproduction. Obtaining permission to quote, reproduce; translate, etc. Please contact the copyright holder directly.

-- Users in countries and regions where there is a local RRO under bilateral contract with Japan Academic Association for Copyright Clearance (JAACC)

Users in countries and regions of which RROs are listed on the following website are requested to contact the respective RROs directly to obtain permission.

Japan Academic Association for Copyright Clearance (JAACC)
Address 9-6-41 Akasaka, Minato-ku, Tokyo 107-0052 Japan
Website http://www.jaacc.jp/
E-mail info@jaacc.jp Fax: +81-3-3347-5619

Journal of JIMA English Issues: ISSN 1342-2618
Published on 15th, February, 2011

Japan Industrial Management Association
4-4-19 Takadanobaba, Shinjyuku-ku, Tokyo 169-0075, JAPAN
TEL: +81-3-5389-6379

Center for Academic Publications Japan
2-4-16 Yayoi, Bunkyo-ku, Tokyo 113-0032, JAPAN
TEL: +81-3-3817-5821

Sanbi Printing Co., Ltd.
5-9-8 Nishi-nippori, Arakawa-ku, Tokyo 116-0013