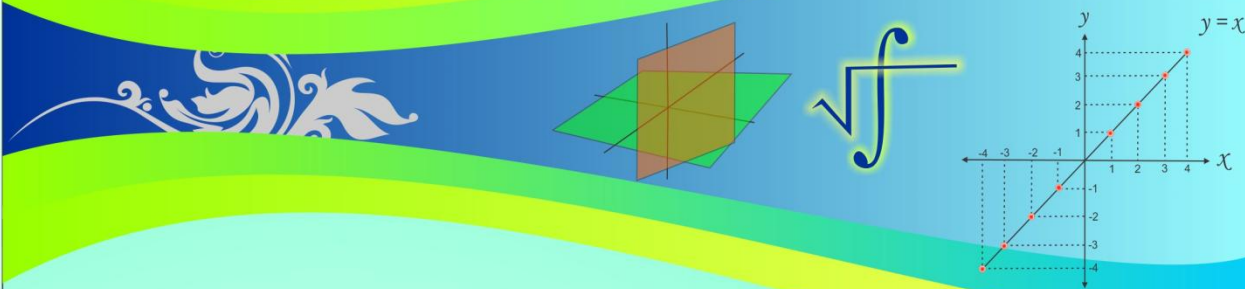




Dept of Mathematics Education  
Dept of Math Education Graduate School  
Yogyakarta State University

# Proceeding



## International Seminar on Innovation in Mathematics and Mathematics Education

# 1<sup>st</sup> ISIM-MED 2014

## “ Innovation and Technology for Mathematics and Mathematics Education”

Joint Conference on Innovation and Technology  
For Mathematics and Mathematics Education :

19<sup>th</sup> ATCM 1<sup>st</sup> ISIM-MED 3<sup>rd</sup> ISMEI 2014 2<sup>nd</sup> SeNdiMat

NOVEMBER, 26 - 30, 2014  
YOGYAKARTA STATE UNIVERSITY

Organized by :

Dept of Mathematics Education  
Dept of Math Education Graduate School  
Yogyakarta State University



Asian Technology Conference in Mathematics

P4TK Matematika, Yogyakarta



SEAMEO QITEP in Mathematics

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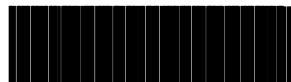
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Department of Mathematics Education  
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Yogyakarta State University  
2014

## Preface

*Assalaamu'alaikum Warahmatullaahi Wabarakaatuh.*

First of all, we would like to praise *alhamdulillah*, praise is only to Allah SWT, the most gracious and the most merciful, for blessing and giving us energy in conducting a Joint Conference on *Innovation and Technology for Mathematics and Mathematics Education* from 26 to 30 of November 2014, under coordination of Asian Technology Conference in Mathematics (ATCM), Department of Mathematics of Yogyakarta State University, SEAMEO QITEP in Mathematics, and PPPPTK Matematika.

The conference is a joint conference between the 19<sup>th</sup> ATCM, 1<sup>st</sup> ISIMMED of Department of Mathematics of Yogyakarta State University, 3<sup>rd</sup> ISMEI of SEAMEO QITEP in Mathematics, and 2<sup>nd</sup> SeNdiMat of PPPPTK Matematika. During the joint conference, there are 170 papers are presented – 7 papers presented on plenary sessions, 10 papers presented on invited speech sessions, 33 ATCM papers presented on parallel sessions, 120 papers of ISIMMED and ISMEI presented on parallel sessions. There are also 20 workshop papers and 3 posters presented in the joint conference. In addition, more than 50 SeNdiMat papers are presented separately at PPPPTK Matematika. Each conference has its own proceeding. We are honored to present the proceeding of 1<sup>st</sup> ISIMMED 2014. This proceeding contains 110 papers consist of 77 papers on mathematics education and 33 papers on mathematics and/or computer.

Presenters in this conference come from more than 60 universities and institutions from 20 countries around the world: Australia, Belgium, Brunei Darussalam, China, France, Hong Kong, India, Indonesia, Japan, Luxembourg, Malaysia, Netherlands, Oman, Papua New Guinea, Philippines, Singapore, Taiwan, Thailand, United Kingdom, and United State of America. We are fortunate to have presenters from a wide spectrum of scientists and educators, whose presentations and workshops demonstrate the most current innovation and technology for mathematics and mathematics education. Papers and presentations address a very wide spectrum of topics and ideas. We can find papers concentrating on using computer software in teaching mathematics, papers on using Internet, multimedia, and other tools for interactive and online mathematics courses delivery, as well as research papers from pure mathematics where technology was used to produce some new results.

Thanks to evolving technological tools, we are able to explore more interdisciplinary areas such as science, technology, and engineering with Mathematics which we could not before. Therefore, integrating technology into mathematics teaching, learning and research will definitely allow us to expand our knowledge horizon in mathematics.

We would like to express our appreciation to all members of the local organizers from Yogyakarta State University, SEAMEO QITEP in Mathematics, and PPPTK Matematika for the enormous task of planning and preparation of this joint conference. We thank also the International Program Committee of ATCM, especially Prof. Wei-Chi YANG for giving opportunity to host the 19<sup>th</sup> ATCM 2014, one of the most enjoyable and instructive conference in the world. We are very grateful to all plenary and invited speakers for their inspiring papers as well as all reviewers for their great contribution in reviewing papers.

We hope that the papers in this proceeding become very useful references to enrich the creative and innovative ideas that can support the advancement of mathematics education, especially in Indonesia.

*Wassalaamu'alaikum Warahmatullaahi Wabarakaatuh.*

Yogyakarta, November 26, 2014  
Chairman of the YSU Local Committee  
Sahid

## **This Event is presented by :**



**Departement of Mathematics Education  
Faculty of Mathematics and Natural Science  
Yogyakarta State University**

**Graduate Program of Mathematics Education  
Yogyakarta State University**



**SEAMEO QITEP in Mathematics**



**P4TK Matematika, Yogyakarta**

