

**International Conference on
Mathematics and Mathematics Education
ICMME 2021**

8th and 9th October 2021

Technical Session Information

(Zoom Webinar links will be shared later)

ICMME 2021 | Saturday, 9th October 2021

Technical Sessions Summary | Abstract IDs

8.30AM – 9.30AM		KEYNOTE SPEECH by Prof. Ratnasingham Shivaji		KEYNOTE SPEECH by Dr. Chua-Boon	
Time		Session A1	Session B1	Session C1 (Math Ed)	Session D1 (Math Ed)
9.45AM - 10.00AM		7	26	2	59
10.00AM - 10.15AM		13	40	8	62
10.15AM - 10.30AM		23	55	11	85
10.30AM - 10.45AM		15	56	51	95
MORNING TEA (10.45 AM - 11.00 AM)					
11.00AM - 12.00PM		KEYNOTE SPEECH by Prof. Kuppalapalle Vajravelu			
Time		Session A2	Session B2	Session C2	Session D2 (Math Ed)
12.00PM - 12.15PM		27	34	45	69
12.15PM - 12.30PM		58	5	32	74
12.30AM - 12.45PM		70	33	65	82
12.45PM - 1.00PM		28	14	53	93
1.00PM - 1.15PM		100	54	35	94
LUNCH (1.15 PM - 2.00 PM)					
Time		Session A3	Session B3	Session C3 (Math Ed)	Session D3 (Math Ed)
2.00PM - 2.15PM		4	6	44	72
2.15PM - 2.30PM		79	25	48	83
2.30PM - 2.45PM		21	31	49	90
2.45PM - 3.00PM		18	66	68	91
3.00PM - 3.15PM		104	75	86	92
3.15PM - 3.30PM		12	19		
EVENING TEA (3.30 PM - 3.45 PM)					
Time		Session A4	Session B4	Session C4	Session D4 (Math Ed)
3.45PM - 4.00PM		41	39	24	96
4.00PM - 4.15PM		17	89	16	97
4.15PM - 4.30PM		47	73	9	63
4.30PM - 4.45PM		20	46	22	78
4.45PM - 5.00PM		88	67	57	
5.00PM - 5.15PM		50	61	10	

NOTE: Abstract Titles and the authors are given in the following pages

ICMME 2021 | Technical Sessions | Saturday, 9th October 2021 | 9.45am-10.45am

	Session A1	Session B1	Session C1	Session D1
Time\ <i>Session Chairs</i>	<i>Dr. ZAMS Juman Dr. CK Walgampaya</i>	<i>Prof. AAI Perera Dr. Nirosh Tharaka Gamachchige</i>	<i>Prof. HMSP Madawala Dr. SAA Nishantha</i>	<i>Dr. WD Chandrasena Dr. AK Amarasinghe</i>
9.45AM - 10.00AM	WAREHOUSE SPACE OPTIMIZATION USING A GOAL PROGRAMMING MODEL <i>K.L.D.S. Perera, P.A. Fernando and U.J. Mirando</i>	ON PRIME LABELING OF SNAKE GRAPHS <i>P.G.R.S. Ranasinghe and L.R.M.K.R. Jayathilaka</i>	USE OF ACTIVITY BASED APPROACH IN TEACHING GEOMETRY IN G.C.E. (O/L): A CASE STUDY IN KALKUDAH EDUCATION ZONE <i>A. S. Sathiaseelan and U.G.I.G.K. Udagedara</i>	INVESTIGATION OF WAYS OF TEACHING COORDINATE GEOMETRY: A CASE STUDY IN COLOMBO AND GAMPAHA DISTRICTS <i>H.A.N.C. Kulathilaka</i>
10.00AM - 10.15AM	MULTI-OBJECTIVE FUZZY OPTIMIZATION APPROACH TO SOLVE A KILN LOADING PROBLEM IN CERAMIC INDUSTRY <i>K.S.M. Karunamuni and W.B. Daundasekera</i>	A NOVEL CRYPTOSYSTEM USING A COMBINATION OF THE DIFFIE HELLMAN KEY EXCHANGE AND THE RSA ALGORITHM <i>H.M.M. Chathurangi and P.G.R.S. Ranasinghe</i>	FACTORS INFLUENCING STUDENT SELECTIONS IN PHYSICAL SCIENCE STREAM AT G.C.E. (A/L): A CASE STUDY OF KALKUDAH EDUCATIONAL ZONE <i>T. Anantharuban and U.N.B. Dissanayake</i>	IMPROVING ACHIEVEMENT LEVEL OF MATHEMATICS AMONG GRADE EIGHT STUDENTS IN GANEWATTA EDUCATIONAL DIVISION: AN ACTION RESEARCH <i>I.G.J. Ihalagedara</i>
10.15AM - 10.30AM	FINDING AN OPTIMUM ASSIGNMENT FROM FUEL DISTRIBUTION CENTRES TO FILLING STATIONS IN THE CENTRAL PROVINCE, SRI LANKA <i>M.S. Wickramarachchi and L.B.M. Samarasinghe</i>	ISOMORPHISM OF GRAPHS AND CLUSTERING BASED ALGORITHM FOR SIGNATURE VERIFICATION <i>M.R. Winslow, H.V.H. Lakshani, Amila Sudu Ambedara and U.G.I.G.K. Udagedara</i>	PERCEPTIONS OF UNIVERSITY ACADEMICS ON THE USE OF ADVANCED MATHEMATICAL KNOWLEDGE IN TEACHING 'LIMITS' IN COMBINED MATHEMATICS <i>G.N. Jayakody, S. Somathilaka and M. Dissanayake</i>	EFFECT OF TEACHING METHODS IN STUDENTS' ACHIEVEMENTS IN MATHEMATICS <i>W.G.S.P.M. Dasanayake</i>
10.30AM - 10.45AM	MULTI OBJECTIVE FUZZY-LINEAR PROGRAMMING APPROACH TO SOLVE BIN-PACKING PROBLEM <i>W.N.P. Rodrigo, W.B. Daundasekera and A.A.I. Perera</i>	A MODIFIED ELGAMAL CRYPTOSYSTEM USING THE TRAPDOOR KNAPSACK ALGORITHM <i>K.A.P.S. Athurugiriya and P.G.R.S. Ranasinghe</i>	WINNING A GOLD MEDAL IN INTERNATIONAL MATHEMATICAL OLYMPIAD: A COMPARATIVE STUDY <i>H. H. De Silva, S. J. Ranasinghe and S. P. Abeyundara</i>	IMPROVING THE ABILITY OF ADDITION OF INTEGERS AMONG GRADE 10 STUDENTS <i>M. Bartholameuz</i>

ICMME 2021 | Technical Sessions | Saturday, 9th October 2021 | 12.00pm-1.15pm

	Session A2	Session B2	Session C2	Session D2
Time \ Session Chairs	<i>Prof. UNBI Dissanayaka Dr. Rajitha Ranasinghe</i>	<i>Prof. WB Daundasekara Dr. R Sanjeewa</i>	<i>Dr. Rekha De Silva Mrs. WNP Rodrigo</i>	<i>Dr. AAS Perera Dr. PRKA Vitharana</i>
12.00PM - 12.15PM	ON COMPOSITION OF FUNCTIONS DEFINING DISTINGUISHED VARIETIES <i>Y.G.D.M. Dharmasiri and U.D. Wijesooriya</i>	OBTAINING BOUNDS TO A MULTI-OBJECTIVE TRANSPORTATION PROBLEM WITH VARYING DEMANDS AND SUPPLIES <i>R.M.I. Sandamali and Z.A.M.S. Juman</i>	A NEW THIRD-ORDER APPROXIMATION FOR RIEMANN-LIOUVILLE FRACTIONAL DERIVATIVE AND APPLICATIONS <i>W.A. Gunarathna, H.M. Nasir and W.B. Daundasekara</i>	TEACHING MATHEMATICS BY PROSPECTIVE TEACHERS IN COLLEGES OF EDUCATION DURING INTERNSHIPS: AN ACTION RESEARCH <i>M.S. Mahathanthila</i>
12.15PM - 12.30PM	ON THE RADIUS OF CONTRACTION FOR THE NEWTON'S MAP <i>R.A.S.T. Abeysekara and P.G.R.S. Ranasinghe</i>	REDUCING THE STANDARD MINUTE VALUE OF A SINGLE DESIGN USING AN ASSIGNMENT MODEL IN A REPUTED APPAREL MANUFACTURING COMPANY IN SRI LANKA <i>Z.A.M.S. Juman, K.S.M. Karunamuni and H.M.N.S. Kumari</i>	A NOVEL MODEL TO SEEK OPTIMAL EMPLOYEE TRANSPORTATION SYSTEM IN APPAREL INDUSTRY USING VEHICLE ROUTING METHOD <i>W.A.L.S. Boyagoda, B.M.S.M.B. Bowala and W.B. Daundasekera</i>	EXPLORING EASY TECHNIQUES FOR TEACHING AND LEARNING CIRCULAR THEOREMS IN GEOMETRY THROUGH INDUCTIVE LOGIC APPROACH FOR THE STUDENTS IN GRADES 10 AND 11 <i>Sanjeewa Kumara</i>
12.30AM - 12.45PM	AN INVESTIGATION OF SPACES WITH ASYMPTOTIC DIMENSION <i>R.M.I. Deshapriya and A.K. Amarasinghe</i>	A CRITICAL ANALYSIS ON INTEGRATED INVENTORY SUPPLY CHAINM. <i>S.M. Hisam, Z.A.M.S. Juman and M.M.M. Mufassirin</i>	SOLVING TRANSPORTATION PROBLEM WITH MIXED CONSTRAINTS USING ZERO - POINT METHOD COMBINED WITH MORE – FOR - LESS PROCEDURE <i>R.M.G.P. Rathnayaka and W.B. Daundasekera</i>	PROBLEMS AND SOLUTIONS FOR LOW ACHIEVEMENT LEVELS IN MATHEMATICS: ACTION RESEARCH WITH SPECIAL REFERENCE TO WILGAMUWA EDUCATION ZONE <i>M.A.A.S.D.Kularathna</i>
12.45PM - 1.00PM	ON THE SUM OF INNER TORAL POLYNOMIALS GENERATED BY BLASCHKE PRODUCTS. <i>D.P.M. Wijerathne and U.D. Wijesooriya</i>	SOLVING INTERVAL TRANSPORTATION PROBLEM WITH MIXED CONSTRAINTS USING ANT COLONY OPTIMIZATION ALGORITHM <i>E.M.U.S.B. Ekanayake, W.B. Daundasekara and S.P.C. Perera</i>	AN OPTIMIZATION TECHNIQUE TO SCHEDULE THE LOCOMOTIVE DRIVERS IN A RAILWAY SUB-DIVISION IN SRI LANKA <i>H.V.H. Lakshani and W.B. Daundasekera</i>	CHALLENGES IN STUDYING ALGEBRAIC EXPRESSIONS OF GRADE 3 IN PIRIVENA EDUCATION <i>H.G.R.S. Rajapaksha</i>
1.00PM - 1.15PM	ON REMOVING A WEAKLY INFINITE-DIMENSIONAL SUBSPACE FROM A HILBERT CUBE MANIFOLD <i>M.M.S.H.K. Marasinghe and A.K. Amarasinghe</i>	GENETIC ALGORITHM FOR THREE BUYERS AND TWO SUPPLIERS TRANSPORTATION PROBLEM WITH VARYING DEMAND AND SUPPLY <i>H.A.D.R. Gunarathne and Z.A.M.S. Juman</i>	SCHEDULING A TELEVISION ADVERTISING CAMPAIGN USING A MULTI-OBJECTIVE NON-LINEAR PROGRAMMING MODEL <i>M.O.S. Sooriyabandara</i>	RELATIONS OF STUDENT MOTIVATION AND SELF-CONCEPT WITH LEVEL OF ACHIEVEMENT IN MATHEMATICS OF PRE-PRIMARY LEVEL IN PIRIVENAS: A CASE STUDY IN POLONNARUWA EDUCATION ZONE, SRI LANKA <i>S.A.S.D.Kumara</i>

ICMME 2021 | Technical Sessions | Saturday, 9th October 2021 | 2.00pm-3.30pm

	Session A3	Session B3	Session C3	Session D3
Time \ Session Chairs	<i>Dr. R Meegaskumbura Dr. GK Udagedara</i>	<i>Dr. AMCUM Atapattu Dr. JN Seenadera</i>	<i>Prof. SY Ekanayake Dr. Damith Thilakarathne</i>	<i>Dr. R Palamakubura Dr. KSHMVWW Senevirathne</i>
2.00PM - 2.15PM	LINEARIZING INVERTIBLE POINT TRANSFORMATIONS AND APPLICATION TO A NON-LINEAR THIRD-ORDER ORDINARY DIFFERENTIAL EQUATION <i>D.I.A. Saparamadu and A.G. Johnpillai</i>	PRIME LABELING OF THE GRAPH OBTAINED BY UNION OF N COPIES OF K_{12} AND CL_n <i>M.D.M.C.P. Weerathna, D.M.T.B. Dissanayake, T.R.D.S.M. Thennakoon and A.P. Batuwita</i>	USE OF TECHNOLOGY BY PROSPECTIVE TEACHERS IN PRIMARY SCHOOL MATHEMATICS <i>J.D.T.U.K. Jayasingha and W.D. Chandrasena</i>	INVESTIGATING THE EFFECTIVENESS OF APPLYING FLIPPED CLASSROOM METHOD IN TEACHING MATHEMATICS <i>Apsara Amarasinghe</i>
2.15PM - 2.30PM	MATHEMATICAL MODELING OF EVOLUTION OF COVID-19 DISEASE <i>A.A. Konpola and Amila Sudu Ambedgedara</i>	PALEY GRAPHS AND FACTORIZATIONS <i>B.A.P. Batuwita, A.A.I. Perera, P.G.R.S. Ranasinghe and N.T.S.G. Gamachchige</i>	DEVELOPMENT OF TRIGONOMETRIC FUNCTIONS WITH EDEXCEL G.C.E. (A/L) STUDENTS: A CASE STUDY IN KANDY EDUCATIONAL ZONE <i>D.K. Wijetunga and W.D. Chandrasena</i>	STRATEGIES TO ENHANCE THE ACHIEVEMENT LEVEL IN LOW PERFORMING MATHEMATICAL THEMES IN MATHEMATICS PAPER I IN THE BASIC PIRIVENA FINAL EXAMINATION: A CASE STUDY IN KELANIYA AND NEGOMBO EDUCATIONAL ZONE <i>K. P. Jagath Kumarasinghe</i>
2.30PM - 2.45PM	SEMI-ANALYTIC SOLUTIONS FOR THE TRANSITIONAL KORTEWEG-DE VRIES EQUATION VIA SIMILARITY SOLUTIONS <i>W.H.D.T. Karunaratna, C.W. Sahabandu and M. Dewasurendra</i>	PLUMERIA ALBA GRAPH AND ITS PRIME LABELING <i>M.D.M.C.P. Weerathna, T.R.D.S.M. Thennakoon, K.D.E. Dhananjaya and A.A.I. Perera</i>	STUDENT ERRORS AND MISCONCEPTIONS ASSOCIATED WITH FRACTIONS: POSSIBLE CAUSES AND PROBLEMATIC CONCEPTIONS IN ADDITION AND SUBTRACTION <i>S.A. Devandran and G.W.R.M.R. Palamakumbura</i>	TEACHER PERCEPTIONS OF TEACHING MATHEMATICS THROUGH ONLINE METHODS: A CASE STUDY IN WESTERN PROVINCE <i>E.A. Anusha Prishanthi</i>
2.45PM - 3.00PM	AN EXTENSION TO METHOD OF DIRECTLY DEFINING THE INVERSE MAPPING FOR PROPAGATION OF HARMONIC WAVES IN NONLINEAR GENERALIZED MAGNETO - THERMOELASTICITY WITH TWO RELAXATION TIMES UNDER INFLUENCE OF ROTATIONS <i>C.W. Sahabandu, M. Dewasurendra and Z.A.M.S. Juman</i>	MARIGOLD GRAPH AND ITS NEW LABELLING METHOD SIMILAR TO THE ANTIMAGIC LABELLING <i>K.M.P.G.S.C. Kapuhennayake and A.A.I. Perera</i>	PROBLEMS ENCOUNTERED BY TEACHERS AND STUDENTS IN TEACHING AND LEARNING MATHEMATICAL CONCEPTS RELATED IN ALGEBRA AT G.C.E. (O/L) <i>J.M.S. Jayasundara and J.M.P.V.K. Jayasundara</i>	RELATIONSHIP BETWEEN MATHEMATICS SELF CONCEPTS AND QUALITATIVE ACHIEVEMENT OF SECONDARY LEVEL STUDENTS <i>H.M.C.I.K.Herath</i>
3.00PM - 3.15PM	MATHEMATICAL MODELLING OF ENVIRONMENTAL TRANSMISSION OF CORONAVIRUS <i>D.M.N.K. Dissanayaka and T.H.K.R. De Silva</i>	CONNECTIVITY OF GRAPHS CONSTRUCTED BY GRAPH OPERATIONS ON $K_{m,m}$ <i>M.G.U.S. Gunawardana and A.A.I. Perera</i>	RELATIONSHIP BETWEEN STUDENTS' ATTITUDE AND THEIR PERFORMANCE IN MATHEMATICS <i>Y.M.R.Y. Bandara and Y.M.S.G. Imantha</i>	EFFECTIVENESS OF USING NEW SOFTWARE TO TEACH GEOMETRICAL CONSTRUCTIONS FOR GRADE 9 STUDENTS: A CASE STUDY FROM HINGURAKGODA EDUCATIONAL ZONE IN NORTH CENTRAL PROVINCE, SRI LANKA <i>J. M. R. P. A. Gajanayaka</i>

<p>3.15PM - 3.30PM</p>	<p>A MATHEMATICAL MODEL TO INVESTIGATE THE EFFECTS OF QUARANTINE AND ISOLATION ON THE SPREAD OF COVID-19</p> <p><u>L.W. Somathilake</u></p>	<p>E-SUPER VERTEX MAGIC LABELLING OF ODD ORDER BINARY TREE WITH AT LEAST TWO VERTICES OF DEGREE 2</p> <p><u>S.K.O.D. Samarathunge,</u> A.M.C.U.M. Athapattu and A.A.I. Perera</p>		
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ICMME 2021 | Technical Sessions | Saturday, 9th October 2021 | 3.45pm-5.15pm

	Session A4	Session B4	Session C4	Session D4
Time \ Session Chairs	<i>Dr. Nalin Fonseka Dr. Janitha Gunatilake</i>	<i>Dr. HTK Abeysundara Dr. LS Nawawathna</i>	<i>Dr. Jayampathi Rathnayake Dr. Manoj Chaturanga</i>	<i>Dr. P Ekanayake Dr. MB Dehideniya</i>
3.45PM - 4.00PM	A SIMILARITY SOLUTION FOR THE UNSTEADY COUPLED NAVIER STOKES-BRINKMAN EQUATIONS <i>R. Thushanthani and U.G.I.G.K. Udagedara</i>	A LINEAR MODEL TO IMPROVE THE PADDY HARVEST IN SRI LANKA: A COMPARATIVE STUDY USING RIDGE AND LASSO REGRESSION <i>B.M.S.M.B. Bowala, H.A.D.R. Gunarathne and E.M.D.R.K. Ekanayaka</i>	COCYCLIC MATRICES AND GENERALIZED HADAMARD MATRICES <i>W.V. Nishadi and A.A.I. Perera</i>	LEARNING MATHEMATICS THROUGH ONLINE METHODS <i>L.A.A.D.D. Liyanaarachchi</i>
4.00PM - 4.15PM	THE HYPERBOLIC TANH METHOD FOR SOLITARY WAVE SOLUTION OF CAMASSA-HOLM- NONLINEAR SCHRÖDINGER EQUATION <i>R. Thushanthani and T. Mathanaranjan</i>	CORRECTION MODELS FOR ACCURATE PM _{2.5} ESTIMATION FROM LOW-COST AIR QUALITY SENSOR DATA <i>S.D. Senarathna, V. Kumar, S. Sur, S. Dhaniyala, S. Gurajala and S. Mondal</i>	THE CHROMATIC POLYNOMIALS OF CIRCULAR LADDER GRAPHS <i>A.M.U.J.B. Abeysinghe, A.M.C.U.M. Athapattu and A.A.I. Perera</i>	TEACHING-LEARNING PROCESS IN COMBINED MATHEMATICS: A CASE STUDY ON TWELVETH GRADES IN KANDY EDUCATIONAL ZONE <i>P.W.I. S. Arampola</i>
4.15PM - 4.30PM	NUMERICAL PREDICTION OF UNSTABLE LOCATIONS IN BRIDGE STRUCTURES <i>E.M.C.S. Gunasekara and Amila Sudu Ambegedara</i>	REDUCED ORDER MODELING FOR WEATHER FORECASTING <i>N.D.S. Cooray and U.G.I.G.K. Udagedara</i>	K-FRAMES IN QUATERNIONIC SETTING <i>M. Khokulan and S. Srisatkunarajah</i>	ENHANCING MULTIPLICATION SKILLS WITH REGROUPING: AN ACTION RESEARCH WITH GRADE 8 BILINGUAL STUDENTS <i>M. K. Perera</i>
4.30PM - 4.45PM	ESTIMATION OF CAPACITOR FACTOR BASED ON A NEW POWER CURVE APPROXIMATION METHOD <i>H.M.D.P. Bandarathilake and G.W.R.M.R. Palamakumbura</i>	A STUDY OF DENGUE CASES AND CORRELATION WITH CLIMATE FACTORS IN AKURANA, SRI LANKA <i>S.W.S. Sasna, A. Nijamdeen and L. Zubair</i>	AN ALTERNATIVE METHOD OF CONSTRUCTING SKEW-HADAMARD MATRICES OF ORDER 2 ⁿ <i>B.A.P. Batuwita, N.T.S.G. Gamachchige, A.A.I. Perera and P.G.R.S. Ranasinghe</i>	USE OF CONCRETE PICTORIAL APPROACH (CPA) FOR TEACHING MATHEMATICS: A CASE STUDY IN KULIYAPITIYA EDUCATION ZONE, SRI LANKA <i>H. D. K. D Hathurusingha</i>
4.45PM - 5.00PM	MATHEMATICAL MODELING OF BLOOD FLOW THROUGH DISEASED ARTERIES <i>P.R. Sandadini and U.G.I.G.K. Udagedara</i>	ANALYSIS OF AIRBORNE MICROBES FROM SEQUENCING DATA <i>Daniel T. Fuller, Hema Ravindran, Shantanu Sur and Suresh Dhaniyala</i>	A STUDY ON THE GOLDEN RATIO AND THE GENERALIZED FIBONACCI AND LUCAS NUMBERS <i>M.W.S. Randunu, A.P. Madhushani and P.G.R.S. Ranasinghe</i>	
5.00PM - 5.15PM	METHOD OF DIRECTLY DEFINING INVERSE MAPPING FOR BOUNDARY LAYER FLOW OF NANOFLUIDS <i>A.M.P.S. Adhikari and M. Dewasurendra</i>	RIGHT CENSORING DATA WITH PARAMETRIC AND NON-PARAMETRIC ESTIMATIONS <i>L.A. Kalashini and G.M.S. Dinushika</i>	HYPERGROUP-RINGS, THEIR DEFINITION AND SOME ELEMENTARY PROPERTIES <i>R.M.K.S. Rathnayaka and N. Ramaruban</i>	