## **MSCEIS 2019**

Proceedings of the 7th Mathematics, Science, and Computer Science Education International Seminar

Bandung, West Java, Indonesia 12 October 2019

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# Proceedings of the 7<sup>th</sup> Mathematics, Science, and Computer Science Education International Seminar (MSCEIS)

12 October 2019, Bandung, West Java, Indonesia

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#### **Preface**

We are delighted to introduce the proceedings of the first edition of the 20 European Alliance for Innovation (EAI) for 7<sup>th</sup> Mathematics, Science, and Computer Science Education International Seminar (MSCEIS). An annual conference was held by many domestic and overseas universities. It was held by the Faculty of Mathematics and Natural Science Education, Universitas Pendidikan Indonesia (UPI) and the collaboration with 12 University associated in Asosiasi MIPA LPTK Indonesia (AMLI) consisting of Universitas Negeri Semarang (UNNES), Universitas Pendidikan Indonesia (UPI), Universitas Negeri Yogyakarta (UNY), Universitas Negeri Malang (UM), Universitas Negeri Jakarta (UNJ), Universitas Negeri Medan (UNIMED), Universitas Negeri Padang (UNP), Universitas Negeri Manado (UNIMA), Universitas Negeri Gorontalo (UNG), and Universitas Negeri Surabaya (UNESA). In this year, MSCEIS 2019 takes the following theme: "Mathematics, Science, and Computer Science Education for Addressing Challenges and Implementations of Revolution-Industry 4.0" held on October 12, 2019 in Bandung, West Java, Indonesia.

The number of accepted papers is 211 Especially, there are four keynote speakers and thirteen invited speakers come from Japan, Australia, Thailand, Indonesia, for plenary and parallel sessions, respectively.

We would like to thank all of those who helped and supported MSCEIS 2019. Each individual and institution's support was very important for the success of this seminar. Specifically, we would like to acknowledge the advisory board, scientific committee, and organizing committee for their valuable advice, help, suggestion, and support in the organization and helpful peer-reviewing process of the papers. We would also extend our best gratitude to keynote speakers for their valuable contribution to sharing ideas and knowledge in the MSCEIS 2019.

We sincerely hope that MSCEIS 2019 will be a forum for excellent discussions for improving the quality of research and development relating to mathematics, science, and computer science education. We also hope that this forum will put forward new ideas and promote collaborative researches among participants. We believe that the proceedings can serve not only as an essential research source progress but also other new products and processes for better science and technology.

Chairman,

Dr. Lala Septem Riza and Dr. Eka Cahya Prima

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