

CONTENT

Conference Organizer	I
preface	Vi
Content	viii
Invited Speakers	xiii
Presentation Guidelines	xv
Program Overview	xvi
Schedule Of Parallel Session	xvii

GEO-ELECTROMAGNETIC SIGNAL PROCESSING

G101 Pc5 Magnetic Pulsations During Outer Electron Radiation Belt. L. Muhammad Musafar K	1
G102 A Comparison Between Computer Derived (Adaptive Smoothing Method) and Hand Scaled K Indices at Tuntungan Geophysical Station. Yosi Setiawan	2
G103 Electromagnetic Anomaly As Earthquake Precursor In PelabuhanRatu, Sukabumi. Angga Setiyo Prayogo	8
G104 ULF Geomagnetic Pertubations Related With Earthquake . Case Study: 9th January 2014. Ayu Adi Justicea	14
G105 Determinations Onset time of Earthquake Precursor by Analizing ULF-EM Emission Signal in Sumatra region, Case Studi Padang 2009 and Mentawai 2010. S.Ahadi	22
G106 On the Influence of DC Railway Noise on Variation Data from Tangerang Geomagnetic Observatories. Relly Margiono	27
G107 Lesser Sunda Islands Earthquake Inter-Occurrence Times Distribution Modeling. Indira Puteri Kinasih	33
G108 Horizontal Component Variation in Geomagnetic Stations During Annular Solar Eclipse on January 26th, 2009 I Putu Dedy Pratama	34

CONTENT

G109 Changes of the Geomagnetic Signal linked to Tohoku Earthquake on March 11th 2011. Bulkis Kanata	37
NEW-RENEWABLE ENERGY	
G201 Analysis of Harmonic Distortion Effect on Deviation Measurement of Electrical Energy in kWh Meter. Amien Rahardjo	38
G202 Inrush Related Problems Caused by Lamps and Electric Vehicle. J. F. G. Cobben	43
G204 Performance comparison of PWM schemes of dual-inverter fed five-phase motor drives. I Nyoman Wahyu Satiawan	50
G205 Design of Buck Converter For Photovoltaic System Applications. Ratna Ika Putri	52
G206 Development of a 20 V-LED driver based on the boost converter using a FPGA module. N. Sulistiyanto	56
G207 Development of Microhydro Field Laboratory under the Program of Science and Technology on Campus Innovation and Creativity. Teguh Utomo	57
G208 Resisistivity Structures in Mt. Batur Geothermal Prospect Area in Bali Province, Indonesia. Wahyudi W. Parnadi	62
G209 Smart Grid Control with Fuzzy Integrator for Micro Hydro Connected to Low Voltage Distribution PT. PLN (Persero). Lie Jasa	68
G210 A Building Audit Software to Support Energy Management and Conservation. Rini Nur Hasanah	74

CONTENT

DATA MANAGEMENT & INFORMATION SYSTEMS

G301 Improvement Of Multi Resolution Digital Image Magnification Using Combined Low Pass Filter and Bilinear Interpolation. Cahyo Darujati	80
G302 Outlier Filtering For Hydrogen Temperature And Flow Rate Time Series Data In Sintering Process. Dede Sutarya	87
G303 The Implementation of the Advanced Encryption Standard (AES) Encryption Algorithm For Computer File Security. Mokhammad Hendayun	91
G305 Comparison of K-Means and Agglomerative Hierarchical Clustering Method with Principal Component Analysis in Research Document Analysis. Emi Susilowati	96
G306 Level Prediction Of Pneumonia In Children Time Range Based Breastfeeding, Immunization Status, Nutrition Using K-Means. Yusriel Ardian	105
G307 Parallel Programming to Increase Performance of Binary Search Tree. Cipta Ramadhani	112
G308 Fall Detection System for Elderly Based on Android Smartphone. Made Liandana	116
G309 Poverty Mapping in Mataram by Multi-Criteria Fuzzy Approach. Misbahuddin	121
G310 Socialization and Visualization of City Transport Using Google Maps API. Falahah	130
G311 SIG-based Earthquake Information System. Wina Witanti	135
G312 Denoising Acoustic Emission Signal Using Wavelet Transform for Determining the Source Location Micro Crack on Concrete. I Gede Pasek Suta Wijaya	140

CONTENT

Telecommunication

G401 Particle Swarm Optimization for Wireless Sensor Network Deployment Design by Taking Account of Barrier Position and Attenuation. Masjudin	141
G402 Circularly Polarized Stack-Patch Microstrip Array Antenna for Mobile Satellite Communications. Muhammad Fauzan Edy Purnomo	148
G403 Angle of Arrival Using Cross Yagi-Uda Antennas. SatriaGunawanZain	151
G404 Simulation Attenuation From Rain Cell Movement For Wimax Channel Transmission In Lombok. Made Sutha Yadnya	157
G405 Android Based Indoor Navigation Application Using Earth's Magnetic Field Pattern Case Study: Universitas Multimedia Nusantara. Rijal Widhi Permadi	162
G406 Implementation of Haar Wavelet Transform on Xilinx Spartan- 3E FPGA. Risanuri Hidayat	168
G407 A Robust Method of Encryption and Steganography Using ElGamal and Spread Spectrum Technique Based on MP3 Audio File. Priadhana Edi Kresnha	173
G408 Check Out System Using Passive RFID Technology in Wholesale Supermarket. Gede Angga Pradipta	179
G409 Instrumentation of Carbon Monoxide to Indentify Traffic Jams. Siti Sendari	184
G410 Channel Estimation using Least Square Estimation (LSE) Orthogonal Frequency Division Multiplexing (OFDM) System. Muhamad Asvial	190
G411 Design of Low Noise Amplifier for 2.35 GHz Long Term Evolution (LTE) Application. Fitri Yuli Zulkifl	199

CONTENT

ELECTROMAGNETIC TECHNOLOGY

G501 Three Dim Mapping of Static Magnetic Fields over A Semi Anechoic Chamber. Teti Zubaidah	203
G502 Application Of Mt And Gravity Method To Potential Analysis Of Kepahiang Geothermal, Bengkulu. Boko Nurdiyanto	204
G503 Three-dimensional Inversion of Magnetic Resonance Sounding (MRS) for Groundwater Detection. Warsa Warsa	212
G504 Magnetotelluric Investigations in WaiUmpu Geothermal Prospect Area Lampung Province, Indonesia. Wahyudi W	213

