Preface

It is our great pleasure to introduce the Proceedings of the Material Science and Chemistry Symposium, one of the symposia in the Fourth International Conference on Science and Technology (the 4th ICST 2018) that was held in Eastparc Hotel Yogyakarta, Indonesia on 7–8 August 2018. The conference had seven symposia that are (1) Computer and Information Technology, (2) Environmental and Earth Science, (3) Electronics, Communication, Control, and Instrumentation, (4) Material Science and Chemistry, (5) Mechanical and Industrial Engineering, (6) Power and Energy, and (7) Remote Sensing and Geomatics.

This volume of proceedings from the symposium provides an opportunity for readers to connect with a selection of refereed papers that were presented during the 4th ICST 2018 conference. Divided into 4 chapters, the papers published here pick up on the multiple dimensions of the properties of materials. The symposium on Material Science and Chemistry alone received 76 contributing papers, most of them made to the full-length article.

We thank all the members of the conference committee and reviewers for advice given to the successful conference and for efforts to improve the quality of papers selected for conference program and volume for publication. We do hope that the proceedings will contribute well to the advance of chemistry, mainly in the field of material science. Also, we are looking forward to welcoming the contributing authors to the Fifth International Conference on Science and Technology, which is going to be run in August 2019.

Editors

Dr Roto Roto
Dr Indriana Kartini
Dr Julius Motuzas
Dr Kuwat Triyana
Dr Dwi Siswanta
Dr Tutik Dwi Wahyuningsih
Dr Ahmad Kusumaatmaja

Committees

Advisory board:

Widodo, Ph.D.

Dr. Tri Rini Nuringtyas

Dr. Mutiah Amini

Chairman:

Dr. I Wayan Mustika

Co-Chairman:

Dr. Eng. Kuwat Triyana

Secretary:

Ratih Fitria Putri, Ph.D.

Organizing Committee:

Dr. Eng. Sunu Wibirama

Dr. Faizal Makhrus

Dr. Afiahayati

Dr. Ahmad Kusumaatmaja

Dr. Agus Harjoko

Dr. Danang Lelono

Dr. Andi Dharmawan

Dr. Sandy Budi Wibowo

Dr. Indriana Kartini

Dr. R. Roto

Dr. Tutik Dwi Wahyuningsih

Dr. Chotimah

Dr. Dwi Siswanta

Dr. Titis Wijayanto

Dr. Budi Arifvianto

Dr. Fransisco Danang Wijaya

Dr. Trias Aditya Kurniawan Muhammad

Ari Cahyono, M.Sc.

Trias Aditya Kurniawan Muhammad, Ph.D.

Ahmad Cahyadi, M.Sc.

Utia Suarma, M.Sc.

Isnaini Sadali, M.Sc.

Syahrul Fauzi, S.Pt., M.Pd.

Siti Uswatun Hasanah, S.T.P.

Murdani

Suharman, S.E.

Alif Yuni Alfiani, S.Kom.

Sri Wijayanti Suryaningrum, S.Pd.

Aristia Pintakarini, S.Sos.

Khusnun Fauziyyah, S.P.

Kiki Riskita Sari, S.S.

Nurul Hasanah, S.T.

Muhammad Rafieiy, S.Si.

Akhsin Nurlayli, M.Eng.

Rangga Kala Mahaswa

Sulis Setiowati, M.Eng.

Febriyan Yoga Pratama

Zahrah Nurfadhilah, S.Si.

M. Mirza Nuryady, S.Si.

Fitri Irawijayanti

M. Khairurrijal