



# The 3<sup>rd</sup> International Conference on Applied Electromagnetic Technology 2022

Center of Excellence in Science and Technology "Geomagnetic"  
- University of Mataram

Faculty of Engineering, Building B 3rd Floor, Jl. Majapahit No. 62,  
Mataram-Lombok, Nusa Tenggara Barat - INDONESIA

Phone: +62 370 636126 / +62 370 635921 Fax: +62 370 636523  
Email: aemt@unram.ac.id URL: <http://aemt-geomagnetic.org>

## Schedule of the 3<sup>rd</sup> AEMT 2022

### Seminar: Tuesday, 1<sup>st</sup> November 2022

Time (UTC +8)	Agenda	Speaker(s)	Place
08.30 - 10.00	<b>Workshop on Geothermal Exploration</b>	Dr. Yunus Daud (NewQuest Geotechnology) Moderator: Dr. Atas Pracoyo	Ball Room Lombok Raya Hotel & <b>Zoom Virtual Room:</b> <a href="https://bit.ly/AEMT22_Workshop">https://bit.ly/AEMT22_Workshop</a>
10.00 - 10.30	Coffee Break		
10.30 - 12.00	<b>Workshop on Geomagnetic Equipment</b>	Dr. Marhaban Sigalingging (PT Mitra Intimarga) Moderator: Mr. Cipta Ramadhani	
12.00 - 13.00	Lunch		Resto Lombok Raya Hotel
13.00 - 13.05	<b>Opening Ceremony</b>	MC: Ms. Elise van Wijngaarden & Ms. Arnie Jasmin Johar	Ball Room Lombok Raya Hotel & <b>Zoom Virtual Room:</b> <a href="https://bit.ly/AEMT22_Opening">https://bit.ly/AEMT22_Opening</a>
13.05 - 13.15	Recitation of Qur'an	The Winner of E-Fest 2022	
13.15 - 13.25	Speech form General Chair	Dr. Rosmaliati	
13.25 - 13.35	Speech from Chair of IEEE Indonesia Section	Dr. Wahyudi Hasbi	
13.35 - 13.45	Speech from Rector of University of Mataram	Prof. Ir. Bambang Hari Kusumo, M.Agr. St., Ph.D.	
13.45 - 14.00	Speech & Opening by Governor of West Nusa Tenggara Province	Dr. H. Zulkieflimansyah, S.E., M.Sc.	
14.00 - 14.05	Prying	Mr. Suthami Aries Saputra	
14.05 - 14.15	Performance of Local Culture (Asih Tresna Traditional Dance)	Sentras	
14.15 - 15.30	<b>Plenary Session 1</b>	Moderator: Dr. Teti Zubaidah	
	New technologies in geothermal exploration & resource assessments	Dr. Yunus Daud (NewQuest Geotechnology)	
	Earth's magnetic fields are evolving	Dr. Monika Korte (GeoForschungsZentrum Potsdam, Germany)	
	Magnetic fields of our planet: a deep insight from space	Prof. Mioara Mandea (CNES, France)	
15.30 - 16.00	Coffee Break		



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16.00 – 18.00	<b>Parallel Sessions</b>	10 papers/room	
18.00 – 19.00	Dinner & Platinum Sponsor Presentation		Resto Lombok Raya Hotel
19.00 – 20.15	<b>Plenary Session 2</b>  Advances on materials for electric vehicular renewable technologies  Electromagnetics and our future generation of wireless system: a reflection of research & innovation	Moderator: Dr. I Nyoman Wahyu Satiawan  Dr. M.V. Reddy (Nouveau Monde Graphite, Canada)  Prof. Danilo Erricolo, Ph.D. (University of Illinois Chicago, USA)	Ball Room Lombok Raya Hotel &  <b>Zoom Virtual Room:</b> <a href="https://bit.ly/AEMT22_Plenary2">https://bit.ly/AEMT22_Plenary2</a>
20.15 – 20.30		<b>Closing Ceremony &amp; Awards</b> PIC: Mr. Made Sutha Yadnya	

## Scientific Tour: Wednesday-Thursday, 2 -3 November 2022

PIC: Mr. Abdullah Zainuddin & Mr. A. Sjamsiar Rachman

Day	Time (UTC +8)	Agenda (Tentatively)	Place
<b>Wednesday, 2<sup>nd</sup> November 2022</b>	08.00 – 11.00	Travelling from Mataram to Sembalun	Departure from Lombok Raya Hotel
	11.00 – 13.00	Trip to geothermal utilizations sites	Sembalun Bumbung Village
	13.00 – 14.00	Lunch	
	14.00 – 15.30	Trip to geothermal utilizations sites	Sajang Village
	16.30 – 17.00	Presentation: Preliminary Results of Geomagnetic Surveys over Sembalun Geothermal Prospect  by Dr. Teti Zubaidah & Dr. Rosmaliati	Hotel Nusantara, Sembalun Lawang
	17.00 – 18.00	Discussion: Direct Use of Geothermal Energy for Sustainable Green Industry in Sembalun  Moderator: Dr. Misbahuddin	
	18.00 – 19.00	Soft Dinner	
	19.00 - ...	Private agenda	
<b>Thursday, 3<sup>rd</sup> November 2022</b>	07.30 – 08.30	Breakfast & briefing	
	08.30 – 12.00	Trip to geothermal manifestation	Sebau Hot Spring
	12.00 – 15.00	Travelling from Sembalun to Mataram	Arrival at Lombok Raya Hotel



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## Schedule of Parallel Sessions

### **Breakout Room 1 (in-Person ORAL)**

Moderator: Dr. Felix Pasila & Dr. Misbahuddin

Time (UTC +8)	Paper ID	Title	Authors
16.00 – 16.12	2897	Design of Sepic Converter for Renewable Energy System	Ratna Ika Putri, Ferdian Ronilaya, Ika Noer Syamsiana, Septyana Riskitasari and Surya Nata
16.12 – 16.24	0693	Calcium Carbonate Scale Inhibition Program on Two-Phase Geothermal Well in Indonesia	Nur Choiri Amin, Kuzey Karasu, Abdurahman Unal and Yasemine Tigce Yuksel
16.24 – 16.36	4113	Preliminary Results from Spatial Characterization of Tropical Rain Using Weather Radar Data	Made Yadnya, Gamantyo Hendranto, Achmad Mauludiyanto, Wayan Sudiarta, Enderwin Enderwin, Alif Adiyasa and Abdullah Ali
16.36 – 16.48	8713	Optimization Of Patch E-Shape Array Microstrip Antenna 2.45 GHz Using Double Reflector	Cahyo Mustiko Okta Muvianto, Buyung Satria Anugrah, Suthami Ariessaputra and Sareh Malekpour
16.48 – 17.00	5607	NebulaX: A Therapeutic Mechanism Against Corona Virus	Felix Pasila, Hestiasari Rante, Erandaru Erandaru, Handry Khoswanto, Rhema Adhi and Henricus Soehartono
17.00 – 17.12	8741	Evaluation of Earth's Magnetic Field Anomalies over Sembalun Geothermal Prospect	Khilda Ayu Safitri, Teti Zubaidah, Rosmaliati Rosmaliati and Cipta Ramadhani
17.12 – 17.24	6534	Lora Technology for Communication in Blankspot areas	L. Ahmad S. Irfan Akbar, Misbahuddin Misbahuddin, Muhamad Syamsu Iqbal, A. Sjamsjiar Rachman, Djul Fikry Budiman and Giri Wahyu Wiriasto
17.24 – 17.36	0737	Clippo: a Speaker Clip on Mask	Erwin Sanjaya Loeminto and Felix Pasila
17.36 – 17.48	3792	Clustering of the 2018 Lombok, Indonesia Earthquakes using Agglomerative Hierarchical Clustering Algorithm	Cipta Ramadhani, Abdullah Zainuddin, Abdul Natsir, Rosmaliati and Teti Zubaidah
17.48 – 18.00	8927	D-Vote: Decentralized Voting System Using Ethereum Blockchain	Darrell Yonathan, Galih Damar Jati, Gerald Christanto, Kenya Damayanti, Jauzak Hussaini Windiatmaja and Riri Fitri Sari
18.00 – 18.12	6256	Distance Estimation Model Based on RSSI Using Outdoor Propagation Model	Abdullah Zainuddin, Misbahuddin and Irsan Taufik Ali



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## **Breakout Room 2 (Virtual ORAL)**

Moderator: Dr. Sabhan Kanata & Ms. Bulkis Kanata

<b>Time (UTC +8)</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
16.00 – 16.15	6301	Detrended fluctuation analysis associated with the M5.1 earthquake precursor in Banten, Indonesia	Cinantya Nirmala Dewi, Febty Febriani, Titi Anggono, Syuhada Syuhada, Aditya Dwi Prasetyo, Mohammad Hasib, Hendra Suwarta Suprihatin, Suaidi Ahadi, Muhamad Syirojudin, Hasanudin Hasanudin, Indah Marsyam, Muhammad Nafian and Suwondo
16.15 – 16.30	4960	Evaluation Method for Selection of OATS Location for EV Radiated Emission Measurement Based on Electromagnetic Field Scanning	Arief Rufiyanto, Reza Septiawan, Gamantyo Hendrantoro, Budi Sulistya, Eko Setijadi and Risnanda Saputra
16.30 – 16.45	3322	Time-frequency Analysis of Normal and Abnormal Lung Breath Sounds with Short-time Fourier	Bulkis Kanata and Sabhan Kanata
16.45 – 17.00	BREAK		
17.00 – 17.15	3811	Control System Design to Increase Low Voltage Ride Through (LVRT) Capacity in Wind Turbine Using STATCOM Base on Control Linear Quadratic Regulator (LQR)	Nurul Chairunnisa Noor, Indar Chaerah Gunadin and Ansar Suyuti
17.15 – 17.30	4649	Business and Sociological Perspective Review for Smart Farming Application	Insani Sekar Wangi and Catur Apriono
17.30 – 17.45	1195	Low Level Laser Technology (LLLT) to Reduce Dependency Substance Nicotine on Cigarette for Student at the University of Mataram	M. Ahleyani, I Made Bayu Suarjaya and Teti Zubaidah
17.45 – 18.00	3682	Analysis the Effect of Electric Current on Induction Magnetic Field Coils	Gladys Fouriza Ibanez, Ergi Putra Febtiawan and Rosmaliati Rosmaliati



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## **Breakout Room 3 (in-Person POSTER)**

Moderator: Mr. Erlan Taneza

<b>Time (UTC +8)</b>	<b>Paper ID</b>	<b>Title</b>	<b>Author(s)</b>
16.00 – 16.20	0001	Exploration of Geothermal Potential in Blawan – Ijen, East Java	Muhammad Riezqul Fikri
16.20 – 16.40	0002	Kamojang Geothermal Power Plant: 37 Years in Operation	Erlan Taneza
16.40 – 17.00	0003	Ulumbu Geothermal for Future Clean Energy in East Nusa Tenggara	Muhammad Irsal FajriEfendy
17.00 – 17.20	0004	Exploration and Development of Dieng Geothermal Power Plan in Central Java	Tizar Sepli Abiyusani
17.20 – 17.40	0005	Exploration and Utilization of Geothermal Energy in Hu'u – Daha Geothermal Working Area, Dompu District	Zulfikar
17.40 – 18.00	0006	Sorik Marapi in North Sumatra Geothermal Working Area	Multahadi



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## **Breakout Room 4 (Virtual POSTER)**

Moderator: Ms. Dwi Ratnasari

<b>Time (UTC +8)</b>	<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
15.30 – 15.40	5166	Health Risks of Electromagnetic Field	Lalu Alaudin Ibnu Tajuddin Faqih, Deonaldo Setiawan Aninfeto and Teti Zubaidah
15.40 – 15.50	7083	Analysis Design and Materials of Inductive Sensor	Farhan Ahmad Suharyadi, Iffah Fikriana Al Nurin and Bulkis Kanata
15.50 – 16.00	6226	Application of Resistive Sensors in the sector of Environment, Health, and Technology	Fatur Rahman, Fitratul Karimah and A. Sjamsjiar Rachman
16.00 – 16.10	3243	Liquid Crystal Display with Photolithography	Dion Pratama Putra, Dhafin Rizky Aldino and Bulkis Kanata
16.10 – 16.20	3628	Capacitive Sensors and Their Use	Lalu Efry Bani Akhry, Lutvi Alwan and Made Sutha Yadnya.
16.20 – 16.30	3902	RFID system	Dwi Juliadi Kusumayadi and M. Akbar Alamsyah
16.30 – 16.40	9851	The Effect of LED Lighting on Skin Health (The occurrence of skin hyperpigmentation)	Eny Maryani, Firdaus Romadhan and Cipta Ramadhani
16.40 – 16.50	BREAK		
16.50 – 17.00	8756	A Study the feasibility of automated data labelling and training using an EMF sensor in NILM platform	M. Irdani Syafari Fiddin and I Made Gita Yoga
17.00 – 17.10	9328	Easier Business with Barcode	Maulana Ridho Alfarizqa, Malik Gading Dirgantara and Dwi Ratnasari
17.10 – 17.20	2047	Superconducting Quantum Interference Device (SQUID) Magnetometer	Moh. Aryan Hastadi, M. Alan W G Sya'Ban and Paniran Paniran
17.20 – 17.30	5235	Implementation of Advance Photovoltaic Technology	Kevin Asgaryansyah, Lalu Muhammad Daffa Adyfar and Rosmaliati Rosmaliati
17.30 – 17.40	5058	Utilization of Electromagnetic Radiation in Cancer Treatment	M. Fajar Wirayudha, Esas Rahmat Muharam and Abdullah Zainuddin
17.40 – 17.50	4943	Drying Turmeric Using Microwave Ovens	Dony Anggara, Mochamad Dary Rochmany and Dwi Ratnasari
17.50 – 18.00	6604	Magnetic Technology for Medical Application	Diva Septiawan, Intan Novita Sari and Abdullah Zainuddin