



## Programme

### Day 1: 20 October 2020 (Tuesday)

0815 - 0900	<p><b>Opening Ceremony</b></p> <ul style="list-style-type: none"> <li>• Negaraku and Universiti Putra Malaysia (UPM) Anthems</li> <li>• Doa Recitation</li> <li>• Welcoming Speech by YBhg. Prof. Gs. Dr. Abdul Rashid bin Mohammed Shariff, President of IGRSM and Chairman of IGRSM 2020</li> <li>• Guest Address by YBhg. Prof. Ir. Ts. Dr. Nor Kamariah Noordin, Dean, Faculty of Engineering, Universiti Putra Malaysia (UPM)</li> <li>• Vice-Chancellor's Address by YBhg. Prof. Dr. Mohd Roslan Sulaiman, Vice-Chancellor, Universiti Putra Malaysia (UPM)</li> <li>• Opening Address by YB Khairy Jamaluddin bin Abu Bakar, Minister of Science, Technology &amp; Innovation</li> </ul>
0900 - 1130	<p><b>Keynote Session I</b></p> <p>Chairperson: Prof. Gs. Dr. Mazlan Hashim</p> <ul style="list-style-type: none"> <li>• YBrs. Tn. Hj. Gs. Azlikamil bin Hj. Napiah, Director General, Malaysian Space Agency (MYSA): <i>Remote Sensing's Role in the New National Space Policy</i></li> <li>• YBhg. Dato' Sr. Dr. Azhari Mohamed, Director General of Survey and Mapping Malaysia, Department of Survey and Mapping Malaysia (JUPEM): <i>Geospatially Speaking, Just Where on Earth Are We Now?</i></li> <li>• Mr. Jonathan Ong and Mdm. Siti Baizura Alidin, Planet: <i>How Planet's Agile Aerospace Approach Pushes the Boundaries of Geospatial</i></li> <li>• Mr. Paul Kennedy, Vice President, Product Strategy, Geointelligence, MDA Geospatial Services Inc.: <i>Growing a Space Economy with Earth Observation</i></li> </ul>

1130 - 1200	<b>Break</b>
1200 - 1330	<p><b>Keynote Session II</b></p> <p>Chairperson: Gs. Dr. Noordin Ahmad</p> <ul style="list-style-type: none"> <li>• Prof. Dr. Wataru Takeuchi, Remote Sensing of Environment and Disaster Laboratory (RSED), Institute of Industrial Science, University of Tokyo: <i>Geospatial Technologies Towards One World, One Health and One Earth</i></li> <li>• Mr. Johnny Ngo, Head of Sales Engineering APAC, Maxar: <i>Maxar Legion Constellation: Empowering the New Era of Earth Imaging &amp; Insights</i></li> </ul>
1330 - 1500	<p><b>Lunch Break</b></p> <p><b>VVIP Roundtable Discussion:</b></p> <ul style="list-style-type: none"> <li>• YBhg. Prof. Gs. Dr. Abdul Rashid Mohamed Shariff, President of IGRSM</li> <li>• YBr. Tn. Hj. Gs. Azlikamil bin Hj. Napiah, Director General, Malaysian Space Agency (MYSA)</li> <li>• Mr. Andrew Brockfield, Vice President of Sales in the Asia Pacific Region, Planet</li> <li>• Mr. Paul Kennedy, Vice President Earth Observation Systems, MDA Geospatial Services Inc.</li> </ul>
1500 - 1600	<p><b>Solution Provider Session</b></p> <p>Chairperson: Gs. Dr. Dinesh Sathyamoorthy</p> <ul style="list-style-type: none"> <li>• Mr. Marcos Garcia, Business Development Manager, RIEGL in collaboration with GPS Lands: <i>Better Scanner Utilization with RIEGL's New RiMAP GIS Software</i></li> <li>• Sr. Ismail bin Hussin, Principal Assistant Director, Policy &amp; Outreach Section, Policy Development, Standards &amp; Outreach Branch, National Geospatial Centre (PGN): <i>Geospatial Information Sharing in IR 4.0: Speed Up Production, Meet the Standard</i></li> <li>• Mr. Mohamad Azhar Ahmad, Chief Operating Officer, RedPlanet Solutions (M) Sdn. Bhd.: <i>RedPlanet Data Acquisition Services</i></li> <li>• Mr. Simone Placidi, Managing Director, Metasensing AP Pte. Ltd.: <i>MetaSensing SAR Solutions: From Ground to Space</i></li> </ul>
1600 - 1800	<p><b>Parallel Session A</b></p> <ul style="list-style-type: none"> <li>• A1: Geospatial Mapping &amp; Monitoring I</li> <li>• A2: Geospatial Modelling I</li> <li>• A3: Geospatial Planning &amp; Management I</li> <li>• A4: Geospatial Decision-Making I</li> </ul>

**Day 2: 21 October 2020 (Wednesday)**

0900 - 1100	<b>Parallel Session B</b> <ul style="list-style-type: none"><li>• B1: Geospatial Mapping &amp; Monitoring II</li><li>• B2: Geospatial Modelling II</li><li>• B3: Geospatial Planning &amp; Management II</li><li>• B4: Geospatial Decision-Making II</li></ul>
1100 - 1130	<b>Break</b>
1130 - 1330	<b>Parallel Session C</b> <ul style="list-style-type: none"><li>• C1: Geospatial Mapping &amp; Monitoring III</li><li>• C2: Geospatial Modelling III</li><li>• C3: Geospatial Planning &amp; Management III</li><li>• C4: Geospatial Decision-Making III</li></ul>
1330 - 1430	<b>Lunch Break</b>
1430 - 1630	<b>Parallel Session D</b> <ul style="list-style-type: none"><li>• D1: Geospatial Mapping &amp; Monitoring IV</li><li>• D2: Geospatial Modelling IV</li><li>• D3: Geospatial Planning &amp; Management IV</li><li>• D4: Geospatial Decision-Making IV</li></ul>
1630 – 1700	<b>Closing Ceremony</b> Presentation of Best Paper and Best Student Paper Awards

## Technical Sessions

DATE	TIME	SESSION	PAPER
<b>DAY 1</b> 20 October 2020 (Tuesday)	<b>1600 – 1800</b>	<b>A1: GEOSPATIAL MAPPING &amp; MONITORING I</b>	<p><b>Sessions Chair:</b>  <b>Lt. Cdr. Assoc. Prof. Gs. Dr. Mohd Hasmadi Ismail</b></p> <p><b>Change Detection for the Past Three Decade Using Geospatial Approach: A Case Study of Lake Chad in Central Africa</b>  <i>Alhaji Hussaini, Mohd Razali Mahmud and Kelvin Kang Wee Tang</i></p> <p><b>Assessing Land-Use and Land-Cover Change (LULCC) between 2009 and 2019 Using Object-Based Image Analysis (OBIA) in Cameron Highlands, Malaysia</b>  <i>Darren How, Mohd Hasmadi Ismail and Farrah Melissa Muharam</i></p> <p><b>Utilization of GEE for Land Cover Monitoring over Klang Valley, Malaysia</b>  <i>Noor Azawani Wahap and Helmi Zulhaidi Mohd Shafri</i></p> <p><b>Monitoring and Change Detection of Concentration Values for Zinc and Lead Minerals in Soil of Agricultural Lands Based on Remote Sensing Analysis and GIS</b>  <i>Hashim Ali Hasab</i></p>
		<b>A2: GEOSPATIAL MODELLING I</b>	<p><b>Sessions Chair:</b>  <b>Assoc. Prof. Gs. Dr. Ruzinoor Che Mat</b></p> <p><b>Geospatial Technology Methods for Terrestrial Carbon Assessment: A Comprehensive Review</b>  <i>Basam Dahy, Salem Issa, Taoufik Ksiksi and Nazmi Saleous</i></p> <p><b>Investigating the Impact of Land Use Change on Sediment Yield for Hydropower Reservoirs through GIS Application</b>  <i>Azwin Zailti Abdul Razad, Sarah Hanim Samsudin, Anita Setu and Lariyah Mohd Sidek</i></p> <p><b>Measuring the Magnetic Impact of Economic Agglomeration through Spatial Analysis in Pengerang, Johor.</b>  <i>Noordini Che'Man and Amirul Afiq Jamaluddin</i></p> <p><b>Evaluation of Allometries for Estimating Above-Ground Biomass Using Airborne LiDAR Data in Tropical Forest of Northern Borneo</b>  <i>Ho Yan Loh, Jim Jun Fei Liew, Daniel James, Keiko Ioki and Mui-How Phua</i></p>

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<b>DAY 1</b> 20 October 2020 (Tuesday)	1600 – 1800	<b>A3: GEOSPATIAL PLANNING &amp; MANAGEMENT I</b>	<p><b>Sessions Chair:</b>  <b>Assoc. Prof. Gs. Dr. Ahmad Fikri Abdullah</b></p> <p><b>Seismic Vulnerability Assessment for Buildings Typology Using DEMATEL Approach</b>  <i>Ratiranjan Jena and Biswajeet Pradhan</i></p> <p><b>Determining Variations in Rail Public Transport Access Using GIS in Klang Valley City, Selangor, Malaysia</b>  <i>Mohd Sahrul Syukri Yahya, Edie Ezwan Mohd Saftan and Burhaida Burhan</i></p> <p><b>Comparison of Interpolation Techniques for Assessment of Spatial Variability of Soil Chemical Properties for Oil Palm Plantation Zone Management</b>  <i>Shu Qing Tan, Ahmad Suhaizi Mat Su, Aimrun Wayayok and Arina Shairah Abdul Sukor</i></p> <p><b>Development of GIS Database for Infrastructure Management: Power Distribution Network System</b>  <i>Muhammad Amartur Rahman Bin Zainal Abidin, Khairul Nizam Abdul Maulud and Mohd Aizat Saiful Bahri</i></p> <p><b>Integrated Facility and Assets Management Using GIS-Web Application</b>  <i>Mohd Aizat Saiful Bahri, Khairul Nizam Abdul Maulud and Amartur Rahman Zainal Abidin</i></p> <p><b>Spatiotemporal Analysis Land Surface Temperature in Relation to Earthquake Occurrence around the Cimandiri Fault</b>  <i>Diki Nurul Huda, Supriatna, Iqbal Putut Ash Shidiq and Taqyuddin</i></p> <p><b>Comprehensive Spatial Criteria and Parameters for Sustainable Landfill Site Selection</b>  <i>Mohd Sanusi S. Ahamad and Siti Zubaidah Ahmad</i></p> <p><b>RFID Monitoring System and Management on Deer Husbandry</b>  <i>Rizzo Mungka Rechie, Murizah Kassim, Norsuzila Ya'Acob and Roslina Mohamad</i></p>
		<b>A4: GEOSPATIAL DECISION-MAKING I</b>	<p><b>Sessions Chair:</b>  <b>Prof. Sr. Dr. Zulkiflee Abd Latif</b></p> <p><b>Assessment of Environmental Sustainability Level of Affordable Housing in Malaysia</b>  <i>Nurul Aini Ismail, Zakri Tarmidi, Muhammad Najib Mohamed Razali, Nurul Hana Adi Maimun, Noordiana Hassan, Ahmad Nabil Md Nasir, Akhmal Sidek and Nik Norasma Che Ya</i></p> <p><b>Earthquake Risk Assessment Using Integrated Influence Diagram–AHP Approach</b>  <i>Ratiranjan Jena and Biswajeet Pradhan</i></p> <p><b>Earthquake Social Vulnerability Assessment Using Entropy Method</b>  <i>Ratiranjan Jena and Biswajeet Pradhan</i></p> <p><b>GIS-based Technical and Economic Feasibility Analysis of Utility-Scale Photovoltaic Plants in West Kalimantan - Indonesia</b>  <i>Sakti Anggara, Irwan Budiarto, Ibrahim Bathis Kunhali, Alfeus Sunarso and Harold Ruiz</i></p> <p><b>GIS Based Multi-Criteria Decision Making for Identification of Important Plant Areas: A Case Study in Johor, Malaysia</b>  <i>Hamidah Mamat, Mohd Hasmadi Ismail, Chua L.S.L., Lau K.H. and Yong W.S.Y.</i></p> <p><b>Landslides Risk Prediction Using Cascade Neural Networks Model at Muş in Turkey</b>  <i>Sohaib K. M. Abujayyab and Azlan Saleh</i></p>

DATE	TIME	SESSION	PAPER
<b>DAY 2</b> 21 October 2020 (Wednesday)	<b>0900 – 1100</b>	<b>B1: GEOSPATIAL MAPPING &amp; MONITORING II</b>	<p><b>Sessions Chair:</b>  <b>Gs. Dr. Hamdan Omar</b></p> <p><b>The Fixed Wing UAV Usage on Land Use Verification for Gazetted Royal Land in Malaysia</b>  <i>Norzailawati Noor, Norzalina Harun and Alias Abdullah</i></p> <p><b>Upscaling Remote Estimation on Relative Abundance of Chengal Trees in Tropical Rainforest Using Modified Canopy Fractional Cover (mCFC) Approach</b>  <i>Noordyana Hassan, Mazlan Hashim, Shinya Numata and Mohammad Zakri Tarmidi</i></p> <p><b>Identifying the Spatial Patterns of Housing Distribution in Johor Bahru through Spatial Autocorrelation</b>  <i>Nur Asyikin Mohd Sairi, Burhaida Burhan and Edie Ezwan Mohd Safian</i></p> <p><b>Vegetation Indices for Identifying Melaleuca Forest from Multispectral Satellite Sensors</b>  <i>Hamdan Omar, Muhamad Afizzul Misman and Siti Yasmin Yaakub</i></p> <p><b>Spatio-Temporal Pattern Analysis of Forest Fire Event in South Kalimantan Using Integration Remote Sensing Data and GIS for Forest Fire Disaster Mitigation</b>  <i>Huwaida Nur Salsabila, Abhista Fawwaz Sahitya and Panji Mahyatar</i></p> <p><b>Development of a Landscape Forest Performance Index to Assess Forest Quality of Managed Forests</b>  <i>Muhamad Afizzul Misman, Siti Yasmin Yaakub and Hamdan Omar</i></p>
		<b>B2: GEOSPATIAL MODELLING II</b>	<p><b>Sessions Chair:</b>  <b>Gs. Dr. Mohammad Zakri Tarmidi</b></p> <p><b>Assessment of Climate Change Impact on Future Streamflow at Bernam River Basin Malaysia</b>  <i>Habibu Ismail, Md Rowshon Kamal, Lai Sai Hin, Ahmad Fikri Bin Abdullah and Nuruddeen Mukhtar Nasidi</i></p> <p><b>Dengue Hotspot Detection in Bangi, Selangor, Malaysia</b>  <i>Nuriah Abd Majid and Rozimah Muhamad Rasdi</i></p> <p><b>Modelling Burglary Susceptibility – An Expert Judgement Approach.</b>  <i>Suzanna Noor Azmy, Muhammad Zulkarnain Abdul Rahman, Shahabuddin Amerudin, Othman Zainon and Tze Huey Tam</i></p> <p><b>Burglary Crime Susceptibility Assessment Using Bivariate Statistics Approach of Information Value Model</b>  <i>Suzanna Noor Azmy, Muhammad Zulkarnain Abd Rahman, Amerudin Shahabuddin, Othman Zainon and Mohd Asraf Asmadi</i></p> <p><b>Implementing Sustainable Urbanization Development Using Geospatial Approach</b>  <i>Muhammad Azizol Ismail, Ahmad Nazri Muhamad Ludin and Nafisa Hosni</i></p> <p><b>Analysis of Canopy Height Model (CHM) Extraction Using Quick Terrain Modeller (QTM) for Tropical Forest</b>  <i>Nurul Ain Mohd Zaki, Muhammad Farhan Rajuli, Zulkiflee Abd Latif, Mohd Nazip Suratman, Hamdan Omar, Mohd Zainee Zainal, Sharifah Norashikin Bohari and Noorfatekah Talib</i></p>

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<b>DAY 2</b> 21 October 2020 (Wednesday)	<b>0900 - 1100</b>	<b>B3: GEOSPATIAL PLANNING &amp; MANAGEMENT II</b>	<p><b>Sessions Chair:</b>  <b>Gs. Dr. Norizah Kamarudin</b></p> <p><b>Land Cover and NDBI Analysis to Map Built up Areas in Iskandar Malaysia</b>  <i>Muhammad Yazrin Yasin, Jamalunlaili Abdullah, Norzailawati Hj Mohd Noor and Mariney Mohd Yusoff</i></p> <p><b>Development of an Android Application for Smart Farming in Crop Management</b>  <i>Nor Athirah Roslin, Nik Norasma Che Ya and Mohd Razi Ismail</i></p> <p><b>Data Integration with a Twist</b>  <i>Lyes Mokraoui</i></p> <p><b>A 2-way Geo-Crowdsourcing Approach in Flood Relief Coordination and Distribution</b>  <i>Nurul Hawani Idris and Mohamad Hafis Izran Ishak</i></p> <p><b>Drone Technology as a Modern Tool in Monitoring the Urban Rural Development</b>  <i>Asniza Md Yunus, Abd Halim Hamzah and Fatin Afiqah Md. Azmi</i></p>
		<b>B4: GEOSPATIAL DECISION-MAKING II</b>	<p><b>Sessions Chair:</b>  <b>Gs. Dr. Nur Aulia Rosni</b></p> <p><b>Finding Optimal Locations of Uniqlo Stores Using Analytical Hierarchical Process (AHP) and GIS Analysis</b>  <i>Mukrimo'az Mat Hashim and Nabilah Naharudin</i></p> <p><b>Influence of Data Quality to Vegetation Passability</b>  <i>Josef Rada, Marian Rybansky and Filip Dohnal</i></p> <p><b>The Impact of Microrelief Forms on Mobility of Terrain Vehicles</b>  <i>Marian Rybansky, Filip Dohnal and Josef Rada</i></p> <p><b>Crime Prediction Using Spatial Repeat and Near-Repeats Analysis for Geospatial Policing Strategies</b>  <i>Hasranizam Hashim, Wan Mohd Naim Wan Mohd, Eran Sadek Said Md Sadek, Dato' Sahabudin Abd Manan, Mohd Kamal Kordi and Hisyamuddin Mohd Baharin</i></p> <p><b>Landslide Possibilities Using Remote Sensing and Geographical Information System (GIS)</b>  <i>Norsuzila Ya'Acob, Zarith Nur Atikah Abdul Rashid, Noraisyah Tajudin and Murizah Kassim</i></p> <p><b>The Development of Raspi-Met System with Raspberry Pi3 for Meteorological Monitoring in Remote Areas</b>  <i>Wayan Suparta</i></p>

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<b>DAY 2</b> 21 October 2020 (Wednesday)	1130 – 1330	<b>C1: GEOSPATIAL MAPPING &amp; MONITORING III</b>	<p><b>Sessions Chair:</b>  <b>Gs. Dr. Khairul Nizam Tahar</b></p> <p><b>The Integration of Aerial Sensing and Geophysical Techniques to Identify Buried Archaeological Properties in Sungai Batu, Bujang Valley (Kedah, Malaysia)</b>  <i>Shairatul Akma Roslan, Mohd Fitri Mohd Yakub, Mohd Noor Norzailawati, Shuib Rambat and Mokhtar Saidin</i></p> <p><b>Mapping of Archaeological Sites Using UAV Aerial Survey and PPK GNSS Ground Survey Techniques in Central Asia</b>  <i>Stanley Anak Suab, Yuichi Hayakawa and Shogo Kume</i></p> <p><b>Tree Stump Height Estimation Using Canopy Height Model at Tropical Forest in Ulu Jelai Forest Reserve, Pahang, Malaysia</b>  <i>Siti Nor Maizah Saad, Khairul Nizam Abdul Maulud, Wan Shafrina Wan Mohd Jaafar, Aisyah Marliza Muhammad Kamaruzaman and Gs Dr Hamdan Omar</i></p> <p><b>Assessment of Land Use Land Cover Change and Its Impact on Soil Erosion Using GIS and Revised Universal Soil Loss Equation Model.</b>  <i>Sarah Hanim Samsudin, Azwin Zailti Abdul Razad, Anita Setu and Mohd. Nadzari Ismail</i></p> <p><b>Correlation Analysis of Urban Development and Land Surface Temperature Using Google Earth Engine in Sleman Regency, Indonesia</b>  <i>Amanda Maishella, Bayu Elwentyo Bagus Dewantoro and Muhammad Ari Purnomo Aji</i></p> <p><b>A Comparative Study of Modern UAV Platform for Topographic Mapping</b>  <i>Hamid Chaudhry, Dr. Anuar Ahmad and Qudsia Gulzar</i></p> <p><b>Comparative Assessment of the Unsupervised Land Use Classification by Using Proprietary GIS and Open Source Software</b>  <i>Muhammad Azizol Ismail, Ahmad Nazri Ludin and Nafisa Hosni</i></p>
		<b>C2: GEOSPATIAL MODELLING III</b>	<p><b>Sessions Chair:</b>  <b>Gs. Dr. Abdul Rauf bin Abdul Rasam</b></p> <p><b>Review of Conceptual Model to Spatially Assess Safe City Level of Affordable Housing in Malaysia</b>  <i>Salwa Najlaa, Zakri Tarmidi and Noorsidi Aizuddin Mat Noor</i></p> <p><b>Review of Spatial Model to Assess Suitability of Affordable Housing Based on Demand Criteria</b>  <i>Zur'Ain Zamri, Zakri Tarmidi and Nurul Hana Adi Maimun</i></p> <p><b>The Use of Geo-Spatial Data from GIS in Quantitative Analysis of Landslides</b>  <i>Muhammad Bello Ibrahim, Indra Sati Hamonangan Harahap, Abdul-Lateef Babatunde Balogun and Aliyu Usman</i></p> <p><b>The Development of Continuous Hydrographic Datum Using Geodetic Based Approaches: A Review</b>  <i>Mohd Faizuddin Abd Rahman and Ami Hassan Md Din</i></p> <p><b>A Deep Learning Approach to Ship Detection Using Satellite Imagery</b>  <i>Marzuraikah Mohd Stofa, Mohd Asyraf Zulkifley and Siti Zulaikha Muhammad Zaki</i></p> <p><b>A Spatial Analysis of the Relationship Between Socio-demographic Characteristics with Burglar Behaviours on Burglary Crime</b>  <i>Ling Sie Chiew, Shahabuddin Amerudin and Zainab Mohamed Yusof</i></p>



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<b>DAY 2</b> 21 October 2020 (Wednesday)	1130 - 1330	<b>C3: GEOSPATIAL PLANNING &amp; MANAGEMENT III</b>	<p><b>Sessions Chair:</b>  <b>Dr. Nisfariza Mohd Noor Maris</b></p> <p><b>Performance of Different Classifiers for Marine Habitat Mapping Using Side Scan Sonar and Object-Based Image Analysis</b>  <i>Raihanah Rusmadi and Rozaimi Che Hasan</i></p> <p><b>Identifying Tall Trees in Man-Made Tropical Rain Forest Using UAV LiDAR Cloud Point</b>  <i>Siti Yasmin Binti Yaakub, Muhamad Afizzul Mismam and Hamdan Omar</i></p> <p><b>Slope Effect on the Vertical Accuracy of Spatial Information Using Multi Rotor UAV</b>  <i>Noorfatekah Talib, Amir Ariff Subri, Dr Rohayu Haron Narashid, Muhammad Faiz Pa'Suya and Siti Aminah Anshah</i></p> <p><b>Self-adaptive Image Segmentation Optimization for Hierarchal Object-based Classification of Drone-based Images</b>  <i>Rami Al-Ruzouq, Mohamed Barakat and Abdallah Shanableh</i></p> <p><b>Identification Spectral Signature of Weed Species in Rice Using Spectroradiometer Handheld Sensor</b>  <i>Nik Norasma Che'Ya, Lutfi Amir Nor Alahyadi, Wan Fazilah Fazlil Ilahi, Siti Nur Aliaa Roslan and Zakri Tarmidi</i></p> <p><b>A lightweight Two-Factor Authentication scheme for real-time information in the Internet of Drones</b>  <i>Haqi Khalid, Shaiful Jahari Hashim, Sharifah Mumtazah Syed Aham, Fazirulhisyam Hashim and Muhammad Akmal Chaudharye.</i></p>
		<b>C4: GEOSPATIAL DECISION-MAKING III</b>	<p><b>Sessions Chair:</b>  <b>Assoc. Prof. Gs. Dr. Norzailawati Mohd Noor</b></p> <p><b>Quantitative Morphometric Analysis of Mandakini River Basin Using Remote Sensing and GIS Techniques</b>  <i>Abdul Qadir, Mohammad Yasir, Ismail Ahmad Abir, Naseem Akhtar and Hwee San Lim</i></p> <p><b>Improved Land Cover Mapping Using Landsat 8 Thermal Imagery</b>  <i>Jwan Al-Doski, Shattri B. Mansor, H'Ng Paik San and Zailani Khuzaimah</i></p> <p><b>Conceptual Framework for Walkability Assessment for Pedestrian Access to Rail Transit Services by Using Spatial-MCDA</b>  <i>Nabilah Naharudin, Abdul Hakim Salleh, Maisarah Abdul Halim and Zulkiflee Abd Latif</i></p> <p><b>Rock Slope Monitoring Using Drone Based Multispectral Image and Thermal Images.</b>  <i>Muhammad Latifi Mohd Yaacob, Abd Wahid Rasib, Ahmad Safuan A Rashid, Afiqah Ismail, Radzuan Sa'Ari, Mushairy Mustaffar, Norbazlan Mohd Yusof and Norisam Abd Rahaman</i></p> <p><b>SmartKADASTER Interactive Portal (SKiP), Is It Fit for Purpose?</b>  <i>Nur Zurairah Abdul Halim and Chan Keat Lim</i></p> <p><b>The Integration of Remote Sensing Data for Lineament Mapping in the Semanggol Formation, Northwest Peninsular Malaysia</b>  <i>Ali Imran Azman, Jasmi Ab Talib and Mohamad Shaufi Sokiman</i></p> <p><b>Non-Destruction Method for Detecting Corroded Underground Pipe Using Ground Penetrating Radar</b>  <i>Nurhazimah Husna Shokri, Zulkarnaini Mat Amin and Vanessa Ak Seli</i></p>

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<b>DAY 2</b> 21 October 2020 (Wednesday)	<b>1430 – 1630</b>	<b>D1: GEOSPATIAL MAPPING &amp; MONITORING IV</b>	<p><b>Sessions Chair:</b>  <b>Gs. Dr. Noordyana Hassan</b></p> <p><b>The Prediction of Urban Growth in Seremban Basin Using Spatio-Temporal CA-MC Model</b>  <i>Rabia Ajeeb, Maher Aburas, Abdelsalam Ali, Faisal Baba and Motasem Azaiza</i></p> <p><b>Identification of Dry Areas on Agricultural Land Using Normalized Difference Drought Index in Magetan Regency</b>  <i>Fidya Rismayatika, Ratna Saraswati, Iqbal Putut Ash-Shidiq and Taqyyudin</i></p> <p><b>Assessing Hutan Simpan Ampang Using GIS-based Potential Surface Analysis Approach</b>  <i>Emal Ahmad Hussainzad, Mohd Johari Mohd Yusof, Hangyu Gao, Kevin Kor Yu Yang, Norman Wong Kueng Ming, Mohammad Shafiq Abdul Majid and Tengyun Xu</i></p> <p><b>Feasibility Study on Walkable City through Implementation of Car-Free Zones in Georgetown, Penang Using GIS Network Analysis</b>  <i>Abdul Hakim Salleh, Mohd Sanusi S Ahamad and William Gui Win Way</i></p> <p><b>Predictive Model of Mangroves Carbon Stocks in Kedah, Malaysia Using Remote Sensing</b>  <i>Tengku Mohd Zarawie Tengku Hashim, Mohd Nazip Suratman, Jasmee Jaafar, Harinder Rai Singh and Ahmad Naqiyuddin Bakar</i></p> <p><b>Modeling Catchment Land Use Changes against Water Yield with Satellite Multi-Temporal Data</b>  <i>Babangida Baiya and Mazlan Hashim</i></p>
		<b>D2: GEOSPATIAL MODELLING IV</b>	<p><b>Sessions Chair:</b>  <b>Gs. Dr. Zakiah Ponrahono</b></p> <p><b>Remote Estimation of Gross Primary Production (GPP) Using MODIS Data in Kelantan: A Preliminary Assessment</b>  <i>Aisyah Syazana Adeli and Jemali Noor Janatun Naim</i></p> <p><b>Application of Thermal Imaging for Plant Disease Detection</b>  <i>Izrahayu Che Hashim, Abdul Rashid M. Shariff, Farrah Melissa Muharam, Siti Khairunniza Bejo, Khairulmazmi Ahmad and Haslina Hashim</i></p> <p><b>Spatio-Temporal Assessment of Aerosol Optical Depth From Himawari-8 Satellite Data over Malaysia</b>  <i>Nurul Amalin Fatimah Kamarul Zaman and Kasturi Devi Kanniah</i></p> <p><b>Monitoring Groundwater Depletion Due to Drought Using Satellite Gravimetry: A Review</b>  <i>Norhafizi Mohamad, Anuar Ahmad and Ami Hassan Md Din</i></p> <p><b>Deep Learning-Based Water Segmentation for Autonomous Surface Vessel</b>  <i>Muhammad Ammar Mohd Adam, Ahmad Imran Ibrahim, Zulkifli Zainal Abidin and Hasan Firdaus Mohd Zaki</i></p> <p><b>Modelling the Multipath Signal from a GPS Receiver Located at Agensi Angkasa Negara Malaysia</b>  <i>Chew Jia Chin</i></p>

DATE	TIME	SESSION	PAPER
<b>DAY 2</b> 21 October 2020 (Wednesday)	1430 - 1630	<b>D3: GEOSPATIAL PLANNING &amp; MANAGEMENT IV</b>	<p><b>Sessions Chair:</b>  <b>Gs. Dr. Hamdan Omar</b></p> <p><b>Comparative Analysis of Malaria Cases Using Geospatial-statistical Approach in Hadejia Metropolis, Jigawa State, Nigeria</b>  <i>Jibrin Gambo, Helmi Zulhaidi Bin Mohd Shafri, Abubakar Ahmed, Yusuf Ahmed Yusuf and Maryam Babangida Adam</i></p> <p><b>Colour Feature Extraction Techniques for Real Time System of Oil Palm Fresh Fruit Bunch Maturity Grading</b>  <i>Meftah Alfatni, Abdul Rashid Bin Mohamed Shariff, Osama Ben Saeed and Atia Mahmud Albhbah</i></p> <p><b>The Effect of Ground Penetrating Radar (GPR) Image Reflection on Different Pipes and Soil</b>  <i>Nurafifah Mohamad, Zulkarnaini Mat Amin and Nur Haafizah Mohd Kamal</i></p> <p><b>Developed of Low-Cost Integrated Sensors and Geo-Location for Smart Agriculture in Bangladesh</b>  <i>Roshidul Hasan, Morshedur Rahman, Tonmoy Ahmed, Mizanur Rahman and Anamul Haque</i></p>
		<b>D4: GEOSPATIAL DECISION-MAKING IV</b>	<p><b>Sessions Chair:</b>  <b>Assoc. Prof. Gs. Dr. Rosilawati Zainol</b></p> <p><b>Estimated Relative Permittivity of Contaminated Laterite Soil: An Empirical Model for GPR Waves</b>  <i>Mimi Diana Ghazali, Othman Zainon, Rahmat Mohsin, Khairulnizam M.Idris and Nordhalia Mustafa</i></p> <p><b>Spatial Pattern of Affordability and Overhang in Selangor</b>  <i>Nur Arzwin Mohamed Aris, Mohamad Syazli Fathi, Aizul Nahar Harun and Zainai Mohamed</i></p> <p><b>Mapping Seasonal Variations of Grazing-Land Above-Ground Biomass with Sentinel 2A Satellite Data</b>  <i>Muhammad Isa Zumo and Mazlan Hashim</i></p> <p><b>Assessing the Economic Value of Carbon Sequestration in Taman Negara Pahang</b>  <i>Emal Ahmad Hussainzad and Mohd Johari Mohd Yusof</i></p> <p><b>An Approach for the Retrieval of Land Surface Temperature from the Industrial Area Using Landsat-8 Thermal Infrared Sensors</b>  <i>Mohammed Dahiru Zakari and Mazlan Hashim</i></p> <p><b>Modelling Catchment Land Use Changes against Water Yield with Satellite Multi-Temporal Data</b>  <i>Babangida Baiya and Mazlan Hashim</i></p>

## POSTERS

**Airborne LiDAR for Above-Ground Biomass Estimation in Tropical Forests**

*Mui-How Phua*

**Geostatistics of Oil Palm Trees Affected by Ganoderma Disease in Low and High Planting Density**

*Mohd Shukri Ibrahim, Mohammad Izzuddin Anuar, Mohd Hefni Rusli and Idris Abu Seman*

**Paddy Monitoring in Seberang Perak, Malaysia Using Multi-Temporal Sentinel-1 Data**

*Azhar Abed and Abdul Rashid Mohamed Shariff*

**Visualizing Distribution of Common Livestock Disease in Perak State Using Geographical Mapping from Year 2017 to 2019**

*Mohammad Masrin Azami, Fakhrulisham Razali, Sharil Azwan Mohd Zain, Zaini Che Mamat, Aisya Naama Tulis and Faizah Hanim Mohd Saied*

**Long Range Locator (LRL) Beacon**

*Dinesh Sathyamoorthy*

**Classification of Oil Palm Fresh Fruit Bunch Ripeness Level by Using Oil Palm Ripeness Detector and Spectrometer**

*Goh Jia Quan, Abdul Rashid Mohamed Shariff and Nazmi Mat Nawi*

**Prospecting Fe-Skarn Mineralization Using ASTER Satellite Data: Case Study from Ravanj Village, Markazi Province, Iran**

*Omid Kiani, Abdolhamid Ansari, Amin Beiranvand Pour and Aidy M Muslim*

**Analyses Water Bodies Effect in Mitigation of Urban Heat Effect: Case Study Small Size Cities Kuching, Sarawak, Malaysia.**

*Ricky Anak Kemarau Kemarau and Oliver Valentine Eboy*

**The Approach for Maturity Level Prediction of Oil Palm Fresh Fruit Bunches by Using Optical Spectrometer**

*Adilijiang Tuerxun, Abdul Rashid Mohamed Shariff, Shattri Mansor, Rimfiel Janius, Zulkifly Abbas and Ghafour Amouzad Mahdiraji*

**Assessing Coastal Land Dynamics along UAE Shoreline Using GIS and Remote Sensing Techniques**

*Diena Al Dogom, Shaikha Albeshar, Saeed Al Mansoori and Tasnim Nazzal*