

PROCEEDINGS

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Exploring Science and Technology for Sustainable Growth of
Agroindustry Competitiveness



Kementerian
Perindustrian
REPUBLIK INDONESIA



ICoChEA

*International Conference on Chemistry
& Engineering in Agroindustry.*

2017

26th-27th October 2017
Padang, Indonesia

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**POLITEKNIK ATI PADANG
PADANG
2017**

Exploring Science and Technology for Sustainable Growth of Agroindustry Competitiveness

Proceedings of International Conference on Chemistry & Engineering in Agroindustry
ICoChEA 2017

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Introduction

Director of Polytechnic ATI Padang

Assalamu'alaikum warahmatullaahi wabarakaatuh.

Praise to the presence of Allah, SWT for implementation of International Conference on Chemistry and Engineering in Agro Industry (ICoChEA 2017). This conference brings together academics and professionals across the whole science and technology in a time of exciting technological advancement. Society has never moved faster, placing ever greater demands on science and industry, which to date have kept pace through innovation, research, and the sharing of ideas on occasions such as this. Bridging the gap between disciplines has never been more important, and Polytechnic ATI Padang is proud to be role models of vocational college within the Ministry of Industry in facilitating the interdisciplinary dissemination of cutting-edge information between subjects as diverse as chemistry, chemical engineering, logistic management and industrial technology of agro industry.

With its first international conference, Polytechnic ATI Padang builds upon this mission, holding annual gatherings for brightest minds from Indonesia and abroad to share the latest findings in their respective fields. Through collaboration with our international partners, this conference has seen enormous success, shaping development of scientific networks, increasing Indonesian authors' prominence in publications with global readership.

We are honored and humbled at the number of people who will be in attendance at this conference. We thank the invited speaker for the expertise and knowledge they will bring to the conference, and of course the inevitable discussion their talks will spur. Special thank is also extended to the members of the organizing committee for their hard work in bringing this conference together. And last but not least, we would like to thank all of the conference participants who will contribute to making this the most memorable ICoChEA 2017.

Polytechnic ATI Padang plans to hold the ICoChEA every year as part of its Annual Scientific Meeting. The theme of each conference will vary depending on current domestic and international issues. Over tomorrow, we will have the opportunity to gain precious insight into the future of science and engineering in agro industry.

Thank you,

M. Arifin, SE, MM

Preface

The International Conference on Chemistry & Engineering in Agroindustry ICoChEA 2017 was the first annual meeting in the field of chemistry and technology organized by Polytechnic ATI Padang, Indonesia. The aim of the conference was to provide a platform for researchers and practitioners from both academia and industry to meet and share cutting-edge advances in the fields of chemistry and engineering in agroindustry. The topics covered include Logistics and Supply Chain Management, Sustainable Agriculture and Natural Resource for Agro Industry (Soil, Water, Environment etc), Food Science and Bioprocess Technology, Process Engineering based on Agricultural Products, Production and Inventory Management, Modeling Simulation, Control, and Analysis of Manufacturing Processes, Green Chemistry, Green Technology and Waste Management, Applied Technology for Sustainable Development in Bioenergy and Oleochemical, Operation Research and System Modelling, The Role of IT in Sustainable Enterprise.

These proceedings will be of interest to academia, researchers, undergraduate and graduate students, policy makers, government agencies, and industries related to science and technology. The papers present to the readers are the best papers in the field that examine specifically the chemistry, chemical engineering, logistics management and industrial technology of agro industry. In addition to containing the participants' papers, this proceeding is also reinforced by the initial discourse of the speakers in the international conference and also strengthened with papers from keynote speakers.

November 2017

Editors

Table of Contents

Introduction from Director of Polytechnic ATI Padang	iv
Preface	v
Table of Contents	vi
 Keynote Speaker Articles	
Role of Supply Chain Management in Supporting Agroindustry: A Study Case from Thailand <i>Kanya Auckara-aree, Wanatchapong Kongkaew, Sivasit Wittayasilp and Nikorn Sirivongpaisal Prince of Songkla University- Thailand</i>	1-8
Transforming the Agriculture Industry with Internet of Things <i>Ery Yulian Triblas Adesta and Avicenna International Islamic University Malaysia</i>	9-14
 Articles	
Utilization of Edible Coating and Film from Mocaf Flour to Extend Shelf Life of Gelamai <i>Hafnimardiyanti, M. Ikhlas Armin</i>	15-19
The Effect of Various Plasticizer for Making Edible Coating from Canna Starch Tuber to Traditional Food (<i>Gelamai</i>) <i>M. Ikhlas Armin, Hafnimardiyanti</i>	20-26
The Correlation of Biodiesel Physical Properties and Titanium Tetrahedral Coordination in Silica- Titania Prepared by Different Mole Ratio of Precursors <i>Umar Kalmar Nizar, Yohanes Manan Sitanggang, Risma Sari, Rita Sundari, Bahrizal</i>	27-32
Biosorption of Cadmium and Copper Ions from Aqueous Solution using Banana (<i>Musa paradisiaca</i>) Shell as Low-cost Biosorbent <i>Edi Nasra, Desi Kurniawati, Bahrizal</i>	33-36
Thermal Degradation of Modified Phenol-Formaldehyde Resin with Sodium Silicate <i>Muh. Wahyu Sya'Bani, Indra Perdana Rochmadi</i>	37-40
Characteristic of Gayo Coffee's Chemical Compound Based on Different Roasting Condition – an Explorative Study <i>Dedy Rahmad, Dian Hasni, Novi Safriani, Murna Muzaifa</i>	41-44
Designing of e-Nose Mobile using Raspberry Pi as A Tool Detection of HALAL Products <i>Pharmayeni, Zulhamidi</i>	45-47
A Linear Programming Model for Hybrid Corn Seed Cultivation Planning <i>Jonrinaldi, Alexie Herryandie, Rahmatul Aulia</i>	48-51
Implementation of Preventive Maintenance in Production Machine with Age Replacement Model in PT XYZ <i>Taswir Syahfoeddin, Indra Yusuf R.</i>	52-57
Proposed Pricing of Tea Leaves in PTPN VI Unit Danau Kembar with Simulation System Approach <i>Ima Ekawati, Lisa Nesti</i>	58-61

Quality of Kahwa's Leaves Hard Candy In Terms of Food Chemistry <i>Malse Anggia, Ruri Wijayanti</i>	62-66
The Competitiveness of Crude Palm Oil in West Sumatra in The Domestic and The World Market <i>Lisa Nesti, Firwan Tan</i>	67-70
Supply Chain System of Tea Industry in West Sumatera <i>Peni Shoffiyati, Irna Ekawati</i>	71-74
Installation of Turbine Ventilators and Lighting Systems to Improve Occupational Safety and Health in The Randang Kacang Industry In West Pasaman <i>Candrianto, Silfayona</i>	75-78
Production Quality Analysis by using System Modeling (Case Study of Black Tea Production Process at PT Perkebunan Nusantara VI Solok, West Sumatera) <i>Zulhamidi, Mila Meliana Putri</i>	79-83
Effeciency Analysis of Sterilizer Machine using Overall Equipment Effectiveness (OEE) Method at PT Gersindo Minang Plantation, Pasaman Barat <i>Maryam, Selvi Novia Wahyuni, Yunizurwan</i> ,.....	84-90
Models of Centralized Inventory for Single-Vendor and Single-Buyer System with Controllable Leadtime and Batch of Production <i>Yevita Nursyanti</i> ,	91-97
Last Mile Distribution in Relief Distribution Planning for Responding a Probable Tsunami <i>Reinny Patrisina, Alfadhlani, Rahmad Inca Liperda</i>	98-104