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Appreciated to:

"Monitoring System and Control of Electric Vehicle of Jember University Based on Radio Prof. Dr. Bambang Sujanarko for his/her worthy Oral Presentation titled

on 27th - 28th August 2018 at The Santika Premiere Hotel, Malang, Indonesia at International Conference on Smart Green Technology Frequency"

ANIK NEGEA

EKNOLDG!

DIREKTU

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In Association with:

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# CONFERENCE PROCEEDINGS ABSTRACTS ICSGT 2018

### STATE POLYTECHNIC OF MALANG

Malang, 27 August, 2018

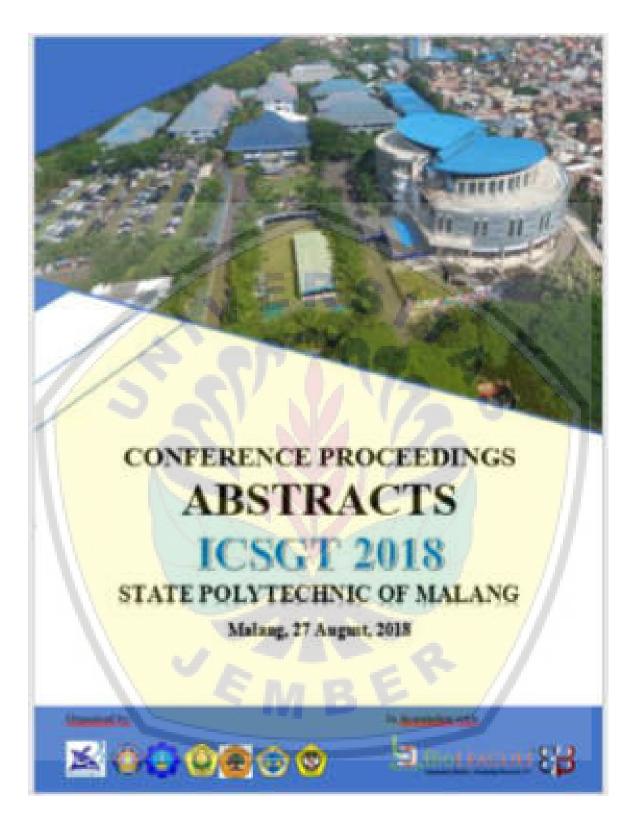
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#### ORGANIZING COMMITTEE INTERNATIONAL CONFERENCE ON SMART GREEN TECHNOLOGY (ICSGT) 2018

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#### PREFACE CONFERENCE CHAIR OF ICSGT 2018 STATE POLYTECHNIC OF MALANG

It is a big pleasure to me on behalf of the Organizing Committee of a twoday International Conference of Smart Green Technology (ICSGT) to welcome all the delegates and participants of this conference held in Malang city – the flower city.

As stated in the title, the scope of the cenference covers about developing technologies for the smart living, which are in a fact, requires many diciplines that constitute engineering as a whole and united field.

We are whole-heartedly knowledgeable that differs from academic fields and industry professionals, this conference may also give opportunities to under and post graduate students and research scholars alike to take an active part and present research papers.

By doing so, they will not only gain greater insight into their discipline, but also contribute to the existing body of knowledge in that domain.

I am certain that the conference will prove to be a healthy point of academic interaction and so the students and faculty members as well will not only give but also benefit and draw inspiration from the talks and presentations from the distinguished guests.

Malang, August 27, 2018

Bambang Sugiyono Agus Purwono



#### FOREWORD DIRECTOR OF STATE POLYTECHNIC OF MALANG

It is our great pleasure to welcome all participants, guests, keynote speakers, and presenters at this conference which is organized by the State Polytechnic of Malang.

The International Conference of Smart Green Technology 2018 (ICSGT 2018) provides a setting for discussing recent developments in a wide variety of topics of green technologies.

The conference particularly encouraged the interaction of research students and scholars with the more established academic community to present and to discuss new and current works. I believe that this conference will be a momentum to stimulate further study and research in all topics related to the green technology developments.

I would like to express my deep appreciation to keynote speakers for the efforts to present the ideas and methods in a lively and accessible way.

I would like to thank those who have responded to our call to take part and to contribute to this conference. We have a big hope that all of you enjoy, and get more knowledge and fruitful experience through the conference.

Finally, but not least, support and efforts from the conference organizing committee were absolutely essential to this conference. Therefore, I would like to acknowledge my sincere thanks to the conference organizing committee.

Malang, August 27, 2018

Awan Setiawan

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Bambang Sujanarko, Fajar Kurniawan, Moch. Hasan, Widyono Hadi, Samsul Arifin, Devita Ayu Larasati, Nita Kuswardhani

University of Jember

Abstract

Electric vehicle is one choice to develop clean pollution in ountries. In this research a electric vehicle monitors and controls to get best performance of electric vehicle. The voltage sensor, current sensor, speed sensor, and dynamic characteristic testing with control mode and driver mode. In the control mode test, there are four road condition namely straight road, turn road, down road, and ramp. In these test, the high current value happen in 7.93 A. In the speed control mode, the electric vehicle runs well on the road condition straight value reference at speed of 250 RPM. In the condition of the turning road with the speed of reference 250 RPM, the average velocity value is of 245.79 RPM, and in the decrease elevation of road, the velocity value is 206.55 rpm, and finally for increase elevation of road, the speed is 99.63 rpm. All of this numerical can be shown on master control, because all of parameter are sent by radio frequency of the system. These results have low error and have high accuracy

Keywords: electric vehicle, monitoring, control, radio frequency

Topic: Engineering