

FROM THE EDITORS

The First International Seminar on Sciences and Science Education, ISOSE, organized by Faculty of Mathematics and Natural Science of State University of Medan, was held on 4 – 5 December 2014 in Medan, North Sumatera, Indonesia. The seminar particularly encouraged the interaction of research students and developing academics with the more established academic community in an informal setting to present and to discuss new and current work. The high quality of the papers and the discussion represent the thinking and experience of experts and practitioners, researches, lecturers and students in their particular fields and interests. The papers contributed the most recent scientific knowledge known in science and science education.

This proceeding contains all the paper presented in the seminar, consisted of 11 papers of Biological Sciences, 11 papers of Chemical Sciences, 3 papers of Mathematical Sciences, 14 papers of Physical Sciences and 39 papers of Science Education.

In addition to the contributed papers, an outstanding keynote presentation on National Curriculum 2013 was made by Prof. Dr. Syawal Gultom (formerly Rector of State University of Medan, Unimed), now as Head of Badan Pengembangan Sumberdaya Manusia Pendidikan of Department of Education and Culture of Republic of Indonesia. This presentation gives all participants a new and comprehensive perspective on the orientation of national education in the next era.

Two invited keynote presentations were given by Prof. Dr. Yaya Rukayadi from Department of Food Science, Faculty of Food Science and Technology and Laboratory of Natural Products, Institute of Bioscience, Universiti Putra Malaysia, Serdang, Selangor DarulEhsan, Malaysia who spoke on how to appreciate the nation through research javanese turmeric or temulawak (*Curcuma xanthorrhiza* ROXB.), and by Dr. Phattrawan Tongkumchum, Department of Mathematics and Computer Science, Faculty of Science and Technology, Prince of Songkla University, Pattani, Thailand who spoke about the applications of the weighted sum contrasts methods on graphing confidence interval for adjusted mean, their used for comparing two and several groups, and adjustment for covariates.

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We thank all authors and participants for their contributions.

Medan, February 2015

Editor