

## **PREFACE**

**Gratitude and Alhamdulillah shall we deliver upon the presence of The Almighty God, because of the abundance of grace and the gift of Him, then the editing and the printing of the proceedings which is a compilation of all the papers of the International Conference can be done well.**

**This International Conference is an activity organized by the Faculty of Engineering, Semarang State University, in Pandanaran Hotel on 8th January 2013.**

**The theme of this International Conference is “ESTABLISHING COLLABORATION WITH EDUCATIONAL INSTITUTIONS AND INDUSTRIAL PARTNERS”. The Purpose of this conference is to provide informations about how to start cooperation or collaboration with educational institutions or industry partners. Cooperation might be in forms of cooperation of research, employee, student or college student exchange. This conference also provides opportunities for lecturers, as the main key in educational, to correspond with industries which have roles as facilitators to develop problem solving in technical education.**

**This proceeding consists of a set of parallel major papers and term papers and the editing of the proceeding has been conducted as good as possible. However, we are fully aware errors and deficiencies will always exist in its arrangement. Therefore, criticisms and suggestions are we expected for improvements in the future.**

**In this opportunity, the committee would like to thank the main speaker and companion speaker, committee and others as well who have helped and supported in organizing this conference so its publication of proceedings can be done well. The committee also would like to thank all parties involved and those who have contributed for the success of this conference.**

**Hopefully this publication of proceeding will be profitable for all of us.**

**Regards**

**Committee of Engineering International Conference**