Preface

The present volume contains selected papers of the 2nd International Conference on Functional Materials Science 2014 (ICFMS 2014) held on November 12-13, 2014 in Lombok, Indonesia. The conference, which has been jointly organized by Universitas Padjadjaran, Universitas Gadjah Mada, Institut Teknologi Bandung, Institut Teknologi Sepuluh Nopember, and Universitas Indonesia, has accepted more than 134 abstracts. After having reviewed the abstracts, 121 papers were presented in the conference. Finally, under a tight peer-review process, 66 papers were accepted in Materials Science Forum.

The papers are categorized into several groups that cover new developments and research results related to theoretical and experimental studies of functional materials as well as their various processing and wide variety of applications. They include researching by: energy conversion materials and devices, materials in biomedical engineering, theoretical and experimental investigation of structure and properties of functional materials, hybrid, composite and ferromagnetic materials.

Finally, we are grateful to all organizing committee members and reviewers for invaluable supports, comments and suggestions.

Editors.

Dr. Risdiana (Department of Physics, Universitas Padjadjaran (risdiana@phys.unpad.ac.id))

Dr. Kuwat Triyana (Department of Physics, Universitas Gadjah Mada (triyana@ugm.ac.id))

Dr. Agustinus Agung Nugroho (Department of Physics, Institut Teknologi Bandung (nugroho@fi.itb.ac.id))

Conference Organizers

Universitas Padjadjaran (UNPAD), Universitas Gadjah Mada (UGM), Institut Teknologi Bandung (ITB), Institut Teknologi Sepuluh Nopember (ITS) and Universitas Indonesia (UI)

ORGANIZING COMMITEE

Advisory Board

Yoji Koike (Tohoku University, Japan)

Yukio Furukawa (Waseda University, Japan)

Isao Watanabe (The Physical and Chemical Research Institute (RIKEN), Japan)

Darminto (Institut Teknologi Sepuluh Nopember, Indonesia)

Yasuo Nozue (Osaka University, Japan)

Tadashi Adachi (Sophia University, Japan)

Tobat P. I. Saragi (University of Kassel, Germany)

Hiroshi Orihara (Hokkaido University, Japan)

Yoh Kohori (Chiba University, Japan)

Noriah Bidin (Universiti Teknologi Malaysia, Malaysia)

Hiromi Taniguchi (Saitama University, Japan)

Shukri Sulaiman (Universiti Sains Malaysia, Malaysia)

Chairman/Co-Chairman

Chairman: Risdiana (Universitas Padjadjaran, Indonesia)

Co-chairman : Yusril Yusuf (Universitas Gadjah Mada, Indonesia)

Secretary

Lusi Safriani (Universitas Padjadjaran, Indonesia) Harini Sosiati (Universitas Gadjah Mada, Indonesia)

Organizing Committee

Kuwat Triyana (Universitas Gadjah Mada, Indonesia)

Agung A. Nugroho (Institut Teknologi Bandung, Indonesia)

Harsojo (Universitas Gadjah Mada, Indonesia)

Triwikantoro (Institut Teknologi Sepuluh Nopember, Indonesia)

Ayi Bahtiar (Universitas Padjadjaran, Indonesia)

Rahmat Hidayat (Institut Teknologi Bandung, Indonesia)

Irwan A. Dharmawan (Universitas Padjadjaran, Indonesia)

Suminar Pratapa (Institut Teknologi Sepuluh Nopember, Indonesia)

Mochamad Zainuri (Institut Teknologi Sepuluh Nopember, Indonesia)

Budhy Kurniawan (Universitas Indonesia, Indonesia)

Fitrilawati (Universitas Padjadjaran, Indonesia)

Kasnawi Al Hadi (Universitas Mataram, Indonesia)

Teguh Ardianto (Universitas Mataram, Indonesia)

Laili Mardiana (Universitas Mataram, Indonesia)

Lily Maysari Anggraeni (Universitas Mataram, Indonesia)

Alfina Yuridis Alaydrus (Universitas Mataram, Indonesia)

Siti Alaa (Universitas Mataram, Indonesia)

Nurul Qomariyah (Universitas Mataram, Indonesia)