

ISBN :



# CONFERENCE PROGRAMS AND ABSTRACT

**INTERNATIONAL CONFERENCE  
FORUM IN RESEARCH, SCIENCE, AND TECHNOLOGY 2020**

**NOVEMBER 10-11, 2020**

**Palembang, Province of South Sumatera  
Indonesia**

Organized By :

Collaborate With :



## ORGANIZING COMMITTEE

### International Advisory Committee

Prof. Erry Yulian Triblas Adesta, International Islamic University, Malaysia  
Prof. Yasushi Kiyoki, Keio University, Japan  
Assoc. Prof. Dr. Augustus E. Osseo-Asare University of Sunderland, United Kingdom  
Prof. Eddy Yusuf, Ph.D., Management Science University, Malaysia  
Prof. Win-jet Luo, Ph.D., National Chin-Yi University of Technology, Taiwan  
Yu-Lieh Wu, Ph.D., National Chin-Yi University of Technology, Taiwan  
Prof. Chiaki Ogino, Kobe University, Japan  
Wahyu Caesarendra, S.T., M.Eng., Ph.D., University of Brunei Darussalam, Brunei  
Prof. Yuliansyah, M.S.A., Ph.D., Ak., CA., University of Lampung, Indonesia  
Dr. Muhammad Haikal Satria, IPM, Jakarta Global University, Indonesia  
Assoc. Prof. Dr. Mohammed N Adurazaq, Management and Science University (MSU), Malaysia

### Steering Committee

Dr. Ing. Ahmad Taqwa, M.T, Politeknik Negeri Sriwijaya, Indonesia  
Dr. RD. Kusumanto, MM, Politeknik Negeri Sriwijaya, Indonesia  
Prof. Dr. Ir. Siti Nurmaini, Universitas Sriwijaya, Indonesia  
Prof Aldes Lesbani S.Si,M.Si,Ph.D, Universitas Sriwijaya, Indonesia  
Yu-Lieh Wu, Ph.D., National Chin-Yi University of Technology, Taiwan  
Dr. Zulhadi Zakaria, Politeknik Seberang Perai, Malaysia  
Dr.Ir.Rusdianasari, M.Si, Politeknik Negeri Sriwijaya, Indonesia  
Asst. Prof. Dr. Dodik Siswanto, S.E., M.Sc. Acc., Universitas Indonesia  
Irsyadi Yani, ST., M.Eng. PhD, Universitas Sriwijaya, Indonesia  
Dr. Gancar Candra Premananto SE., M.Si., Universitas Airlangga  
Dr. Yohandri Bow, M.Si, Politeknik Negeri Sriwijaya, Indonesia  
Dr. Yuli Yetri, M.Si, Politeknik Negeri Padang  
Dr. Marieska Verawaty, M.Si., Universitas Sriwijaya, Indonesia  
Dr. Eng. Tresna Dewi, M.Eng., Politeknik Negeri Sriwijaya, Indonesia  
Dr. Maya Fitri Oktarini S.T., M.T., Universitas Sriwijaya, Indonesia  
Ir. Indra Chandra Setiawan, M.T., PT. Toyota Motor Manufacturing, Indonesia

### General Chair

Dr.Rita Martini, SE.,M.Si.,Ak.,CA, Politeknik Negeri Sriwijaya, Indonesia

### General co-Chairs

Dr. Ade Silvia Handayani, S.T, M.T., Politeknik Negeri Sriwijaya, Indonesia  
Carlos R. Sitompul, S.T.,M.T., Politeknik Negeri Sriwijaya, Indonesia  
Ir. Jaksen M. Amin, M.Si, Politeknik Negeri Sriwijaya, Indonesia

### Publication Chairs

Dr. Nyayu Latifah Husni, S.T., M.T, Politeknik Negeri Sriwijaya, Indonesia  
Deris Stiawan, M,Kom, PhD., Universitas Sriwijaya, Indonesia  
Dr. Martha Aznury, M.Si., Politeknik Negeri Sriwijaya, Indonesia

### **Technical Program Chairs**

Fatahul Arifin, ST., Dipl Eng. EPD., M.EngSc, PhD, Politeknik Negeri Sriwijaya, Indonesia

Dr. Herlambang Saputra, S.Pd., M.Kom., Politeknik Negeri Sriwijaya, Indonesia

### **Finance Chairs & Treasurer**

Dr. Marieska Lupikawati, S.E., M.M, Politeknik Negeri Sriwijaya, Indonesia

### **Public Relation Chairs**

Nelly Masnila, S.E, M.Si, Ak, Politeknik Negeri Sriwijaya, Indonesia

Ahmad Zamheri, S.T, M.T, Politeknik Negeri Sriwijaya, Indonesia

Drs Zakaria MPd., Politeknik Negeri Sriwijaya, Indonesia

Desloehal Djumrianti, S.E., MIS., PhD, Politeknik Negeri Sriwijaya, Indonesia

Leni Novianti, M.Kom., Politeknik Negeri Sriwijaya, Indonesia

M. Miftahul Amin, S.Kom., M.Eng., Politeknik Negeri Sriwijaya, Indonesia

Dr. Ir. Abu Hasan, M.Si., Politeknik Negeri Sriwijaya, Indonesia

Ir. Irawan Rusnadi, M.T. , Politeknik Negeri Sriwijaya, Indonesia

Dr. Indrayani, ST., M.T. , Politeknik Negeri Sriwijaya, Indonesia

Dra. Tiur Simanjuntak, M.Ed.M, Politeknik Negeri Sriwijaya, Indonesia

Sukandar S.Si.,M.T,Ph.D., Institut Teknologi Bandung, Indonesia

Dr. GK Marriappen, Politeknik Seberang Perai, Malaysia

Ir. Irwin Bizzy, M.T., Universitas Sriwijaya, Indonesia

Dr. Sari Lestari Zainal Ridho, SE., M.Ec, Politeknik Negeri Sriwijaya, Indonesia

Dr. Ir.Leila Kalsum, M.T, Politeknik Negeri Sriwijaya, Indonesia

Dr. Leily Nurul Komariah, S.T., M.T., Universitas Sriwijaya, Indonesia

Dr, Rosmalinda Permatasari ST MT, Universitas Tridinanti Palembang, Indonesia

Erliza Yuniarti, S.T., M.Eng, Universitas Muhammadiyah Palembang, Indonesia

Firdaus, S.T., M.Kom., Universitas Sriwijaya, Indonesia

Ervi Cofriyanti, S.Si, M.T.I, Politeknik Negeri Sriwijaya, Indonesia

Lindawati, ST., M.Ti., Politeknik Negeri Sriwijaya, Indonesia

Yogi Eka Fernandes, S.Pd., M.T., Politeknik Negeri Sriwijaya, Indonesia

Ozkar Firdausi Homzah, S.T., M.T., Politeknik Negeri Sriwijaya, Indonesia

## Table of Content

FOREWORD FROM GENERAL CHAIR 4 <sup>th</sup> FIRST 2020 INTERNATIONAL CONFERENCE .....	2
FOREWORD FROM DIRECTOR OF STATE POLYTECHNIC OF SRIWIJAYA.....	4
ORGANIZING COMMITTEE.....	5
KEYNOTE SPEAKER .....	7
Prof. Dr. Chiaki Ogino.....	7
KEYNOTE SPEAKER .....	8
Wahyu Caesarendra, PhD .....	8
KEYNOTE SPEAKER .....	9
Prof. Yuliansyah, M.S.A., Ph.D, Akt, CA .....	9
KEYNOTE SPEAKER .....	10
Dr. H. Dodi Reza Alex Lic, Econ, MBA.....	10
KEYNOTE SPEAKER .....	11
Dr. Muhammad Haikal Satria, IPM .....	11
KEYNOTE SPEAKER .....	12
Assoc. Prof. Dr. Mohammed N. Abdulrazaq Alshekhly .....	12
RUNDOWN .....	13
The 4 <sup>th</sup> FIRST 2020 INTERNATIONAL CONFERENCE.....	13
(FORUM IN RESEARCH SCIENCE AND TECHNOLOGY) .....	13
SNAPTEKMAS (Seminar Nasional Aplikasi Teknologi pada Masyarakat) 2020.....	13
RUNDOWN .....	16
TRACK 1.....	16
(Engineering and Science) .....	16
RUNDOWN .....	19
TRACK 1.....	19
(Engineering and Science) .....	19
RUNDOWN .....	22
TRACK 1.....	22
(Engineering and Science) .....	22
RUNDOWN .....	26
TRACK 2.....	26
(Computer Science, , Computer Engineering, Information System, Informatics Management)	26
.....	26
RUNDOWN .....	30
TRACK 2.....	30
(Computer Science, , Computer Engineering, Information System, Informatics Management)	30
.....	30

RUNDOWN .....	33
TRACK 3 (Social Science).....	33
RUNDOWN .....	36
TRACK 3 (Social Science).....	36
CHARACTERIZATION OF BLENDING COMPOSITION VARIATIONS IN FATTY ACID METHYL ESTER (FAME) BIOFUELS WITH DIESEL TO BIODIESEL .....	51
ID : 2079 .....	51
Yusabri <sup>1,2</sup> , Muhammad Yerizam <sup>3</sup> , Aida Syarif <sup>4</sup> .....	51
<sup>1</sup> Applied Master of Renewable Energy Engineering, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	51
<sup>2</sup> Crude Distillation and Gas Plant Production, PT. Pertamina (Persero) Refinery Unit III, Jalan Beringin, Kompleks Pertamina Refinery Unit III Plaju, Palembang, 30268 Indonesia. ....	51
<sup>3</sup> Chemical Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	51
<sup>4</sup> Renewable Energy Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia. ....	51
PROCESSING PLASTIC WASTE HDPE AND PP ON PYROLYSIS TEMPERATURE USING CU-AL2O3 CATALYST INTO AN ALTERNATIVE LIQUID FUEL.....	52
ID : 2082 .....	52
Pamilia Coniwanti <sup>1</sup> , Fitri Hadiah <sup>1</sup> , David Bahrin <sup>1</sup> , Liza Novriani <sup>1</sup> , Gracia Mei Lie Justina <sup>1</sup> , Robinsyah <sup>1</sup> .....	52
<sup>1</sup> Chemical Engineering Department, Sriwijaya of University, Jl. Raya Palembang-Prabumulih KM. 32, Inderalaya, Ogan Ilir 30662, Indonesia .....	52
THE PURIFICATION OF BIOGAS WITH MONOETHANOLAMINE (MEA) SOLUTION BASED ON THE BIOGAS FLOW RATE .....	53
Id : 2749.....	53
Yohandri Bow <sup>1</sup> , Leila Kalsum <sup>2</sup> , Abu Hasan <sup>2</sup> , A. Husaini <sup>3</sup> , Rusdianasari <sup>2</sup> .....	53
<sup>1</sup> Energy Engineering Department, Politeknik Negeri Sriwijaya, Palembang, 30139 Indonesia.....	53
<sup>2</sup> Renewable Energy Engineering Department, Politeknik Negeri Sriwijaya, Jalan .....	53
Srijaya Negara, Palembang, 30139 Indonesia.....	53
<sup>3</sup> Chemical Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya, .....	53
Negara, Palembang, 30139 Indonesia. ....	53
FILTRATION AND ELECTROCOAGULATION AS A COMBINED PROCESS FOR ELECTROPLATING WASTEWATER.....	54
ID : 2758 .....	54
Rusdianasari <sup>1,*</sup> , Yohandri Bow <sup>2</sup> , Adi Syakdani <sup>3</sup> , Muhammad Taufik <sup>3</sup> .....	54
<sup>1</sup> Renewable Energy Engineering Department, PoliteknikNegeri Sriwijaya, Palembang, Indonesia.....	54

2 Energy Engineering Departmen, Politeknik Negeri Sriwijaya, Palembang, Indonesia..	54
3Chemical Engineering Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia .....	54
STUDY OF TEMPERATURE AND USE OF CATALYSTS IN THE PYROLYSIS OF LDPE PLASTIC WASTE ON THE QUANTITY OF OIL FUEL PRODUCTS PRODUCED .....	55
ID : 2415 .....	55
Novarini <sup>1</sup> , Sigit Kurniawan <sup>2</sup> , Rusdianasari <sup>3</sup> , Yohandri Bow <sup>4</sup> .....	55
<sup>1</sup> Mechanical Engineering Department, Politeknik Jambi, Jambi, Indonesia.....	55
<sup>2</sup> Electronic Engineering Department, Politeknik Jambi, Jambi, Indonesia .....	55
<sup>3</sup> Chemical Engineering Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia .....	55
<sup>4</sup> Energy Engineering Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia .	55
TITANIUM DIOXIDE SOAKING TIME EFFECTS ON DSSC POWERS AND EFFICIENCY .....	56
ID : 2077 .....	56
Rika Musiana <sup>1</sup> , Abu Hasan <sup>2</sup> , RD Kusumanto <sup>3</sup> .....	56
<sup>1</sup> Applied Renewable Energy Engineering Study Program, Politeknik Negeri Sriwijaya,...	56
Jalan Srijaya Negara, Palembang, 30139 Indonesia. ....	56
<sup>2</sup> Renewable Energy Engineering Department, Politeknik Negeri Sriwijaya, Jalan .....	56
Srijaya Negara, Palembang, 30139 Indonesia. <sup>3</sup> Renewable Energy Engineering Department, Politeknik Negeri Sriwijaya, Jalan .....	56
Srijaya Negara, Palembang, 30139 Indonesia.....	56
EFFECT OF FEED COMPOSITION AND PRODUCT QUANTITY OF CO-PROCESSING REFINED BLEACHED DEODORIZED PALM OIL (RBDPO).....	57
Id : 2086.....	57
Juarsa <sup>12</sup> , Aida Syarif <sup>3</sup> , Leila Kalsum <sup>3</sup> .....	57
<sup>1</sup> Applied Master of Renewable Energy Engineering, Politeknik Negeri Sriwijaya,.....	57
Jalan Srijaya Negara, Bukit Besar, Palembang, 30139, Indonesia.....	57
<sup>2</sup> Crude Distillation and Light End Production, Pertamina Ltd. (Persero) Refinery Unit III, Beringin Road, Complex of Pertamina Refinery Unit III Plaju, Palembang, 30268 Indonesia .....	57
<sup>3</sup> Renewable Energy Engineering Department, Politeknik Negeri Sriwijaya,.....	57
Jalan Srijaya Negara, Bukit Besar, Palembang, 30139, Indonesia.....	57
TOFU INDUSTRIAL LIQUID WASTE TREATMENT BY ELECTROCOAGULATION METHOD .....	58
ID : 2748 .....	58
Ibnu Hajar <sup>1,*</sup> , Fadarina <sup>1</sup> , Mustain Zamhari <sup>1</sup> , Selastia Yuliaty <sup>1</sup> .....	58
<sup>3</sup> Chemical Engineering Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia	58
EFFECT OF TEMPERATURE ON BIOFUELS PRODUCTION WITH CATALYTIC CRACKING PROCESS.....	59
ID : 2626 .....	59

KA Ridwan <sup>1,2</sup> , Aneasari M <sup>1</sup> , Taufik Jauhari <sup>1</sup> , Ida Febriana <sup>1</sup> .....	59
<sup>1</sup> Chemical Engineering Department, State Polytechnic of Sriwijaya, South Sumatra, Indonesia.....	59
EFFECT OF BENTONITE ON THE YIELD AND COMPOSITION OF PRODUCTS FROM THERMOLYSIS OF POLYSTYRENE WASTE .....	60
ID : 2573 .....	60
Lety Trisnaliani <sup>1a</sup> , Aida Syarif <sup>1</sup> , Sahrul Effendy <sup>1</sup> , Tahdid <sup>1</sup> , Rima Daniar <sup>1</sup> .....	60
<sup>1</sup> Energy Department, Politeknik Negeri Sriwijaya .....	60
PRODUCTION OF BIO-PELET BRIQUETTES FROM COCONUT SHELL WASTE AS ALTERNATIVE ENERGY FOR HOUSEHOLD SCALE .....	61
ID : 2665 .....	61
Muhammad Yerizam* <sup>1</sup> , Muhammad Zaman 1, Taufiq Jauhari1 , Nur Yuli 1, Riwen Setiawan1 , Umaidella Afrilla1.....	61
<sup>1</sup> Jurusan Teknik Kimia,Politeknik Negeri Sriwijaya Jl. Srijaya Negara, Bukit Besar, Palembang 30139, Indonesia.....	61
CATALYTIC PYROLYSIS OF STYROFOAM WASTE USING ZEOLITE CATALYST TO PRODUCE LIQUID FUEL .....	62
ID : 2707 .....	62
Zurohaina <sup>1*</sup> , Irawan Rusnadi, Fatria, Arizal Aswan, Rima Daniar .....	62
<sup>1</sup> Department of Chemical Engineering, Polytechnic of Sriwijaya, Palembang, Indonesia .....	62
PRODUCTION OF GREEN DIESEL FROM CRUDE PALM OIL (CPO) THROUGH HYDROTREATING PROCESS BY USING ZEOLITE CATALYST.....	63
ID : 2715 .....	63
Ahmad Zikri* , Indah Puspita, Erlinawati, Sutini PL, Agus M Elbi Zalita P, Andre Krismantoro .....	63
Energy Engineering, Chemical Engineering Department, State Polytechnic of Sriwijaya 63 Jl. Srijaya Negara Bukit Besar Palembang 30139, Telp +62711353414 / fax +62711355918.....	63
EFFECT OF ADDING PALM OIL MILL EFFLUENT (POME) AND SLURRY ON BIOGAS FROM COW MANURE TO PRODUCED METHANE GAS .....	64
ID : 2723 .....	64
Muhammad Hanif Fatin <sup>1,*</sup> , A. Husaini <sup>2</sup> , Leila Kalsum <sup>3</sup> .....	64
<sup>1</sup> Applied Renewable Energy Engineering Study Program, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	64
<sup>2</sup> Chemical Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	64
<sup>3</sup> Renewable Energy Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia. ....	64
CHARACTERIZATION OF THERMAL ACTIVATED FLY ASH ADSORBENT BY STUDYING THE EFFECT OF TEMPERATURE .....	65

ID : 2796 .....	65
Aida Syarif <sup>1</sup> , Rusdianasari, M.Yerizam,Sayhirmanyusi, .....	65
<sup>1</sup> Jurusan Teknik Kimia Program Studi Magister Terapan Teknik Energi Baru Terbarukan .....	65
Politeknik Negeri Sriwijaya, Jalan Srijaya Negara Bukit Besar Palembang .....	65
DRYING RATE OF SKIM MILK FROM VIRGIN COCONUT OIL REMAINING WATER .....	66
ID : 2516 .....	66
A Hasan <sup>1</sup> , I Purnamasari <sup>1,2</sup> , M Yerizam <sup>1</sup> , A Hasan <sup>1</sup> and R Junaidi <sup>1</sup> .....	66
<sup>1</sup> Chemical Engineering Department, State Polytechnic of Sriwijaya, South Sumatera, Indonesia.....	66
TOFU INDUSTRIAL WASTEWATER TREATMENT BY ELECTROCOAGULATION METHOD .....	67
ID : 2656 .....	67
Ibnu Hajar <sup>1</sup> ,* Fadarina <sup>1</sup> , Mustain Zamhari <sup>1</sup> , Selastia Yuliaty <sup>1</sup> .....	67
<sup>3</sup> Chemical Engineering Department .....	67
BIOCELLULOSE MEMBRANE OF COCONUT WATER.....	68
ID : 2792 .....	68
Elina Margaretty <sup>1</sup> , Erwana Dewi <sup>2</sup> , Leila Kalsum <sup>3</sup> , Aisyah Suci Ningsih <sup>1</sup> .....	68
<sup>1</sup> ). Lecturer D3-Chemical Engineering Sriwijaya State Polytechnic, Palembang, Indonesia .....	68
<sup>2</sup> ).Lecturer D4- Industrial Chemical Technology, Sriwijaya State Polytechnic, Palembang, Indonesia.....	68
<sup>3</sup> ). Lecturer S2- Renewable Energy Engineering, Sriwijaya State Polytechnic, Palembang, Indonesia.....	68
SURFACTANT METHYL ESTER SULFONATE FROM CRUDE PALM OIL (CPO)- BASED METHYL ESTER.....	69
ID : 2794 .....	69
Jaksen <sup>1</sup> , Idha Silviyati <sup>1</sup> , Endang Supraptiah <sup>1</sup> , Rima Daniar <sup>2</sup> .....	69
<sup>1</sup> ).Lecturer of Chemical Engineering Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia.....	69
<sup>2</sup> ).Lecturer of Energy Engineering Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia.....	69
OIL PALM EMPTY BUNCHES AS AN ALTERNATIVE RAW MATERIAL FOR MAKING BIOPLASTICS .....	70
ID : 2250 .....	70
Husaini A <sup>1</sup> , Zaman M <sup>1</sup> , Chodijah S <sup>1</sup> , Hilwatullisan <sup>1</sup> , Ibrahim <sup>2</sup> .....	70
<sup>1</sup> Chemical engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	70
<sup>2</sup> Chemical engineering Study Program, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	70
<i>Corresponding author E-mail address :husaini@polsri.ac.id</i> .....	70



THE EFFECT OF THE CATALYST (NaOH) ON THE PROCESSING OF WASTE USED OIL INTO LIQUID FUEL .....	71
ID : 2511 .....	71
Azharuddin <sup>1</sup> , Syafei <sup>1</sup> , Didi Suryana <sup>1</sup> , Indra HB <sup>1</sup> , M R Rahmaddy <sup>1</sup> .....	71
Y Pratomo <sup>1</sup> , M A Ariasya <sup>1</sup> .....	71
<sup>1</sup> ) Mechanical Engineering Department, State Polytechnic of Sriwijaya, Palembang, 30154, Indonesia.....	71
DESIGN AND PROTOTYPE OF PAVING BLOCK MAKING MACHINE .....	72
ID : 2766 .....	72
Ella Sundari <sup>1</sup> , Soegeng Witjahjo <sup>1</sup> , Eka Satria Martomi <sup>1</sup> , Dodi Tafrant <sup>1</sup> .....	72
Lecturer of Mechanical Engineering Departement, Sriwijaya State Polytechnic .....	72
*Jln. Srijayanegara Bukit Lama, Palembang.....	72
WATER QUALITY MONITORING SYSTEM IN GURAME FISH CULTIVATION BASED ON ESP32 .....	73
ID : 2094 .....	73
Sujito <sup>1</sup> , Mokh. Sholihul Hadi <sup>1</sup> ,I Made Wirawan <sup>1</sup> , Faiz Syaikhoni <sup>2</sup> , Abdullah Iskandar Syah <sup>2</sup> , .....	73
Danny Mayrawan <sup>2</sup> .....	73
<sup>1</sup> Dosen Jurusan Teknik Elektro, Fakultas Teknik, Universitas Negeri Malang .....	73
<sup>2</sup> Mahasiswa Jurusan Teknik Elektro, Fakultas Teknik, Universitas Negeri Malang.....	73
OPTIMIZATION OF STROKE REHABILITATION HAND COMPONENT OF 3D PRINTING WITH TAGUCHI METHOD APPROACH.....	74
ID : 2426 .....	74
Fatahul Arifin <sup>1</sup> , Fenoria Putri <sup>1</sup> , Iskandar <sup>1</sup> , Mulyadi <sup>1</sup> , Suparjo <sup>1</sup> , Franando <sup>1</sup> , Yusuf Dewantoro Herlambang <sup>2(*)</sup> .....	74
<sup>1</sup> Mechanical Engineering Department, Politeknik Negeri Sriwijaya, Palembang, 30154, Indonesia.....	74
<sup>2</sup> Mechanical Engineering Department, Politeknik Negeri Semarang, Semarang, 50275, Indonesia.....	74
EXPERIMENTAL RESEARCH OF THE INFLUENCE OF HOT MACHINING METHOD ON AISI 4340 LATHE MACHINE PROCESS TOWARDS SPECIFIC CUTTING ENERGY AND SURFACE ROUGHNESS.....	75
ID : 2457 .....	75
Ismail T <sup>1</sup> , Dyos S <sup>2</sup> , Joni Y <sup>3</sup> , Samuel S <sup>4</sup> ,Abdurahman W <sup>5</sup> , Aldi Y <sup>6</sup> .....	75
<sup>123456</sup> Mechanical Engineering, Engineering Faculty of Sriwijaya University,.....	75
Jln Raya Palembang - Inderalaya Km 32, Indonesia.....	75
STUDY OF CAPACITOR PLACEMENT TO IMPROVE THE VOLTAGE PROFILE IN CONTINGENCY CONDITIONS OF THE 150 KV MADURA ELECTRICITY POWER SYSTEM .....	76
ID : 2487 .....	76
Sujito <sup>1*</sup> , M. Z. Falah <sup>1</sup> , M. R. Faiz <sup>1</sup> .....	76

<sup>1</sup> Electrical Engineering Department, Universitas Negeri Malang, Indonesia .....	76
THE INVESTIGATION OF SEA SALT SOILING ON PV PANEL .....	77
ID : 2488 .....	77
Tresna Dewi <sup>1</sup> , Ahmad Taqwa <sup>2</sup> , Rusdianasari <sup>2</sup> , RD Kusumanto <sup>1</sup> , and Carlos Sitompul <sup>1</sup> ...	77
<sup>1</sup> Electrical Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	77
<sup>2</sup> Renewable Energy Engineering Department, Politeknik Negeri Sriwijaya, Jalan .....	77
Srijaya Negara, Palembang, 30139 Indonesia.....	77
REAL-TIME WIRELESS CONCEPT OF VEHICLE TO VEHICLE CHARGING SYSTEM.....	78
ID: 2490 .....	78
Yurni Oktarina <sup>1</sup> , Tresna Dewi <sup>1</sup> , Pola Risma <sup>1</sup> , and Muhammad Nawawi <sup>1</sup> .....	78
<sup>1</sup> Electrical Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara Palembang, Indonesia 30139.....	78
OPTIMIZATION OF FDM 3D PRINTING PROCESS PARAMETER FOR IMPROVING POROSITY ACCURACY OF PLA SCAFFOLD.....	79
ID : 2522 .....	79
Zainal Abidin <sup>1</sup> , M. Yanis <sup>1</sup> , M. Zahri Kadir <sup>1</sup> , Astuti <sup>1</sup> , Akbar Teguh Prakoso <sup>1</sup> , Edo Syahrizal <sup>1</sup> , Ardiyansyah Syahrom <sup>2,3</sup> , Hasan Basri <sup>1,*</sup> .....	79
Department of Mechanical Engineering, Faculty of Engineering, Universitas Sriwijaya, Indralaya 30662, Ogan Ilir, South Sumatera, Indonesia .....	79
Department of Applied Mechanics and Design, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai 81310, Johor, Malaysia .....	79
Medical Device and Technology Center (Meditec), Institute of Human-Centered and Engineering (IHCE), Universiti Teknologi Malaysia, Skudai 81310, Johor, Malaysia.....	79
FATIGUE PREDICTION OF POROUS MAGNESIUM BONE SCAFFOLD USING FINITE ELEMENT METHOD .....	80
ID: 2527 .....	80
Risky Utama Putra <sup>1</sup> , Akbar Teguh Prakoso <sup>1</sup> , Amir Putra Md Saad <sup>2,3</sup> , Ardiyansyah Syahrom <sup>2,3</sup> , Hasan Basri <sup>1,*</sup> .....	80
Mechanical Engineering Master Study Program, Faculty of Engineering, Universitas Sriwijaya, Indralaya 30662, Ogan Ilir, South Sumatera, Indonesia .....	80
Department of Applied Mechanics and Design, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai 81310, Johor, Malaysia .....	80
Medical Device and Technology Center (Meditec), Institute of Human-Centered and Engineering (IHCE), Universiti Teknologi Malaysia, Skudai 81310, Johor, Malaysia.....	80
THE GROUNDING SYSTEM IN FEEDER TOMAT PT. PLN (PERSERO) ULP MARIANA .....	81
ID : 2763 .....	81
Bambang Guntoro, Siswandi, Zainuddin Idris, M. Yunus .....	81
Email : bguntoro57@gmail.com .....	81
OPTIMIZATION OF PRODUCTION PROCESS PARAMETERS OF DLP TYPE 3D PRINTER DESIGN	

FOR PRODUCT ROUGHNESS VALUE.....	82
ID : 2510 .....	82
DP Putra <sup>1</sup> , Romli <sup>2</sup> , D Seprianto <sup>2</sup> , Hasan Basri <sup>1,*</sup> .....	82
<sup>1</sup> Mechanical Engineering Master Study Program, Universitas Sriwijaya .....	82
Jalan Srijaya Negara Bukit Besar Palembang, Sumatera Selatan, 30139, Indonesia .....	82
<sup>2</sup> Mechanical Engineering Department, Politeknik Negeri Sriwijaya.....	82
Jalan Srijaya Negara Bukit Besar Palembang, Sumatera Selatan, 30139, Indonesia .....	82
DESIGN OF ELECTRONIC INSTRUMENTS AS TOOLS AIR POLLUTION DETECTION.....	83
ID : 2592 .....	83
Ali Nurdin <sup>1</sup> ( <b>ali_viking_kps@yahoo.com</b> . aalinurdin67@gmail.com), Jon Endri, .....	83
Ibnu Ziad <sup>3</sup> , Ciksadan <sup>4</sup> .....	83
<sup>1,2,3,4</sup> Politeknik Negeri Sriwijaya .....	83
<i>Jl. Srijaya Negara Bukit Besar – Palembang</i> .....	83
Datalogger experimental analysis based on arduino mega 2560 on a 100 wp monocrystalline solar panel using perforated plate.....	84
ID : 2249 .....	84
W Adipradana <sup>1</sup> , A Sofijan <sup>2</sup> , Rahmawati <sup>3</sup> , I Bizzy <sup>4</sup> , R Sipahutar <sup>5</sup> , M A Fajri <sup>6</sup> .....	84
<sup>1,2,3,6</sup> Department of Electrical Engineering, Engineering Faculty, Sriwijaya University, Indonesia.....	84
<sup>4,5</sup> Department of Mechanical Engineering, Engineering Faculty, Sriwijaya University, Indonesia.....	84
A_sofijan@ft.unsri.ac.id.....	84
THE EFFECT OF INDUCTION HEATING ON TENSILE TEST SPECIMENS' CLAMPING PRODUCTS THROUGH THE MEDIUM CARBON STEEL MATERIALS' ENGINEERING TECHNIQUE .....	85
ID : 2722 .....	85
Romli <sup>1,*</sup> , M. Afif Rizkiawan <sup>1</sup> , Karmin <sup>1</sup> , Sairul Effendi <sup>1</sup> , Firdaus <sup>1</sup> .....	85
<sup>1</sup> Mechanical Engineering Department, State Polytechnic of Sriwijaya, Indonesia .....	85
DEVELOPMENT INTERNET OF THINGS FOR WATER QUALITY MONITORING SYSTEM FOR GOURAMY CULTIVATION.....	86
ID: 2484 .....	86
D Mayrawan <sup>2</sup> , Sujito <sup>1,2*</sup> , I M Wirawan <sup>2</sup> , F S Aziz <sup>1,2</sup> , A I Syah <sup>2</sup> , M A A Shidiqi <sup>2</sup> .....	86
<sup>1</sup> Electrical Engineering Postgraduate, Universitas Negeri Malang, Indonesia .....	86
<sup>2</sup> Electrical Engineering Department, Universitas Negeri Malang, Indonesia .....	86
CONTINGENCY ANALYSIS ON 150 KV ELECTRICITY POWER SYSTEM ON THE MADURA ISLAND BASED ON THE 1P1Q METHOD .....	87
ID : 2485 .....	87
M Z Falah <sup>1</sup> , Sujito <sup>1*</sup> , I M Wirawan <sup>1</sup> . .....	87
<sup>1</sup> Electrical Engineering Department, Universitas Negeri Malang, Indonesia .....	87
PROTOTYPE OF SMALL SAVONIUS WIND TURBINE .....	88

ID : 2797 .....	88
Ozkar F. Homzah <sup>1,*</sup> Tri Widagdo <sup>1</sup> Mardiana <sup>1</sup> Ibnu Asrofi <sup>1</sup> Destra A Pratama <sup>2</sup> .....	88
<sup>1</sup> Department of Mechanical Engineering, Politeknik Negeri Sriwijaya, Palembang, Indonesia.....	88
<sup>2</sup> Department of Electrical Engineering, Politeknik Negeri Sriwijaya, Palembang, Indonesia .....	88
THE FORMATION OF MACHINE COMPONENTS USING POWDER METALLURGY METHOD UTILIZING METAL POWDER FROM GRINDING PROCESS .....	89
ID : 2780 .....	89
Yahya, S.T.,M.T <sup>1</sup> , Muhammad Rasid, S.T.,M.T <sup>2</sup> ,.....	89
Dicky Seprianto, S.T.,M.T. <sup>3</sup> , Siproni, S.T.,M.T. <sup>4</sup> .....	89
<i>Departement of Mecahanical Engineering, Politeknik Of Sriwijaya, Palembang, Indonesia</i> .....	89
SIMULATION-BASED ANALYSIS ON VACUUM ACTUATED SOFT ROBOTIC GRIPPER: TRAJECTORY AND STRESS INTENSITY FACTOR .....	90
ID :2736 .....	90
Noer Fadzri Perdana Dinata <sup>1</sup> , Hasan Basri <sup>1,*</sup> .....	90
<sup>1</sup> Mechanical Engineering Master Study Program, Universitas Sriwijaya, Jalan Srijaya Negara Bukit Besar Palembang, Sumatera Selatan, 30139, Indonesia.....	90
*Corresponding author. Email: hasan_basri@unsri.ac.id .....	90
FAILURE ANALYSIS AND PERFORMANCE ASSESSMENT OF TUBULAR AIR HEATER AT PLTU SOUTH SUMATRA V .....	91
ID : 2731 .....	91
Lulu Khoirunnisa <sup>1</sup> , Hasan Basri <sup>2,*</sup> .....	91
<sup>1</sup> Mechanical Engineering Master Study Program, Universitas Sriwijaya.....	91
Jalan Srijaya Negara Bukit Besar Palembang, Sumatera Selatan, 30139, Indonesia .....	91
AUTOMATIC SIMULATION OF MOVING PRODUCTS USING LINE FOLLOWER AND CONVEYOR .....	92
ID : 2787 .....	92
Almadora Anwar Sani <sup>1,*</sup> Rachmat Dwi S <sup>2</sup> , Irawan Malik <sup>3</sup> , Ali Medi <sup>4</sup> , Agus Nugraha <sup>5</sup> .....	92
<sup>1</sup> mechanical engineering, Politeknik Negeri Sriwijaya, .....	92
<sup>2</sup> mechanical engineering, Politeknik Negeri Sriwijaya .....	92
<sup>3</sup> mechanical engineering, Politeknik Negeri Sriwijaya .....	92
<sup>4</sup> mechanical engineering, Politeknik Negeri Sriwijaya .....	92
<sup>5</sup> mechanical engineering, Politeknik Negeri Sriwijaya .....	92
MONITORING DEPTH OF DISCHARGE OF A VALVE REGULATED LEAD ACID BATTERY IN A STANDALONE PV SYSTEM.....	93
ID : 2751 .....	93
Mirdiansyah <sup>1,*</sup> Ahmad Taqwa <sup>2</sup> , Yohandri Bow <sup>3</sup> .....	93

<sup>1</sup> Applied Renewable Energy Engineering Study Program, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	93
<sup>2</sup> Renewable Energy Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia .....	93
<sup>3</sup> Energy Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	93
The Effect of Parameter Process 3D Printer Technology Digital Light Processing to Geometric of Shaft.....	94
ID : 2650 .....	94
A Zamheri <sup>1,*</sup> D Seprianto <sup>2</sup> , Carlos RS <sup>3</sup> , Indri A <sup>4</sup> , TC Persada <sup>5</sup> .....	94
<sup>1</sup> Mechanical Engineering Department, State Polytechnic of Sriwijaya, Indonesia .....	94
<sup>2</sup> Mechanical Engineering Department, State Polytechnic of Sriwijaya, Indonesia .....	94
<sup>3</sup> Electrical Engineering Department, State Polytechnic of Sriwijaya, Indonesia .....	94
<sup>4</sup> Informatics Management Department,, State Polytechnic of Sriwijaya, Indonesia.....	94
<sup>5</sup> Mechanical Engineering Department, State Polytechnic of Sriwijaya, Indonesia.....	94
BENDING TEST GALVALUM COLD FORMED STEEL BEAM WITH VARIATION MORTAR AND REINFORCEMENT BARS.....	95
ID : 2073 .....	95
Fadhila Firdausa, Sri Rezki Artini, Ahmad Syapawi, Puryanto .....	95
Civil Engineering Polytechnic of Sriwijaya.....	95
INDEX OF RETAINED STRENGTH AND WEIGHT LOSS ON FLEXIBLE PAVEMENT AC-WC AND HRS-WC USING POLYMER PRODUCTS ETHYLENE VINYL ACETATE (EVA) AND STYRENE-BUTADIENE-STYRENE (SBS) .....	95
ID : 2089 .....	95
Pataras M <sup>1</sup> , Kadarsa E <sup>2</sup> , Permata D Y <sup>3</sup> , Khairunnisa S <sup>4</sup> , Akbar M A <sup>5</sup> , Pratama Y <sup>6</sup> .....	96
<sup>1</sup> Civil Engineering Department, Sriwijaya University, Raya Prabumulih Road, Indralaya, Sumatera Selatan .....	96
<sup>2</sup> Civil Engineering Department, Sriwijaya University, Raya Prabumulih Road, Indralaya, Sumatera Selatan .....	96
<sup>3</sup> Civil Engineering Department, Sriwijaya University, Raya Prabumulih Road, Indralaya, Sumatera Selatan .....	96
UTILIZATION OF RESIDUAL SAND MATERIALS FROM THE MINING OF KAOLIN AND TIN IN BANGKA ISLAND ON FLEXIBLE PAVEMENT STRUCTURE .....	97
ID : 2101 .....	97
Adhitya B B <sup>1</sup> , Pataras M <sup>2</sup> , Kurnia A Y <sup>3</sup> , Wiranda N <sup>4</sup> , Wulansari W <sup>5</sup> , Islami B M <sup>6</sup> .....	97
<sup>1</sup> Civil Engineering Department, Sriwijaya University, Indralaya, Sumatera Selatan .....	97
<sup>2</sup> Civil Engineering Department, Sriwijaya University, Indralaya, Sumatera Selatan .....	97
<sup>3</sup> Civil Engineering Department, Sriwijaya University, Indralaya, Sumatera Selatan .....	97
THE INFLUENCE OF ANADARA GRANOSA'S SHELL WASTE AS A SUBSTITUTE OF FINE AGGREGATE IN MIXED ASPHALT CONCRETE WEARING COURSE (AC-WC) .....	98

ID : 2218 .....	98
Ika Sulianti <sup>1</sup> , Ibrahim <sup>1</sup> , Indah Ayu Wiloka <sup>1</sup> , Reta Iftitah Sari <sup>1</sup> .....	98
1. State Polytechnic of Sriwijaya, Jl. Sriwijaya Negara Bukit Besar Palembang 30139, .....	98
South Sumatera – Indonesia.....	98
ANALYSIS OF THE IMPACT OF PALEMBANG- INDRALAYA (PALINDRA) TOLL ROAD TO PALEMBANG – INDRALAYA NATIONAL ROAD SERVICE LEVELS .....	99
ID : 2236 .....	99
S Nisumanti*, N Puspita, and S Mulyaningsih, .....	99
Civil Engineering Department, Universitas Indo Global Mandiri, Jalan Jend. Sudirman KM.4 No.629 Palembang, Indonesia .....	99
THE EFFECT OF FLY ASH AS A PART CEMENT INSTITUTION ON HIGH-QUALITY CONCRETE FC'35 .....	100
ID: 2402 .....	100
<b>Sazili Harnawansyah<sup>1</sup>, Herlinawati<sup>1(*)</sup>, Bastoni Hasasi<sup>1</sup>, Radius Pranoto<sup>1</sup> ....</b>	<b>100</b>
1 Civil Engineering Department, Sriwijaya State Polytechnic, Palembang, 30154, Indonesia .....	100
THE USE OF COLD-FORMED STEEL AS A SUBSTITUTE FOR REINFORCEMENT ON STRUCTURAL OF LIGHTWEIGHT CONCRETE BEAMS.....	101
ID : 2553 .....	101
Mahmuda <sup>1</sup> , Revias <sup>2</sup> , Siswa Indra <sup>3</sup> , Sumiati <sup>4</sup> .....	101
Civil Engineering Departement, State Polytechnic Sriwijaya, Sriwijaya Negara street, Bukit Besar Palembang, 30139, Indonesia.....	101
THE EFFECT OF AIR PRESSURE ON FOAMED MORTAR PRODUCTION.....	102
ID : 2724 .....	102
Ibrahim <sup>1</sup> , Amiruddin <sup>1</sup> , and Ika Sulianti <sup>1</sup> , and Agus Subrianto <sup>1</sup> .....	102
1. State Polytechnic of Sriwijaya, Jl. Sriwijaya Negara Bukit Besar Palembang 30139, ....	102
South Sumatera – Indonesia.....	102
THE CHARACTERISTICS OF FOLDING BICYCLE USERS AGAINST THE SELECTION OF TRANSPORTATION MODES IN PALEMBANG CITY.....	103
ID : 2767 .....	103
Efrilia Rahmadona <sup>1</sup> , Sudarmadji <sup>2</sup> , Norca Praditya <sup>3</sup> , M. Ade Surya Pratama <sup>4</sup> .....	103
<sup>1</sup> Politeknik Negeri Sriwijaya .....	103
<sup>2</sup> Politeknik Negeri Sriwijaya .....	103
<sup>3</sup> Politeknik Negeri Sriwijaya .....	103
<sup>4</sup> Politeknik Negeri Sriwijaya .....	103
EFFECT OF AMOUNT POTASSIUM HYDROXIDE, METHANOL, AND ELECTRICITY CURRENT ON THE PRODUCTION PROCESS OF METHYL ESTERS FROM USED FRYING OIL .....	104
ID : 2081 .....	104
Rosdiana Moeksin.....	104

Teknik Kimia, Universitas Sriwijaya Palembang-Indonesia. ....	104
OPTIMIZATION OF PUBLIC TRASPORT SERVICEBUS RAPID TRANSIT (BRT) TRANS MUSI IN THE CITY OFPALEMBANG .....	105
ID : 2611 .....	105
Moch.Absor,Yusri, A.Latif, A. Fuad Z.Muhammad Yusri R.Civil Engineering, Politeknik Negeri Sriwijaya, Palembang, Indonesia .....	105
absorputrasyam@gmail.com, yusribermawi18@gmail.com,Latiftamim56@yahoo.com,fuadzainin13@yahoo.com, muhammadyusririzki@gmail.com .....	105
LIFE CYCLE ASSESSMENT (LCA) IN PULP & PAPER MILLS: COMPARISON BETWEEN MFO WITH BIOMASS IN LIME KILN .....	106
ID : 2109 .....	106
Yonki Alexander Volta <sup>1</sup> , Rusdianasari <sup>2</sup> , Syahirman Yusi <sup>3</sup> .....	106
<sup>1</sup> Applied Renewable Energy Engineering Study Program, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia. ....	106
<sup>2</sup> Renewable Energy Engineering Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia. ....	106
<sup>3</sup> Business Administration Department, Politeknik Negeri Sriwijaya, Jalan Srijaya Negara, Palembang, 30139 Indonesia.....	106
EFFECT OF VARIATIONS CONCENTRATION AND PH OF LIQUID SMOKE IN THE IMMERSION WITH VARIOUS TYPES OF FISH .....	107
ID : 2120 .....	107
by .....	107
Farida Ali, Corresponding author, Lecturer, Faculty of Chemical Engineering, Universitas Sriwijaya.....	107
Lia Cundari, Lecturer, Faculty of Chemical Engineering, Universitas Sriwijaya.....	107
Siti Miskah, Lecturer, Faculty of Chemical Engineering, Universitas Sriwijaya.....	107
Hendri Prasetyo, Student, Faculty of Chemical Engineering, Universitas Sriwijaya.....	107
COMPARISON OF THE USE OF FLY ASH AND RICE HUSK ASH IN THE MAKING OF GEOPOLYMER CONCRETE.....	108
ID : 2154 .....	108
Indrayani <sup>1*</sup> , Andi Herius <sup>1</sup> , Akhmad Mirza <sup>1</sup> , Ricky Ravsyhan Alhafez <sup>1</sup> .....	108
<sup>1</sup> Civil Engineering Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia ....	108
FLEXURAL STRENGTH ANALYSIS OF CONCRETE WITH THE ADDITION OF B3 WASTE AS AN ADDITIVE TO ORDINARY PORTLAND CEMENT (OPC).....	109
ID :2235 .....	109
N Puspita*, Y Arti and Febriyandi .....	109
Civil Engineering Department, Universitas Indo Global Mandiri, Jalan Jend. Sudirman KM.4 No.629 Palembang, Indonesia .....	109
SIMULATION OF SILAGE PRODUCTION FROM WATER HYACINTH ( <i>EICHORNIA CRASSIPES</i> )	

AS RUMINANTS FEED BASED ON THE INCREASE OF <i>ASPERGILLUS NIGER</i> .....	110
ID : 2811 .....	110
Agung Budi Santoso <sup>1,*</sup> Martha Aznury <sup>2</sup> Nova Rachmadona <sup>3</sup> Robert Junaidi <sup>2</sup> Fertarina Pratiwi <sup>2</sup> .....	110
<sup>1</sup> Department of Biotechnology, Faculty of Agroindustry, Kasetsart University, Bangkok, Thailand .....	110
<sup>2</sup> Department of Chemical Engineering, Politeknik Negeri Sriwijaya, Palembang, Indonesia .....	110
<sup>3</sup> Department of Chemical Science and Engineering, Graduate School of Engineering, Kobe University, Japan .....	110
THE PLACEMENT POSITION OF HOLLOW CORES IN THE IDEAL LONGITUDINAL DIRECTION ON THE REINFOCED CONCRETE BEAM .....	111
ID : 2645 .....	111
Sumiati <sup>1</sup> , Mahmuda <sup>2</sup> , Ahmad Syapawi <sup>3</sup> .....	111
Civil Engineering Departement, State Polytechnic Sriwijaya, Srijaya Negara street, Bukit Besar Palembang, 30139, Indonesia.....	111
PRODUCTION OF BIODIESEL FROM UNREFINED PLANTS-DERIVED OIL BY IMMOBILIZED <i>ASPERGILLUS ORYZAE</i> EXPRESSING <i>BACILLUS THERMOCATENULATUS</i> LIPASE.....	112
ID : 2741 .....	112
Nova Rachmadona <sup>1,*</sup> Martha Aznury <sup>2</sup> Chiaki Ogino <sup>1</sup> .....	112
<sup>1</sup> Department of Chemical Science and Engineering, Graduate School of Engineering, Kobe University, 1-1 Rokkodai-cho, Nada-ku, Kobe 657-8501, Japan .....	112
<sup>2</sup> Department of Chemical Engineering, State Polytechnic of Sriwijaya, Jl. Srijaya Negara Bukit Besar, Palembang, South Sumatera 30139, Indonesia .....	112
PARTIAL SUBSTITUTION OF CEMENT USING FLY ASH AND CARBITE WASTE IN THE MAKING OF NORMAL CONCRETE .....	113
ID : 2571 .....	113
(Darma Prabudi, Kosim, Zainuddin, Raja Marpaung) Sriwijaya State Polytechnic .....	113
email:                                      darma_prabudi@yahoo.com,                                      kosimmt@gmail.com,                                      zainuddin_muchtar@yahoo.co.id, raja.marpaung@gmail.com.....	113
COMMUNITY ADAPTATION TO TRADITIONAL MARKETS DURING THE PANDEMIC PERIOD IN PALEMBANG CITY .....	114
ID : 2660 .....	114
Hendi Warlika Sedo Putra <sup>1</sup> , Maya Fitri Oktarini <sup>2</sup> , dan Primadella <sup>3</sup> .....	114
<sup>1</sup> Department of Civil Engineering, Politeknik Negeri Sriwijaya, Indonesia .....	114
<sup>2</sup> Department of Architecture, Engineering Faculty, Universitas Sriwijaya, Indonesia .	114
<sup>3</sup> Department of Architecture, Engineering Faculty, Universitas Sriwijaya, Indonesia .	114
EFFECT OF FERMENTATION TIME AND PERCENTAGE OF MORINGA ( <i>MORINGA OLEIFERA</i> ) FLOUR VARIATIONS ON VITAMIN C OF YOGURT .....	115
ID : 2809 .....	115



*Martha Aznury <sup>1</sup> Elina Margerty <sup>1</sup> Melianti <sup>1</sup> Sofiah <sup>1</sup> Yuniar <sup>1</sup> Sufi Awwaliyah <sup>1</sup> .....	115
1Department of Chemical Engineering, Politeknik Negeri Sriwijaya, Palembang, Indonesia .....	115
ROAD DAMAGE CONDITIONS ANALYSIS OF TANJUNG API-API - GASING DISTRICT ROAD BASED ON SURFACE DISTRESS INDEX (SDI) METHOD.....	116
ID : 2744 .....	116
R. Marpen <sup>1</sup> , A. Hasan <sup>2</sup> , AN. Sari <sup>3</sup> , HWS. Putra <sup>4</sup> , R. Pranoto <sup>5</sup> .....	116
<sup>12345</sup> Jurusan Teknik Sipil, Politeknik Negeri Sriwijaya, Palembang Jl. Srijaya Negara Bukit Besar, Palembang, Sumatera Selatan 30139 .....	116
DATA MODEL PATTERN FOR DATA WAREHOUSE WEB APPLICATION OF INFORMATION PORTAL (Case study : Hidyatullah Integrated Islamic Boarding School, Banyuasin Regency) .....	117
ID : 2550 .....	117
M Aris Ganiardi <sup>1</sup> ,Nita Novita <sup>2</sup> , Indri Ariyanti <sup>3</sup> , Delta Khairunnisa <sup>4</sup> .....	117
Informatics Management Department, Politeknik Negeri Sriwijaya, Srijaya Negara Street, Palembang, 30139, Indonesia.....	117
INVENTORY CONTROL AND EOQ FORECASTING TOOLS AS EFFECTIVE DECISION-MAKING MODEL.....	118
ID : 2577 .....	118
Ahmad Rifai <sup>1</sup> , Dedy Kurniawan <sup>2*</sup> , Ariansyah Saputra <sup>3</sup> , .....	118
Dinna Yunika Hardiyanti <sup>4</sup> .....	118
1-4 Faculty of Computer Science, Universitas Sriwijaya, Indonesia .....	118
2*Advanced Programming Laboratory, Faculty of Computer Science, Universitas Sriwijaya, Indonesia.....	118
3 Department of Computer Engineering, Politeknik Negeri Sriwijaya, Indonesia .....	118
INCREASING SENSITIVITY OF PH DETECTION USING COMPUTER VISION BASED BIOSENSORS.....	119
ID : 2096 .....	119
Faiz Syaikhoni Aziz <sup>1,2</sup> , Sujito <sup>1,2</sup> , Aji Prasetya Wibawa <sup>1,2</sup> , I Made Wirawan <sup>2</sup> , Ari Priharta <sup>1,2</sup> , Abdullah Iskandar Syah <sup>2</sup> , Tran Huu Duy <sup>3</sup> .....	119
<sup>1</sup> Electrical Engineering Postgraduate, Universitas Negeri Malang .....	119
<sup>2</sup> Electrical Engineering Department, Universitas Negeri Malang .....	119
<sup>3</sup> Electrical Engineering Department, Dalat University .....	119
ADAPTIVE FUZZY TIME SERIES METHOD TO FORECASTING ENROLLMENTS OF NEW STUDENT (CASE STUDY : DEPARTMENT OF COMPUTER ENGINEERING, STATE POLYTECHNIC OF SRIWIJAYA).....	120
ID : 2603 .....	120
Ica Admirani <sup>1</sup> , Ikhthison Mekongga <sup>2</sup> , Isnaini Azro <sup>3</sup> , Hidayati Ami <sup>4</sup> , Rian Rahmanda Putra <sup>5</sup> .....	120
1Department of Computer Engineering, State Polytechnic of Sriwijaya, JL.Srijaya Negara Bukit Besar, Palembang,30139, Indonesia. ....	120

2Department of Computer Engineering, State Polytechnic of Sriwijaya, JL.Srijaya Negara Bukit Besar, Palembang,30139, Indonesia. ....	120
3Department of Computer Engineering, State Polytechnic of Sriwijaya, JL.Srijaya Negara Bukit Besar, Palembang,30139, Indonesia. ....	120
4Department of Computer Engineering, State Polytechnic of Sriwijaya, JL.Srijaya Negara Bukit Besar, Palembang,30139, Indonesia. ....	120
5Department of Computer Engineering, State Polytechnic of Sriwijaya, JL.Srijaya Negara Bukit Besar, Palembang,30139, Indonesia ....	120
ROOM SAFETY SYSTEM USING FACE RECOGNITION USING TELEGRAM AND RASPBERRY PI BASED HISTOGRAM OF ORIENTED METHOD.....	121
ID : 2613 .....	121
Azwardi, Yulian Mirza, Alan Novi Tomponu, Ariansyah Saputra .....	121
Program Studi Teknik Komputer, Politeknik Negeri Sriwijaya .....	121
Jl. Srijaya Negara Bukit Besar- Palembang 30139 .....	121
Telp. 0711-353414, Fax. 0711- 355918 .....	121
TELEMETRY DESIGN ACCURATION OF PATIENT’S TEMPERATURE WITH IOT APPROACH. ....	122
ID : 2618 .....	122
Ahyar Supani <sup>1,*</sup> , Ahmad Bahri Joni Malyan <sup>1</sup> , Herlambang Saputra <sup>1</sup> , Indarto <sup>1</sup> , Yuli Andriani <sup>2</sup> .....	122
<sup>1</sup> <i>Department of Computer Engineering, Polytechnic State of Sriwijaya, Palembang, Indonesia.....</i> .....	122
<sup>2</sup> <i>Department of Mathematics, Sriwijaya University, Palembang, Indonesia.....</i> .....	122
Image processing system for pH classification using biosensors .....	123
ID : 2097 .....	123
Sujito <sup>1,2*</sup> , A P Wibawa <sup>1,2</sup> , I M Wirawan <sup>2</sup> , Aripriharta <sup>1,2</sup> , F S Aziz <sup>1</sup> , A I Syah <sup>2</sup> , T H Duy <sup>3</sup> .....	123
<sup>1</sup> Electrical Engineering Postgraduate, Universitas Negeri Malang, Indonesia .....	123
<sup>2</sup> Electrical Engineering Department, Universitas Negeri Malang, Indonesia .....	123
<sup>3</sup> Electrical Engineering Department, Dalat University, Vietnam .....	123
QUALITY MEASUREMENT EVALUATION OF THE POLSRI LEARNING MANAGEMENT SYSTEM WEBSITE USING IMPORTANCE PERFORMANCE ANALYSIS (IPA) METHOD .....	124
ID : 2274 .....	124
Irma Salamah <sup>1</sup> , Lindawati <sup>2</sup> , Asriyadi <sup>3</sup> , M.Fadhli <sup>4</sup> .....	124
<sup>1,2,3,4</sup> Telecommunication Program Studi State Polytechnic of Sriwijaya.....	124
RESTFUL WEB SERVICE AS DATA GENERATOR FOR REPORTING OF ACADEMIC INFORMATION SYSTEM.....	125
ID : 2620 .....	125
M. Miftakul Amin <sup>*1</sup> , Slamet Widodo <sup>2</sup> , Adi Sutrisman <sup>3</sup> , Ervi Cofriyanti <sup>4</sup> , Ali Firdaus <sup>5</sup> .....	125
<sup>1,2,3,4,5</sup> Department of Computer Engineering, Politeknik Negeri Sriwijaya, Jl. Srijaya Negara Bukit Besar, Palembang, 30139, Indonesia .....	125

DESIGN AND IMPLEMENTATION OF LEARNING E-SCHEDULING IN SRIWIJAYA STATE POLYTECHNIC - TELECOMMUNICATION ENGINEERING STUDY PROGRAM.....	126
ID : 2666 .....	126
Abdul Rakhman <sup>1</sup> , Irawan Hadi <sup>2</sup> , Nasron <sup>3</sup> , Martinus Mujur Rose <sup>4</sup> .....	126
<sup>1,2,3,4</sup> Politeknik Negeri Sriwijaya .....	126
Jl. Srijaya Negara Bukit Besar – Palembang .....	126
PHP PROGRAMMING FOR ACHIEVING STUDENTS IN INFORMATICS MANAGEMENT DEPARTMENT STATE OF POLYTECHNIC SRIWIJAYA.....	127
ID : 2702 .....	127
Yusniarti <sup>1</sup> .....	127
Henny Madora <sup>2</sup> .....	127
Ida Wahyuningrum <sup>3</sup> .....	127
Muhammad Noval <sup>4</sup> .....	127
<sup>1234</sup> .Jurusan Manajemen Informatika Politeknik Negeri Sriwijaya.....	127
MEDICAL SERVICES APPLICATION OF LECTURERS, STAFF AND STUDENTS IN THE SRIWIJAYA STATE POLYTECHNIC POLYCLINIC .....	128
ID : 2704 .....	128
Robinson <sup>1</sup> , Deri Darfin <sup>2</sup> , Zulkarnaini <sup>3</sup> , Ridwan Effendi <sup>4</sup> , .....	128
<sup>1</sup> Polsri Jl. Srijaya Negara Bukit Besar Palembang Sumatera Selatan .....	128
<sup>2</sup> Polsri Jl. Srijaya Negara Bukit Besar Palembang Sumatera Selatan .....	128
<sup>3</sup> Polsri Jl. Srijaya Negara Bukit Besar Palembang Sumatera Selatan .....	128
<sup>4</sup> Polsri Jl. Srijaya Negara Bukit Besar Palembang Sumatera Selatan.....	128
PROTOTYPE DEVELOPMENT OF MOTORBIKE TOWING HOOK TOWARD AUTHORIZED MECHANIC PERCEPTION AND INVESTIGATION .....	129
ID : 2768 .....	129
Rahman Hakim <sup>1</sup> , Muhammad Hasan Albana <sup>1</sup> , Widodo <sup>1</sup> , Hanifah Widiastuti <sup>1</sup> and Wahyu Caesarendra <sup>2*</sup> .....	129
<sup>1</sup> Department of Mechanical Engineering, Politeknik Negeri Batam, Jl. A. Yani, Batam Center, Kota Batam 29461, Indonesia .....	129
<sup>2</sup> Faculty of Integrated Technologies, Universiti Brunei Darussalam, Jalan Tungku Link, Gadong BE1410, Brunei Darussalam.....	129
INVESTIGATION STUDY OF PRESSURE DIFFERENT EFFECT AT EVAPORATOR IN ORGANIC RANKINE CYCLE SIMULATOR (ORCS) USING LOW-GRADE WASTE HEAT .....	130
ID : 2770 .....	130
Mochamad Denny Surindra <sup>1</sup> , Wahyu Caesarendra <sup>2*</sup> .....	130
<sup>1</sup> Mechanical Engineering, Politeknik Negeri Semarang, Semarang 50275, Indonesia; Email: dennysurindra@polines.ac.id .....	130
<sup>2</sup> Faculty of Integrated Technologies, Universiti Brunei Darussalam, Jalan Tungku Link, Gadong BE1410, Brunei Darussalam.....	130
APPLICATION OF TRACKING LETTER DISPOSITION AT STATE POLYTECHNIC OF SRIWIJAYA	

BASED ON ANDROID WEBVIEW .....	131
ID : 2644 .....	131
Satriadi, Indra <sup>1,*</sup> Oktapriandi, Sony., Meileni, Hetty., Aprianty, Desy.....	131
<sup>1</sup> State Polytechnic of Sriwijaya .....	131
THE SHORTEST PATH SEARCH APPLICATION FOR BASE TRANSCIEVER STATION (BTS) USING A* ALGORITHM .....	132
ID : 1994 .....	132
Ikhthison Mekongga <sup>1</sup> , Aryanti Aryanti <sup>2,3</sup> .....	132
<sup>1</sup> Computer Engineering, Politeknik Negeri Sriwijaya, Palembang, Indonesia .....	132
<sup>2</sup> Electrical Engineering, Politeknik Negeri Sriwijaya, Palembang, Indonesia.....	132
<sup>3</sup> Electrical Engineering, Southern Taiwan University of science and Technology, Tainan, Taiwan .....	132
COMPATIBILITY OF LINUX ARCHITECTURE FOR DISKLESS TECHNOLOGY SYSTEM.....	133
ID : 2615 .....	133
Aryanti Aryanti <sup>1,2*</sup> , Ade Silvia Handayani <sup>2</sup> , Ibnu ziad <sup>2</sup> , Ikhthison Mekongga <sup>3</sup> , Farid Jatri Abiyyu <sup>2</sup> .....	133
<sup>1</sup> Electrical Engineering, Southern Taiwan University of science and Technology, Tainan, Taiwan .....	133
<sup>2</sup> Electrical Engineering, Politeknik Negeri Sriwijaya, Palembang, Indonesia.....	133
<sup>3</sup> Computer Engineering, Politeknik Negeri Sriwijaya, Palembang, Indonesia .....	133
RESERVOIR IRRIGATION SYSTEM DESIGN BASED WIRELESS SENSOR NETWORK .....	134
ID : 2636 .....	134
M. Zakuan Agung <sup>1</sup> ), Eka Susanti <sup>2</sup> ), R.A Halimatussa'diyah <sup>3</sup> ), Susanzezi <sup>4</sup> ), Amirah Fakhirah <sup>5</sup> ) .....	134
<sup>1,2,3,4,5</sup> Department of Polytechnic Sriwijaya, Jalan Srijaya Negera, Bukit Besar, Palembang - Indonesia .....	134
USING NIGHT VISION CAMERA ROBOT BASED ON INTERNET OF THING .....	135
ID : 2817 .....	135
Sarjana <sup>1</sup> ), Adewasti <sup>2</sup> ), Sholihin <sup>3</sup> ), Emilia Hesti <sup>4</sup> ), Amirah Fakhirah <sup>5</sup> ) .....	135
<sup>1</sup> Department of Polytechnic Sriwijaya, Jalan Srijaya Negera, Bukit Besar, Palembang - Indonesia.....	135
<sup>2</sup> Department of Polytechnic Sriwijaya, Jalan Srijaya Negera, Bukit Besar, Palembang - Indonesia.....	135
<sup>3</sup> Department of Polytechnic Sriwijaya, Jalan Srijaya Negera, Bukit Besar, Palembang - Indonesia.....	135
<sup>4</sup> Department of Polytechnic Sriwijaya, Jalan Srijaya Negera, Bukit Besar, Palembang - Indonesia.....	135
<sup>5</sup> Department of Polytechnic Sriwijaya, Jalan Srijaya Negera, Bukit Besar, Palembang - Indonesia.....	135
Biometric Fingerprint Implementation for Presence Checking and Room Access Control System	

.....	136
ID : 2726 .....	136
Yudi Wijanarko <sup>1</sup> , Selamat Muslimin <sup>2</sup> , *Renny Maulidda <sup>3</sup> , .....	136
Yordan Hasan <sup>4</sup> , Abdurrahman <sup>5</sup> .....	136
<sup>1</sup> Politeknik Negeri Sriwijaya.....	136
<sup>2</sup> Politeknik Negeri Sriwijaya .....	136
<sup>3</sup> Politeknik Negeri Sriwijaya.....	136
<sup>4</sup> Politeknik Negeri Sriwijaya .....	136
Prototype Design of Landslide Early Detection System Using LoRa and IoT .....	137
ID : 2663 .....	137
Ahmad Taqwa <sup>1</sup> , Mohammad Fadhli <sup>2</sup> , Sopian Soim <sup>3</sup> , Ade Silvia <sup>4</sup> , Suroso Suroso <sup>5</sup> .....	137
<sup>1,2,3,4,5</sup> Politeknik Negeri Sriwijaya .....	137
IMPLEMENTATION OF USTADZ SEARCH SOFTWARE FOR MUBALIGH, QORI AND QORIAH CATEGORIES IN PALEMBANG USING AN ANDROID-BASED USABILITY APPROACH.....	138
ID : 2078 .....	138
M. Rudi Sanjaya <sup>1</sup> , Yadi Utama <sup>2</sup> , Dedy Kurniawan <sup>3</sup> , Ariansyah Saputra <sup>4</sup> , Novita Sari <sup>5</sup> , Rahma Destriani <sup>6</sup> , Muhammad Raihan Udda Rahmany <sup>7</sup> .....	138
<sup>1</sup> Internet Programming Laboratory Department of Computer Engineering, Faculty of Computer Science, Universitas Sriwijaya, Indonesia .....	138
<sup>2</sup> Department of Computer Engineering, Faculty of Computer Science, Universitas Sriwijaya, Indonesia.....	138
<sup>3</sup> Department of Computer Engineering, Faculty of Computer Science, Universitas Sriwijaya, Indonesia.....	138
<sup>4</sup> Department of Computer Engineering, Politeknik Negeri Sriwijaya, Indonesia .....	138
<sup>5,6,7</sup> Student Department of Computer Engineering, Faculty of Computer Science, Universitas Sriwijaya, Indonesia.....	138
APPLICATION OF CAMPUS PARKING AREA FOR STATE POLYTECHNIC OF SRIWIJAYA BASED ON SMARTPHONE .....	139
ID: 2619 .....	139
Leni Novianti <sup>1</sup> , Devi Sartika <sup>2</sup> , Dewi Irmawati <sup>3</sup> , Ienda Meiriska <sup>4</sup> .....	139
<sup>1,2,3,4</sup> Study Program of Informatics Management, State Polytechnic of Sriwijaya .....	139
ANDROID-BASE m-VOTING APPLICATION DEVELOPMENT WITH SIMPLE ADDITIVE WEIGHTING METHOD .....	140
ID : 2669.....	140
Devi Sartika <sup>1</sup> , Leni Novianti <sup>2</sup> , Dewi Irmawati <sup>3</sup> , Ienda Meiriska <sup>4</sup> .....	140
<sup>1,2,3,4</sup> Study Program of Informatics Management,State Polytechnic of Sriwijaya.....	140
DESIGN WEB BASED ONLINE TUTORING APPLICATION IN PALEMBANG CITY USING THE SUS (SYSTEM USABILITY SCALE) METHOD.....	141
ID : 2098 .....	141

M. Rudi Sanjaya <sup>1</sup> , Ariansyah Saputra <sup>2</sup> , 3Bayu Wijaya Putra, Novita Sari <sup>4</sup> , Rahma Destriani <sup>5</sup> , Muhammad Raihan Udda Rahmany <sup>6</sup> .....	141
1,3 Program in Informatics Management of Computer Engineering, Faculty of Computer Science, Universitas Sriwijaya, Indonesia .....	141
2 Department of Computer Engineering, Politeknik Negeri Sriwijaya, Indonesia .....	141
3,4,5 Student Department of Computer Engineering, Faculty of Computer Science, Universitas Sriwijaya, Indonesia.....	141
BLACK BOX TESTING USING EQUIVALENCE PARTITION METHOD IN SINTANA APPLICATION .....	142
ID : 2225 .....	142
Yayuk Ike Melani <sup>1</sup> and Mahmud <sup>2</sup> .....	142
<sup>1</sup> S1 Information System, STMIK PalComTech, Palembang .....	142
<sup>2</sup> S1 Informatic, STMIK PalComTech, Palembang.....	142
THE DESIGN OF A TOOL TO MEASURE THE EFFECTIVENESS AND EFFICIENCY OF USERS TOWARDS THE APPLICATION OF POLISIKU APPLICATION.....	143
ID : 2366 .....	143
<sup>1</sup> Eko Setiawan and <sup>2</sup> Wiza Yunifa.....	143
<sup>1,2</sup> Information Systems Study Program, Politeknik PalComTech Palembang.....	143
DATABASE DESIGN FOR CHILD SPECIAL DEVELOPMENT INSTITUTION'S SERVICE PERFORMANCE E-DASHBOARD (CASE STUDY: PALEMBANG CHILD SPECIAL DEVELOPMENT INSTITUTION).....	144
ID : 2432 .....	144
Hendra Hadiwijaya <sup>1</sup> , Febrianty <sup>2</sup> , Rezanía Agramanisti Azdy <sup>3*</sup> .....	144
<sup>1, 2</sup> Accounting Study Program, Palembang Palcomtech Polytechnic, Indonesia .....	144
<sup>3*</sup> Informatics Study Program, STMIK PalComTech, Indonesia .....	144
EXTENDING THE UNDERSTANDING OF BUSINESS INTELLIGENCE AND ITS APPLICATION IN STARTUPS.....	145
ID : 2440 .....	145
Dedy Kurniawan <sup>1</sup> , Ariansyah Saputra <sup>2</sup> , M. Rudi Sanjaya <sup>3</sup> , Zaqqi Yamani <sup>4</sup> .....	145
<sup>1</sup> Advanced Programming Laboratory, Faculty of Computer Science, Universitas Sriwijaya, Indonesia.....	145
<sup>2</sup> Department of Computer Engineering, Politeknik Negeri Sriwijaya, Indonesia .....	145
<sup>3</sup> Internet Programming Laboratory, Faculty of Computer Science, Universitas Sriwijaya, Indonesia.....	145
<sup>4-5</sup> Faculty of Computer Science, Universitas Sriwijaya, Indonesia.....	145
THE APPLICATION OF DIGITAL MARKETING FOR UKM IN FACING THE COVID-19 PANDEMIC .....	146
ID : 2472 .....	146
Hetty Meileni <sup>1</sup> , Sony Oktapriandi <sup>2</sup> , Desi Apriyanti <sup>3</sup> .....	146
<sup>1-3</sup> Informatic Management Department, Politeknik Negeri Sriwijaya .....	146

DESIGNING STUDENT AND LECTURER ATTENDANCE SYSTEM APPLICATION USING PROGRESSIVE WEB APPS (PWA) .....	147
ID : 2586 .....	147
Hartati Deviana <sup>1</sup> .....	147
<sup>1</sup> Department of Computer Engineering, Politeknik Sriwijaya,Jl. Srijaya Negara Bukit Besar,Palembang,30139, Indonesia.....	147
DESIGNING AUGMENTED REALITY-BASED COMPUTER DEVICES LEARNING MEDIA ON ANDROID PLATFORM .....	148
ID : 2760 .....	148
Dony Novaliendry <sup>1,2</sup> , Arif Subagia <sup>1</sup> , Titi Sriwahyuni <sup>1</sup> , Fegie Y Wattimena <sup>3</sup> , Axelon S Renyaan <sup>3</sup> , Ceng-Hong Yang <sup>2</sup> , Muhammad Ariyon <sup>4</sup> .....	148
<sup>1</sup> Departement of Electronics Engineering, Faculty of Engineering, Universitas Negeri Padang, Padang, Indonesia .....	148
<sup>2</sup> Departement of Electronics Engineering, National Kaohsiung University of Science and Technology, Kaohsiung, Taiwan.....	148
<sup>3</sup> Fakultas Sains & Teknologi, Universitas Ottow Geissler Papua, Indonesia .....	148
<sup>4</sup> Teknik Perminyakan, Universitas Islam Riau, Pekanbaru, Indonesia .....	148
PUBLIC SERVICE ANNOUNCEMENT IMPLEMENTATION OF LEARNING AT THE SRIWIJAYA STATE POLYTECHNIC IN MINIMIZING THE RISKS AND IMPACTS CAUSED BY THE COVID-19 PANDEMIC.....	149
ID : 2706 .....	149
Alan Novi Tompunu <sup>1</sup> , Nelly Masnila <sup>2</sup> , Zakaria <sup>3</sup> , Azwardi <sup>1</sup> and Ainun Nabila <sup>1</sup> .....	149
<sup>1</sup> Computer Engineering Department, State Polytechnic of Sriwijaya, Indonesia.....	149
<sup>2</sup> Accounting <i>Department</i> , State Polytechnic of Sriwijaya, Indonesia.....	149
<sup>3</sup> <i>English Department</i> , State Polytechnic of Sriwijaya, Indonesia .....	149
PRINCIPAL COMPONENT ANALYSIS METHOD FOR IMAGE SEGMENTATION OF SMART METER DIGITAL.....	150
ID : 2087 .....	150
Husnawati <sup>1</sup> , Shinta Puspasari <sup>2</sup> , Rian Rahmanda Putra <sup>3</sup> .....	150
<sup>1,2</sup> Department of computer science, Indo Global Mandiri University, Palembang, .....	150
Indonesia.....	150
<sup>3</sup> Department of computer science, Politeknik Negeri Sriwijaya, Palembang, .....	150
Indonesia.....	150
DESIGN OF SOLAR POWERED VACCINE BACKPACK .....	151
ID : 2838 .....	151
Muhammad Haikal Satria <sup>1,*</sup> , Ariep Jaenul <sup>1</sup> Adhes Gamayel <sup>1</sup> .....	151
<sup>1</sup> Dept. of Electrical Engineering, Faculty of Engineering and Computer Science, Jakarta Global University .....	151
TRAINER MODULE DESIGN OF ITEM SORTING EQUIPMENT BASED ON HEIGHT AND PLC-BASED TRAFFIC LIGHT PROTOTYPE IN THE SYSTEM LABORATORY.....	152

ID : 2798 .....	152
Evelina <sup>1</sup> , Amperawan <sup>2</sup> , Dewi Permata Sari <sup>3</sup> , Sabilal Rasyad <sup>4</sup> .....	152
<sup>1</sup> Electrical Engineering, Department of Electrical Engineering .....	152
<sup>2</sup> Electrical Engineering, Politeknik Negeri Sriwijaya .....	152
PROTOTYPE DEVELOPMENT OF HEARTBEAT AND BODY TEMPERATURE MONITORING SYSTEM BASED ON INTERNET OF THINGS .....	153
ID : 2599 .....	153
Ade Silvia Handayani <sup>1)</sup> , Ahmad Taqwa <sup>2)</sup> , Arsyil Shiddik <sup>3)</sup> Nyayu Latifah Husni <sup>4)</sup> .....	153
<sup>1)-3)</sup> Telecommunication Engineering, Politeknik Negeri Sriwijaya .....	153
<sup>4)</sup> Elektronics Engineering, Politeknik Negeri Sriwijaya .....	153
IMPLEMENTATION OF FUZZY LOGIC TYPE-2 ON MOBILE ROBOT NAVIGATION SYSTEM .	154
ID : 2661 .....	154
Ade Silvia Handayani <sup>1</sup> , Jefri Alkausar <sup>1</sup> , Sarjana <sup>1</sup> , Nyayu Latifah Husni <sup>1</sup> , Siti Nurmaini <sup>2</sup> , Irsyadi Yani <sup>3</sup> .....	154
<sup>1</sup> Electrical Department, Politeknik Sriwijaya, <sup>2</sup> Intelligent System Research Group, Faculty of Computer Science, Universitas Sriwijaya, <sup>3</sup> Mechanical Engineering Department, Faculty of Engineering, Universitas Sriwijaya .....	154
WIRELESS DETECTOR FOR LUNG SOUND DISORDER BASED ON DSP TMS320C6416 MODULE .....	155
ID : 2805 .....	155
Nyayu Latifah Husni <sup>1</sup> , Arganda Meranda <sup>2</sup> , Destra Andika Pratama <sup>3</sup> , Ekawati Prihatini <sup>4</sup> , Selamat Muslimin <sup>5</sup> , Ade Silvia Handayani <sup>6</sup> .....	155
<sup>1-6</sup> Electrical Engineering, State Polytechnic of Sriwijaya .....	155
NEW NAVIGATION STRATEGY FOR G-BOT .....	156
ID : 2806 .....	156
Nyayu Latifah Husni <sup>1</sup> , Qodry Maulana <sup>2</sup> , Ekawati Prihatini <sup>3</sup> , Ade Silvia Handayani <sup>4</sup> , Firdaus <sup>5</sup> .....	156
<sup>1-4</sup> Electrical Engineering, State Polytechnic of Sriwijaya <sup>5</sup> Computer Engineering, Sriwijaya University .....	156
AIR DETECTION ENVIRONMENT SYSTEM (ADEV) USING ANDROID APPLICATION FOR AIR QUALITY IN PARK AREA .....	157
ID : 2824 .....	157
Ade Silvia Handayani <sup>1</sup> , Nyayu Latifah Husni <sup>2</sup> , Al Fatur Sayid <sup>3</sup> , Rosmalinda Permatasari <sup>4</sup> , Carlos R Sitompul <sup>5</sup> , Sopian Soim <sup>6</sup> .....	157
<sup>1,2,3,5,6</sup> Department of Polytechnic Sriwijaya, Jalan Srijaya Negera, Bukit Besar, Palembang - Indonesia .....	157
<sup>4</sup> Universitas Tridnanti Palembang-indonesia .....	157
THE CONDITION OF THE SURFACE SEVERITY OF THE POLLUTED INSULATOR BASED ON HARMONIC MEASUREMENTS OF LEAKAGE CURRENTS .....	158
ID : 2775 .....	158



Carlos R Sitompul, Zainuddin Nawawi, Irfan Jambak, Rumiasih Rumiasih, Anton Firmansyah, Indah Susanti .....	158
THE INFLUENCE OF TRAVEL EXPERIENCE AND DESTINATION QUALITY ON TOURIST SATISFACTION VISITING CULINARY TOURISM DESTINATIONS.....	159
ID : 2575 .....	159
Abd. Hamid* <sup>1</sup> , Ummasyroh* <sup>2</sup> , Jusmawi Bustan * <sup>3</sup> , Heri Setiawan* <sup>4</sup> .....	159
<sup>1,2,3,4</sup> Business Administration Department, State Polytechnic of Sriwijaya, Palembang, Indonesia.....	159
THE EFFECT OF ORGANIZATIONAL SUPPORT AND JOB CHARACTERISTICS ON EMPLOYEE ENGAGEMENT.....	160
ID : 2576 .....	160
A.Jalaludin Sayuti <sup>1</sup> , Munparidi <sup>2</sup> , L.Suhairi Hazizma <sup>3</sup> , Alditia Detmuliati <sup>4</sup> .....	160
<sup>1,2,3,4</sup> Business Administration Department, State Polytechnic of Sriwijaya, Palembang, Indonesia.....	160
THE LINKAGE BETWEEN MARKET ORIENTATION, LEARNING ORIENTATION, AND INNOVATION CAPABILITIES OF SMALL SCALE RESTAURANT.....	162
ID : 2581 .....	162
Purwati <sup>1</sup> , Yusleli Herawati <sup>2</sup> , Elisa <sup>3</sup> , Marieska Lupikawati <sup>4</sup> .....	162
Business Administration Department, State Polytechnic of Sriwijaya, Palembang, Indonesia.....	162
STRENGTHENING STUDENTS' WRITING ON PROJECT REPORT VIA PROJECT BASED LEARNING TO THE ENGLISH DEPARTMENT STUDENTS OF SRIWIJAYA STATE POLYTECHNICS .....	163
ID : 2589 .....	163
Yusri, Sri Gustiani,Tiur Simanjuntak, Evi Agustinasari.....	163
(Lecturers of English Department, Sriwijaya Polytechnics) .....	163
ANALYSIS OF DAILY CONVERSATION FOR ONLINE DRIVERS .....	164
ID: 2596 .....	164
Desloehal Djumrianti <sup>1</sup> , Pridson Mandiangan <sup>2</sup> , Hanifati <sup>3</sup> , Alfitriani <sup>4</sup> .....	164
<sup>1,2,3,4</sup> Business Administration Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia.....	164
THE STUDENTS` PERCEPTIONS OF RELIGIOUS RADICALISM AT STATE POLYTECTNIC OF SRIWIJAYA.....	165
ID : 2711 .....	165
Farida Husin* <sup>1</sup> , Ibnu Maja* <sup>2</sup> , Yulianto Wairan* <sup>3</sup> , Lindawati* <sup>4</sup> .....	165
Lecturer of State Polytechnic of Sriwijaya Palembang.....	165
The Correlation between Students' Listening Comprehension Strategy and Their TOEIC Score at State Polytechnic of Sriwijaya .....	166
ID: 2733 .....	166
Koryati <sup>1,*</sup> , Aisyah Shahab <sup>2,*</sup> , Zulkifli <sup>3,*</sup> , Nian Masna Evawati <sup>4,*</sup> .....	166

<i>1,2,3,4 English Department of Sriwijaya State Polytechnic.....</i>	166
DESCRIPTION OF ANXIETY LEVELS OF PRE SCHOOL CHILDREN WITH THALASEMIA WHO WILL GET BLOOD TRANSFUSE IN THE THALASEMIA POLY AT AL-IHSAN BALEENDAH HOSPITAL, BANDUNG.....	167
ID : 2734 .....	167
Lisbet Octovia Manalu <sup>1</sup> , * Budi Rustandi <sup>2</sup> , Budi Somantri <sup>3</sup> .....	167
<sup>1</sup> Rajawali Health Institute Bandung.....	167
<sup>2</sup> Rajawali Health Institute Bandung .....	167
<sup>3</sup> Rajawali Health Institute Bandung .....	167
A STORY OF A CUP OF COFFEE REVIEW OF GOOGLE LOCAL GUIDE REVIEW.....	168
ID : 2759 .....	168
Setiawan Priatmoko <sup>1, 2*</sup> , Dávid Lóránt <sup>1</sup> .....	168
Szent Istvan University School of Economics and Regional Science Gödöllő, Hungary <sup>1</sup>	168
STIE Pariwisata API Yogyakarta, Indonesia <sup>2</sup> .....	168
ASIAN WOMEN'S ROLES IN FAMILY HOLIDAY: A CASE STUDY OF INDONESIAN FEMALES .....	169
Paper ID 2788 .....	169
Desloehal Djumrianti <sup>1</sup> , Augustus E. Oseso-Asare <sup>2</sup> .....	169
<sup>1</sup> <i>Business Administration Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia</i> .....	169
<sup>2</sup> <i>Faculty Business and Law, University of Sunderland, United Kingdom</i> .....	169
Analysis of Daily Conversation for Online Drivers.....	170
ID 2789 .....	170
Desloehal Djumrianti <sup>1</sup> , Augustus E. Oseso-Asare <sup>2</sup> .....	170
<sup>1</sup> <i>Business Administration Department, Politeknik Negeri Sriwijaya, Palembang, Indonesia</i> .....	170
<sup>2</sup> <i>Faculty Business and Law, University of Sunderland, United Kingdom</i> .....	170
The Customary Philosophy of the Anak Dalam Tribe as part of the soul of the nation's law	171
ID 2791 .....	171
Muhamad Erwin <sup>1</sup> , Ahmad Taqwa <sup>2</sup> , Dicky Seprianto <sup>3</sup> , Ahmad Zamheri <sup>4</sup> .....	171
<sup>1</sup> State Polytechnic of Sriwijaya, Palembang, Indonesia, .....	171
<sup>2</sup> Electrical Engineering Departemet State Polytechnic of Sriwijaya, Palembang, Indonesia, .....	171
<sup>3</sup> Mechanical Engineering Departement State Polytechnic of Sriwijaya Palembang, Indonesia,.....	171
<sup>4</sup> Mechanical Engineering Departement State Polytechnic of Sriwijaya Palembang, Indonesia .....	171
THE INFLUENCE OF LEADERSHIP STYLE, AND MOTIVATION WORK STRUCTURE TO MUARA ENIM COMMUNITY HEALTH CENTER (EQUATION STRUCTURAL METHOD APPROACH) ...	172

Paper ID 2612 .....	172
AlHushori <sup>1</sup> , Yusnizal Firdaus <sup>1</sup> , Markoni Badri <sup>1</sup> , Muhammad Yusuf <sup>1*</sup> .....	172
<sup>1</sup> Department of Business Administration, State Polytechnic of Sriwijaya, Palembang, Indonesia.....	172
alhushori@gmail.com,yusnizalfirdaus@yahoo.co.id,markonibadri@yahoo.com,m.yusuf@polsri.ac.id* .....	172
SETTLEMENT OF CASES OF TERMINATION OF EMPLOYMENT AT THE INDUSTRIAL RELATION COURT IN PALEMBANG CITY .....	173
Paper ID 2713 .....	173
Ayu Puspasari, WasitohMeirani, Muhammad Erwin, Suroso.....	173
Politeknik Negeri Sriwijaya.....	173
Jl. Sriwijaya Negara, Bukit Lama, Bukit Besar, Kota Palembang, Sumatera Selatan. ....	173
THE EFFECT OF FINANCIAL TECHNOLOGY ON FINANCIAL INCLUSION IN SMES IN PALEMBANG CITY .....	174
ID : 2845 .....	174
Nur Rizka Erlianta <sup>1</sup> , Marieska Lupikawaty <sup>2*</sup> , Titi Andriyani <sup>3</sup> .....	174
<sup>1</sup> Bachelor Program in Business Management.. Department of Business Administration, Sriwijaya State Polytechnic .....	174
<sup>2</sup> Bachelor Program in Business Management.. Department of Business Administration, Sriwijaya State Polytechnic .....	174
<sup>3</sup> Diploma Program in Business Administration, Department of Business Administration, Sriwijaya State Polytechnic .....	174
THE EFFECT OF PATIENT SATISFACTION LEVELS ON COMPETENCY AND FACILITIES AT SITI KHADIJAH ISLAMIC HOSPITAL, PALEMBANG CITY .....	175
ID : 2217 .....	175
Sarikadarwati <sup>1</sup> , Henny Yulsiati <sup>2</sup> , Sandrayati <sup>3</sup> , Susi Ardiani <sup>4</sup> .....	175
Department Accounting Polytechnic of Sriwijaya.....	175
THE ROLE OF SMALL AND MEDIUM ENTERPRISES (SMES) AND ECONOMIC GROWTH IN INDONESIA: THE VECM ANALYSIS .....	176
ID : 2579 .....	176
Aladin <sup>1</sup> , Evada Dewata <sup>2</sup> , Yuliana Sari <sup>3</sup> , Yuli Antina Aryani <sup>4</sup> .....	176
<sup>1,2,3,4</sup> ,Department of Accounting, Politeknik Negeri Sriwijaya, Indonesia .....	176
POVERTY IN SOUTH SUMATRA PROVINCE IS VIEWED FROM VILLAGE FUND AND VILLAGE FUND ALLOCATION.....	177
ID :2583 .....	177
Rita Martini <sup>1*</sup> , Endah Widyastuti <sup>1</sup> , Sukmini Hartati <sup>1</sup> , Zulkifli <sup>1</sup> , Riana Mayasari <sup>1</sup> .....	177
<sup>1</sup> Accounting Department, Polytechnic State of Sriwijaya, Palembang 30139, Indonesia .....	177
IMPACT OF BUMDESA MANAGEMENT ON PADESA IN PENUKAL ABAB LEMATANG ILIR REGENCY .....	178

ID : 2602 .....	178
Rosy Armaini <sup>1*</sup> , Maria Maria <sup>2</sup> , Nurhasanah Nurhasanah <sup>3</sup> , Yevi Dwitayanti <sup>4</sup> .....	178
<i><sup>1-4</sup> Accounting Major, State Polytechnic of Sriwijaya, Palembang, South Sumatera, Indonesia.....</i>	<i>178</i>
FACTORS AFFECTING ECONOMIC GROWTH IN REGENCIES AND CITIES IN THE PROVINCE OF SOUTH SUMATRA IN 2010 – 2018.....	179
ID : 2803 .....	179
Sri Hartaty <sup>1</sup> , Eka Jumarni F <sup>2</sup> , Anggeraini O <sup>2</sup> , L. Vera R.P. <sup>2</sup> .....	179
<b>ABSTRACT</b> .....	179
THE EFFECT OF LOCAL GOVERNMENT CHARACTERISTICS AND BPK AUDIT OPINIONS ON THE FINANCIAL PERFORMANCE OF LOCAL GOVERNMENTS (STUDY ON LOCAL GOVERNMENTS IN SOUTH SUMATRA).....	180
ID : 2621 .....	180
Indra Satriawan, Ardiyan Natoen, Periansya, Sopiyan AR .....	180
1234 Department of Accounting, Sriwijaya State Polytechnic .....	180
DIMENSIONS OF WOMEN'S EMPOWERMENT .....	181
ID :2519 .....	181
Neneng Miskiyah <sup>1*</sup> , Sari Lestari Zainal Ridho <sup>1</sup> , Hadi Jauhari <sup>1</sup> , Ketu Purnamasari <sup>1</sup> .....	181
<sup>1</sup> Department of Business Administration, Sriwijaya State Polytechnic, Palembang, Indonesia.....	181
THE EFFECT OF ENTREPRENEURIAL COMPETENCIES ON BUSINESS PERFORMANCE (EMPIRICAL STUDY ON MSMES OF PALEMBANG WOVEN FABRIC) .....	182
ID : 2658 .....	182
Edwin Frywaruwah <sup>1</sup> , Bainil Yulina <sup>2</sup> , Sulaiman <sup>3</sup> , Siska Aprianti <sup>4</sup> .....	182
<sup>1,2,3,4</sup> Politeknik Negeri Sriwijaya.....	182
Analysis Of Marketing Mix Strategy On Consumer Value In Small And Medium Enterprises In Palembang, South Sumatra (Case Study Of Palembang's Traditional Processed Food) .....	183
ID : 2756 .....	183
Riza Wahyudi, M.Thoyib, Firmansyah, Darul Amri .....	183
Accounting Department Politeknik Negeri Sriwijaya, thoyib1958@gmail.com .....	183
THE EFFECT OF PLANNING ON RISK OF LOSS.....	184
IN INVESTING IN THE CAPITAL MARKET .....	184
ID 2804 .....	184
Mariska. Z <sup>1</sup> , Hendra Sastrawinata <sup>2</sup> , Dr. Dewi Fadilah <sup>3</sup> , M. Riska Maulana <sup>4</sup> .....	184
State Polytechnic of Sriwijaya .....	184
The Effect of Bank Credibility and Service Convenience on Bank Customer Attitudes .....	185
ID 2567 .....	185
Esya Alhadi <sup>1</sup> , 2nd Gst Ayu Oka Windarti <sup>2</sup> , Elvia Zahara <sup>3</sup> , Titi Andriani <sup>4</sup> .....	185
<sup>1,2,3,4</sup> Business Administration Department, State Polytechnic of Sriwijaya, Palembang,	

Indonesia.....	185
The Influence of Information Quality and Information System Quality of Regional Assets on User Satisfaction at the Provincial Government of South Sumatera .....	186
ID 2814 .....	186
Kartika Rachma Sari <sup>1,*</sup> Zainal Arifin <sup>2</sup> , Desi Indriasari <sup>3</sup> , Choiruddin <sup>4</sup> .....	186
Politeknik Negeri Sriwijaya.....	186
Looking beyond Students' Writing: Its Relation to Their Academic Achievement .....	187
ID 2822 .....	187
Beni Wijaya, Zakaria, Munaja Rahma, Moehamad Ridhwan .....	187
Politeknik Negeri Sriwijaya.....	187
Determinants of Regional Budget Absorption in the Regional Apparatus Organization of Palembang City.....	188
ID 2830 .....	188
Vega Nabila Putri <sup>1</sup> , Kuo Keo Pisey <sup>2</sup> , Sukmini Hartati <sup>1</sup> , Rita Martini <sup>1*</sup> .....	188
<sup>1</sup> Accounting Department, Polytechnic State of Sriwijaya, Palembang 30139, Indonesia .....	188
<sup>2</sup> Entrepreneurship Development Institute, CIEDI Cambodia-India, Cambodia .....	188
*Corresponding author. Email: ritamartini@polsri.ac.id .....	188
ASPECTS AFFECTING THE ACCOUNTABILITY PERFORMANCE OF GOVERNMENT AGENCIES BANYUASIN DISTRICT.....	189
ID: 2834 .....	189
Rita Martini <sup>*1</sup> , Muhammad Aulia Ramadhan <sup>*1</sup> , Sukmini Hartati <sup>*1</sup> .....	189
<sup>1</sup> Accounting Department, Polytechnic State of Sriwijaya, Palembang 30139, Indonesia .....	189
PERCEPTION OF HUMAN RESOURCES ASPECT ON ABILITY TO MANAGE BUMDES .....	190
Paper ID 2846 .....	190
Nelly Masnila <sup>1</sup> , Faridah <sup>2</sup> , M. Husni Mubarak <sup>3</sup> , Desri Yanto <sup>4</sup> .....	190
Politeknik Negeri Sriwijaya.....	190

# Dimensions of Women's Empowerment

Neneng Miskiyah<sup>1,\*</sup> Sari Lestari Zainal Ridho<sup>1</sup> Hadi Jauhari<sup>1</sup> Ketu Purnamasari<sup>1</sup>

<sup>1</sup>*Department of Business Administration, Polytechnic of Sriwijaya, Palembang, Indonesia*

<sup>\*</sup>*Corresponding Author. Email : [nenengmiskiyah@polsri.ac.id](mailto:nenengmiskiyah@polsri.ac.id)*

## ABSTRACT

Women's empowerment is an important strategy in increasing the role and opportunities of women in improving their economy and is an effort to increase and actualize their potential so that they are more able to be independent and work, and are more respected. This study aims to analyze the probability of empowering women in the songket handicraft business according to dimensions of women's empowerment. Testing and analyzing the dimensions of women's empowerment consisting of welfare, access, awareness/critical awareness, participation, and control of women's empowerment. In this study we used the binary logistic regression. The results showed that the dimensions of participation and control have a positive and significant effect on women's empowerment.

**Keywords:** *women's empowerment, gender, dimensions.*

## 1. INTRODUCTION

The involvement of women in the labor market can illustrate the level of women's welfare and empowerment. The more women who work, it shows that the more women are able to actualize themselves and the smaller the inequality of work participation between women and men in the labor market. According to data from Sakernas February 2019 [1], the comparison of the Labor Force Participation Rate (TPAK) between women and men in 2019 shows quite a large difference, the TPAK for women is 55.50 percent, while the TPAK for men is equal to 83.18 percent. Although women's participation rates have increased in the labor market, women are more disadvantaged than men. While women are underrepresented in the workforce, many of them are unemployed or underemployed, who are part-time and informal sector workers. In the formal sector, women's participation is still lower, unemployment is higher, quality of work is worse, wages are lower, access to resources such as land and credit is still low and women face discriminatory treatment in the wage system.

Gender gap compensation affects not only women, but families and children whose needs are influenced by income mothers. This in turn will affect poverty levels, making the percentage of "poor" women larger in society [2]. Women take more responsibility, have to care for their families and carry out social

responsibility to society and they need to be compensated equally and fairly for doing so. Therefore, it needs attention because the increasing role of women in the labor market is expanding and so that this involvement does not lead to gender inequality.

Women's empowerment is an interesting issue to discuss. The various efforts made by the government and society through its programs are directed so that the benefits of development can be felt in a balanced way, both men and women. However, this effort does not yet reflect gender equality, because there is still a lack of attention and intensity of programs directed at empowering women. The development of a family business is one of the steps that can be taken to increase the role of women in the family to jointly build and develop the family economy in achieving family welfare.

Previous research with a similar topic [3] has been conducted which examines the multidimensional effect of production, resources, education, time use on women's empowerment. The results showed that the highest contribution to multidimensional economic empowerment came from the education sector followed by resources, time use, and the least contribution came from income. Another empirical result [4] shows that the content of education, the economy of women's participation, poverty, and the economic opportunities available to women increase their empowerment.

One corner of the city of Palembang which is famous for its songket weaving center is located in the Ki Gede Ing Suro area. This area can also be referred to as the creative industry cluster because there are quite a lot of songket weaving craftsmen in this area. This business has been done a lot in the city of Palembang, and can be used as an effort that can be done by women and have the opportunity to develop this songket craft business so that it is expected to improve family welfare. Although there are still many obstacles faced by women in developing these businesses, for example, the limited knowledge of women as business actors, low skills, and limited business capital. Empowerment of women through the songket craft business is intended to explore deeper the potential and abilities possessed by women in trying and understanding women in terms of independence and internal strength from within themselves. Most of the women who work in the songket handicraft business are only craftsmen/laborers, and even as unpaid workers on the grounds of working in their own family businesses.

This study focuses on five dimensions of Longwe women's empowerment [5]. In simple terms, this study examines these 5 dimensions of the probability of empowering women who work in their own businesses and work in other people's businesses. This paper is organized into 5 parts, namely (1) introduction; (2) literature review; (3) research methods; (4) results and discussion, and the last part (5) conclusions.

## **2. LITERATURE REVIEW**

### **2.1. Women' Empowerment**

Women's empowerment is an effort to build women's awareness of gender equality so that they are able to develop their potential, so that women can be independent and participate in development. Women have the ability to increase independence and strength in themselves. [6][7][8].

Women empowerment is basically a way of enhancing the social, economic, cultural and political position of women, who are conventionally disadvantaged and neglected in society. Many studies have shown that the proportion of women's income is more than men's income to meet household expenses in improving children's welfare and their education [9].

### **2.2. Dimensions of Women's Empowerment**

Sarah Hlupekile Longwe developed the female empowerment dimension. Longwe refers to empowering women to take an equal place with men, and to take an equal part in the development process to

gain control over the factors of production on the same basis as men [10]. The dimension of empowering Longwe women is based on (1) *welfare*, a condition in which women should have the same access as men in terms of women's economic participation, educational attainment, health and welfare; (2) *access*, the ease of access for women to productive resources, and the ability to use information technology; (3) *consientisation*, understanding the differences in gender roles and gender roles; (4) *participation*, mental and emotional involvement of women in contributing to development program starts from planning to decision making, and takes responsibility, and (5) *equality of control*, equality of women who have power in changing the conditions of the position, the future of women themselves, and their communities [11][12][13].

Various researches on women's empowerment have been carried out, starting from conducting research on the factors that influence women's empowerment in improving family living standards, to efforts to empowering women through entrepreneurship development. The study which aims to explore the factors that influence the success of women's empowerment [14] concludes that there are 9 factors that influence, namely the role of government, cooperatives, the role of NGOs, the role of companions, the role of LCO, participation, the need for rewards, personal approaches, and leadership. The same thing was done by [15] researching women's empowerment through entrepreneurship development, with the result that there are 5 (five) interrelated factors that influence women's empowerment, namely, welfare, access to resources, participation, critical awareness, and control.

In addition, a study on empowerment models for poor women through the development of family entrepreneurship towards a creative economy [16] builds a PCIM (*pro-poor capacity improvement model*) model with the main components of empowering poor women, namely (1) *stakeholder support*; (2) the existence of *Achievement Motivation Training*; (3) strengthening networking among women as *learning by doing* media; (4) formation of groups; (5) creativity development through *capacity building*; and (7) expansion of the foster father system.

Research conducted by [11] [15] shows that the dimensions of welfare, access to resources, participation, critical awareness, and control affect women's empowerment. Therefore, based on our research objectives, the hypothesis is (1) the probability of women working in their own businesses is greater than working in other people's businesses, (2) women workers who have high welfare have a greater chance of working in their own business than working in their own business. on the efforts of

others, (3) the women that have broad access have greater opportunities to work on their own business than working on the efforts of others, (4) the lower awareness/consciousness critical, the smaller the chances of female workers to work on business alone, (5) the higher the participation of women workers, the greater the opportunity to work in their own business, and (6) the stronger the control, the greater the chance for women to work in their own business.

### 3. RESEARCH METHODS

This research was conducted in the area of Ki Gede Ing Suro as a songket craft center. The unit of analysis in this study were all women with the criteria as housewives, as workers in the songket weaving business, and women who were not married but had entered the working age who worked in making songket crafts.

The population in this study were women aged 15 years and over to 65 years who worked as songket craftsmen, both those who worked in their own businesses, as well as in other people's businesses. It is not certain that the number of female workers who work in the songket handicraft business in the Ki Gede Ing Suro area is not certain.

Determination of sample size using the Wibisono formula [17], the sample used is 100 people. By using snowball sampling technique where the sample is obtained through a rolling process from one respondent to another respondent [18]. This sampling process runs until sufficient information is obtained and the number of samples that meet is 100 respondents. The questions in the questionnaire designed to measure the variables studied, refers to a theory or prior research on women's empowerment dimensions [11][15][13].

The welfare dimension measures the fulfillment of food and non-food needs and the income/wages earned in accordance with the abilities and skills possessed. The access dimension measures the ease of obtaining information, production materials, business capital assistance, and ease of marketing business results. Regarding the division of labor, appreciation, family and community awareness that women work as songket craftsmen can help improve family welfare as outlined in the critical awareness dimension. The participation dimension measures the involvement of women in contributing thoughts in planning songket business activities, while the control dimension measures the role of women in checking from the start of production to the production of songket.

This study uses a binary logistic regression model [19], where the dependent variable is women's empowerment in the form of qualitative data on a nominal scale consisting of 2 categories, namely

(1) women who work in their own businesses, and (2) women who work for other people's businesses. Meanwhile, the independent variables used in this study are the dimensions of welfare, the dimension of access, the dimension of awareness/critical awareness, the dimension of participation, and the dimension of control.

The logit model equation in this study is:

$$WE = \ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon \quad (1)$$

where :

WE	= Women's empowerment
(1	= working in their own business;
0	= working in other people's business)
X <sub>1</sub>	= welfare
X <sub>2</sub>	= access
X <sub>3</sub>	= awareness/critical awareness
X <sub>4</sub>	= participation
X <sub>5</sub>	= control
ε	= error term

To find out how much opportunity for women's empowerment, a probability estimate is made for the category of working in their own business, and working in other people's businesses. The *p* value or chance (*Y* = 1) with the equation:

$$p = \frac{e^{(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5)}}{(1 + e^{(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5)})} \quad (2)$$

Where:

<i>p</i>	= peluang
<i>e</i>	= eksponensial

### 4. RESULT AND DISCUSSION

The results of preliminary data processing (pre-test) indicate that this study has met all the requirements in the pre-test reliability and validity testing.

Empowerment of women is caused by many factors, both internal and external factors. Efforts to determine the factors that influence empowerment, then in this study, the dependent variable (*Y*) is women's empowerment, where the two-category nominal scale dependent variable must be coded using 0 and 1 [19][20]. The dependent variable consisting of 2 categories is coded, namely *Y* = 1 working in their own business, and *Y* = 0 working in other people's business. Women's empowerment is influenced by 5 dimensions, namely welfare (*X*<sub>1</sub>), access (*X*<sub>2</sub>), awareness/critical awareness (*X*<sub>3</sub>), participation (*X*<sub>4</sub>), and control (*X*<sub>5</sub>). Simultaneous testing to determine the effect of the independent variable on the dependent variable using the Omnibus Test and the results of data processing obtained a significance value of 0.000, so



that Ho decision was rejected because the significance value was smaller than  $\alpha$  of 0.05.

**Table 1.** Omnibus Test

		Chi-square	df	Sig.
Step 1	Step	42.368	5	.000
	Block	42.368	5	.000
	Model	42.368	5	.000

Source: Results of data processing, 2020

From Table 1, it is obtained the Chi-square value of 42,368 and a significance value of 0,000. The value of the Chi-square table with a df of 5, then the value of the Chi-square table is 11,0705 or a significance value of  $\leq 0.05$ . From these results it is stated that the joint test of the independent variable has an effect on women's empowerment.

In contrast to the omnibus test, the Hosmer and Lemeshow test scores are said to be good if the significant value is  $> 0.05$ , as shown in Table 2 below.

**Table 2.** Hosmer and Lemeshow Test

		Chi-square	df	Sig.
Step 1		0.369	4	0.985

Source: Results of data processing, 2020

In addition, the parameters are viewed from Pseudo R<sub>2</sub> is R-square interpreted similar to OLS because no equivalent that can replace the logit model. The following are the output results shown in Table 3.

**Table 3.** Pseudo R<sub>2</sub>

Cox & Snell	0.345
Nagelkerke	0.506

Source: Results of data processing, 2020

From Table 3 it explains that the R-square is equal to 0.506 (Nagelkerke). This indicates that independent variables can only explain the dependent variable of 0506 or 50,6 %. The small pseudo R-square value does not make a model considered bad. The Pseudo R-square value of 0 to 1 is not a natural interpretation but an imitation to replace the OLS R-square in the logit model [21].

By using equation (2), the estimation results of the probability of women's empowerment for the category of working in their own business are 0.543. When viewed from the estimated probability value of this category, it means that women who choose to work in their own business are 0.543 times compared to working in other people's businesses.

Partial testing is done to determine the significance of the independent variable parameters using the Wald test. The following test results are shown in Table 4.

**Table 4.** Partial Test Results for Independent Variables

Independent Variables	B	Wald	Sig.	Exp(B)
Welfare (X <sub>1</sub> )	-0.531	0.253	0.615	0.588

Access (X <sub>2</sub> )	-0.200	0.267	0.606	0.819
Awareness (X <sub>3</sub> )	-0.277	0.752	0.386	0.758
Participation (X <sub>4</sub> )	2.641	6.397	<b>0.011</b>	14.030
Control (X <sub>5</sub> )	1.220	3.881	<b>0.049</b>	3.388
Constant	31.860	5.640	<b>0.018</b>	0.000

Source: Results of data processing, 2020

Significance at  $\alpha = 5\%$

Based on Table 4, it explains that the significant parameter is the coefficient of participation variable and control variable because these two variables have a significance value  $< 0,05$ . This explain that at the 5% significance level, participation and control have a significant effect on women's empowerment. The following is a logistic regression model.

$$WE = 31.860 + 0.531X_1 + 0.200X_2 + 0.277X_3 - 2.641X_4 - 1.220X_5 + \epsilon$$

(3)

Table 4 presents the value of exp (B) or odds ratio, which is interpreted as the risk or tendency of empowering women based on the influencing variables. The odd ratio value on the participation variable is 14,030, this value explains that respondents who are actively involved in contributing their thoughts in songket business activities have a tendency to work on their own business by 14,030 times more than working on other people's businesses. This explains that women songket weavers who participate actively involve themselves by contributing thoughts in planning songket business activities, actively participating in the implementation of business activities, and taking responsibility for everything that is done and the results achieved, the opportunity to work in other people's businesses is diminishing.

Women are no longer considered as targets or objects of the songket business activities but participate in everything from planning to marketing the songket crafts to the market. Participation in the evaluation relating to the preparation and production needs of the songket.

Although initially, the activity of weaving songket that was carried out by women was mostly a side job to help their husbands and to increase household income, this work can be the main source of household income if managed properly. The involvement of women in determining plans for making songket can be more flexible if done when working on their own business. Determination starting from production materials such as threads, motifs, coloring, to the marketing of the results can be done through one's own decision. However, there are still many women songket craftsmen who are not involved or not included in the planning process, because these women work in other people's businesses, who only take orders and do work according to orders.

Women are very potential and have competence in business development, in terms of women's participation in business activities as business actors, managers, or as workers, it is known that women have a very high work ethic and contribute to the welfare of their families. Therefore, [22] explained that women need to participate in contributing thoughts and responsibilities in managing their businesses. This finding is in line with research by [13] who found that equal participation of women in decision-making, policy, planning and administration processes has an effect on women's empowerment.

The next variable that has a significant effect is the control variable. The odds value of the control is exponential (1,220) of 3,388. This value explains that respondents who have the same opportunity to check the costs used, and check from the start of production, tend to work on their own business by 3,388 times more than working on other people's businesses. However, the real condition explains that women songket craftsmen have not fully obtained this access, because there are still limitations in checking the costs used in the business, and the low training carried out by the city government or other institutions. Meanwhile control itself is the level achieved when women take action so that there is gender equality in decision making over access to resources.

This finding is consistent with research conducted by [23] that there has not been any efforts by the government and community leaders due to a lack of understanding and sensitivity to gender gaps. Women have not been allowed the same as men for doing control of the work performed.

## 5. CONCLUSION

Based on the purpose of this study is to examine whether the dimensions of welfare, access, awareness / critical awareness, participation, and control have an influence on women's empowerment. The results were obtained simultaneously that all dimensions have an effect on women's empowerment, but based on partial testing only the participation and control dimensions have a positive and significant effect on women's empowerment. This conclusion indicates that the results of the study support previous research which states that there is a positive and significant relationship between these 5 dimensions on women's empowerment. However, the conclusions from the results of this study differ due to differences in analysis techniques. In detail, it can be concluded that the estimated probability of empowering women prefers to work in their own business. The implication of this research is that there needs to be more serious attention and involvement from the city government and other institutions in coaching women songket craftsmen, and improving the quality of women through various activities to empower

them through songket business activities.

## ACKNOWLEDGMENTS

This research was supported by Polytechnic of Sriwijaya. The authors would like to thank the P3M Polytechnic of Sriwijaya and colleagues who have provided suggestions and corrections that are very helpful for this research.

## REFERENCES

- [1] BPS RI. 2019. *Sakernas Februari 2019*. Jakarta.
- [2] Bowen, Judith E. Grey and McFarlane, Donovan A. 2010. Gender Compensation Discrimination: An Exploration of Gender Compensation Gap and The Higher Education Connection. *Journal of Business Studies Quarterly*, 2(1): 65-82.
- [3] Ayevbomwan O.S, Popoola O.A & Adeoti A.I. 2016. Analysis of Women Empowerment in Rural Nigeria: A Multidimensional Approach. *Global Journal of Human-Social Science C*, 16(6): 19-32.
- [4] Bushra, Aliya, Nasra Wajiha. 2015. Assessing the Socio-Economic Determinants of Women Empowerment in Pakistan. *Procedia-Social and Behavioral Sciences (Elsevier)*, 177(2015): 3-8. DOI: <https://doi.org/10.1016/j.sbspro.2015.02.321>.
- [5] Longwe, Sara Hlupekile. 2002. Addressing Rural Gender Issues: A Framework for Leadership and Mobilisation. *The III World Congress for Rural Women, Madrid, October*, 2-13.
- [6] Novian, Budhy. 2010. *Sekilas Tentang Pemberdayaan Perempuan*. Artikel Sanggar Kegiatan Belajar Kota Pangkal Pinang. Kepulauan Bangka Belitung.
- [7] Priharsanti, Amelia. 2011. Peran dan Potensi Gerakan PKK serta Model Pemberdayaan bagi Perempuan dalam Rangka Membantu Ekonomi Keluarga (Studi pada Beberapa Kelompok Usaha PKK di Malang Raya). *Tesis*. Program Magister Ilmu Ekonomi, Universitas Brawijaya.
- [8] Hunt, Abigail and Emma Samman. 2016. *Women's Economic Empowerment: Navigating Enablers and Constraints*. Research Report, Development Progress.
- [9] F. Hasin, AKMB Hasan and H. Musa. 2018. Women Empowerment Model: Strategies to Overcome Challenges. *J Fundam Appl Sci*, 10(1S): 1068-1083. DOI: <https://doi.org/10.4314/jfas.v10i1s.78>.
- [10] Tonderai, Kapesa, Faustino Kufakunesu. 2019. Women's Economic Empowerment Through

- Entrepreneurial Opportunities In Zimbabwe's Informal Furniture Industry. *IOSR Journal of Business and Management*, 21(10) Series V: 44-55. DOI: <https://doi.org/10.9790/487X-2110054455>.
- [11] Luttrell, Cecilia et al. 2009. Understanding and Operationalising Empowerment. *Working Paper 308*. ISBN 978 1 907288 03 6.
- [12] Cornwall, Andrea, and Althea-Maria Rivash. 2015. From Gender Equality and Women's Empowerment to Global Justice: Reclaiming a Transformative Agenda for Gender and Development. *Third World Quarterly*, 36(2): 396-415. DOI: <https://doi.org/10.1080/01436597.2015.1013341>.
- [13] Supeni, Retno Endah dan Maheni Ika Sari. 2011. *Upaya Pemberdayaan Ekonomi Perempuan Melalui Pengembangan Manajemen Usaha Kecil (Studi diskriptif pada kegiatan usaha kecil ibu-ibu desa Wirolegi, Kabupaten Jember, Dampungan Pusat Studi Wanita UM Jember)*. Makalah pada Seminar Nasional Ilmu Ekonomi Terapan, Fakultas Ekonomi UNIMUS.
- [14] Pratama, Crisvi. 2013. Faktor-faktor yang Mempengaruhi Keberhasilan Pemberdayaan Perempuan Desa Joho di Lereng Gunung Wilis. *Kebijakan dan Manajemen Publik*, 1(1): 12-19.
- [15] Ratnawati, Susi. 2011. Model Pemberdayaan Perempuan Miskin Perdesaan Melalui Pengembangan Kewirausahaan. *Jurnal Kewirausahaan*, 5(2): 1-10.
- [16] Marwanti, Sri, dan Ismi Dwi Astuti. 2012. Model Pemberdayaan Perempuan Miskin Melalui Pengembangan Kewirausahaan Keluarga Menuju Ekonomi Kreatif di Kabupaten Karanganyar. *SEPA*, 9(1): 134-144.
- [17] Riduwan, dan Akdon. 2013. *Rumus dan Data Dalam Analisis Statistika*. Bandung: Alfabeta.
- [18] Sekaran, Uma. 2011. *Research Methods for Business: Metodologi Penelitian untuk Bisnis (Buku 2, Edisi 4)*. Jakarta: Salemba Empat.
- [19] Hosmer, JR, David W., Stanley Lemeshow, Rodney X. Sturdivant. 2013. *Applied Logistic Regression (3<sup>rd</sup> Edition)*. New Jersey: John Wiley & Sons Inc.
- [20] Agresti, Alan. 2007. *An Introduction to Categorical Data Analysis (Second Edition)*. New Jersey: John Wiley & Sons. Inc.
- [21] Greene, William H. 2012. *Econometric Analysis (Seventh Edition)*. United State: Pearson Education. Prentice Hall.
- [22] Indiworo, Hawik, Ervina. 2016. Peran Perempuan Dalam Meningkatkan Kinerja UMKM. *Jurnal Equilibria Pendidikan*, 1(1): 40-58.
- [23] Rosdiana, Weni. 2015. Analisis Pemberdayaan Perempuan Desa (Studi di Desa Bulutengger, Kecamatan Sekaran, Kabupaten Lamongan). *JKMP* 3(2): 117-240.



**The 4<sup>th</sup> FIRST 2020**  
**(FORUM IN RESEARCH, SCIENCE, AND TECHNOLOGY)**

CERTIFICATE OF APPRECIATION

Present to

**Hadi Jauhari**

in recognition & appreciation of contribution as

**Co-Author**

FIRST International Conference  
"SYNERGY OF APPLIED TECHNOLOGY FOR SOCIAL-TECHNOPRENEUR BASED ON LOCAL  
RESOURCE TO GENERATE SUSTAINABILITY DEVELOPMENT"  
Held on November, 10-11, 2020



Dr. Ing. Ahntad Taqwa, M.T.  
Director of State Polytechnic of Sriwijaya



Dr. Rita Martin, M.Si., Ak., CA.  
FIRST 2020

Organized By :



Collaborate With :

