

MESSAGE FROM THE VICE CHANCELLOR

I am delighted to pen this message for the 2nd Students Research Session (GEOSYM 2022) of the Faculty of Geomatics on "Geo Informatics for conquering new frontiers towards National development".

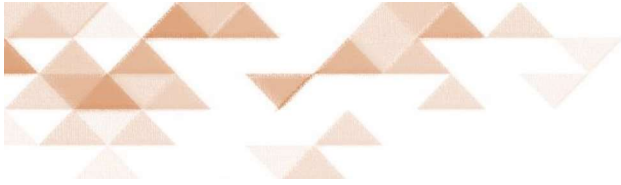
This forum is a pinnacle of the undergraduate quadrennial period of learning and training and it promulgates the scientific knowledge and experience to the global community. The effort, encouragement and dedication the students had on the research work despite the crucial situation of the country should be highly appreciated. I hope that the students would pursue their dreams and aspirations by continuing their motivation and interests. The experiences they attain in these consecutive four years will sharp their lives as responsible citizens in upcoming years.

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Finally, I wish to thank the Dean, Heads of the Departments, Chairperson, Secretary and the members of the Organizing Committee who contributed to the success of GEOSYM 2022

Wish you all the best.

Snr. Prof. Udaya Rathnayaka
Vice-Chancellor
Sabaragamuwa University of Sri Lanka



MESSAGE FROM THE DEAN

On behalf of the Faculty of Geomatics I warmly welcome you to the GeoSym2022 at Belihuloya. The GeoSym2022 is a biennial event comes under the GEOWEEK2022. The conference provides us with the opportunity to celebrate the 25th anniversary of the Faculty. As the Dean of the Faculty, I am privileged to issue a message to the GeoSym2022 at this milestone.

Over the last 25 years, the Faculty has made a tremendous contribution in research, teaching and practice, resulting in a remarkable impact in many sectors including academia, industry and society as well. The conference would give researchers a platform to disseminate their findings through a carefully selected theme GEO-INFORMATICS FOR CONQUERING NEW FRONTIERS TOWARDS NATIONAL DEVELOPMENT.

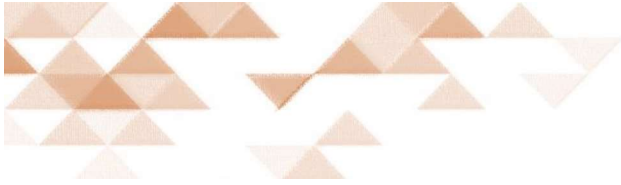
We have experienced local and international in-person conferences till the global pandemic situation hit the academic and professional atmosphere. Nonetheless, it turned the day-to-day life upside down. This confinement paves the way to execute an extensive array of online conferences, educational webinars and hybrid events throughout the period. These hybrid events and tools are creating a new window for critical research to reach a larger audience, inspire interactions and more networking. We have an exciting program at this conference that will allow members to reflect upon and celebrate our past accomplishments, renew friendships and extend our networks, and jointly explore current and future research directions.

I am confident GeoSym2022 will play an important role in spurring research, encouraging continuous program improvement and providing excellent opportunities to build more and better collaborations between colleagues.

Thanks to all members of the Organizing Committee of the GeoSym2022. Thanks also again to all our Faculty members, the sponsors, the distinguished participants and all who have contributed papers to this conference. This Book of Abstracts is a prelude to the Conference Proceedings.

I wish you a very successful conference and an enjoyable hosting of the Faculty of Geomatics.

Mr. PGV Abeyratne
Dean, Faculty of Geomatics
Sabaragamuwa University of Sri Lanka



MESSAGE FROM THE CHAIR-GEOWEEK2022

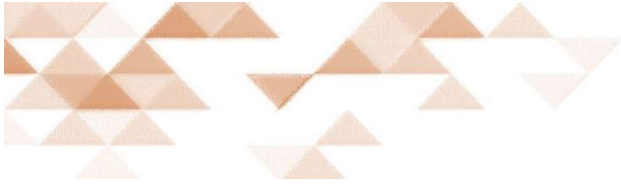
I am immensely pleased and honored to welcome you all to the 2nd international symposium of the Faculty of Geomatics, the Sabaragamuwa University of Sri Lanka which has been scheduled on 30th November and 1st December 2022 as one of the most vital elements of the GEOWEEK2022. In this year we are glamorously continuing GEOSYM2022 as a prominent portion of the GEOWEEK2022. We initiated this academic activity in 2019 with the intention of providing a platform to all the final-year students to unveil their research achievements. I am glad to note that today this event has been nurtured to be a major academic event conducted by the Faculty with the prime concern of exchanging and sharing experiences and research findings among the research scholars, academic staff, and students of the faculty. I am confident to state that this symposium has reached its importance as one of the major annual events for disseminating high quality research, networking, fostering interaction and exchanging ideas among professionals, researchers, academics, and students in the field of special science.

As the only faculty which offers the Surveying Science Degree within the state governed Universities, we owe a great responsibility to society. Research is one such responsibility that we carry out within the field of academia. Surfing for the untouched spheres of knowledge is our prime concern. As an authentic reality of our contribution to emerging knowledge, GEOSYM2022 is aiming to encourage young researchers by providing a forum to share their insights into recent research and cutting-edge technologies. I am pretty sure that the outstanding bunch of undergraduates that we have produced are delighted to have this event as this sharpens their experience of disseminating research findings in the forum of experts and colleagues.

In conclusion, I would like to thank each and every person who shed their sweat on making this event a success. Further, I should pay my heartfelt gratitude to the Faculty of Geomatics for their dedication towards successfully organizing GEOSYM2022. Also, I would like to express my gratitude to all the invited speakers, guests, and presenters whose contribution has enlightened this event.

I wish you all a fruitful academic experience at the GEOSYM2022.

Dr. GSN Perera
Chair-GEOWEEK2022
Faculty of Geomatics
Sabaragamuwa University of Sri Lanka



MESSAGE FROM THE CHAIR-GEOSYM2022

It is with great pleasure and honour to be the Chair of the 2nd international symposium on Geo-Informatics (GEOSYM) 2022 scheduled to be held on 30th November and 1st December of 2022 organized by the Faculty of Geomatics, Sabaragamuwa University of Sri Lanka. This is the main academic activity in GEOWEEK 2022 organized to celebrate the 25th anniversary of the Faculty of Geomatics. The Geographic Information System, Remote Sensing Technology, Global Navigation Satellite System and Spatial Databases play an important roles for the national development planning in many countries. Therefore, we organized this symposium with the theme “Geo-Informatics for conquering new frontiers towards national development.” I am happy to announce that we got more international participations this year through plenary talks by eminent researchers and presentations by research scholars.

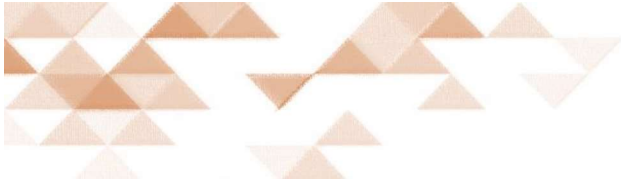
Research for new knowledge is one among the three essential functions of a university, the other two functions being teaching/training and community service. Universities in the country are required to be in the forefront of this drive towards creation of new knowledge. In the view of supporting this, GEOSYM is focused to encourage young researchers by providing a forum to share their insights into the recent research and cutting edge technologies. I am confident that the geospatial community in Sri Lanka are delighted to have this event continuously since this would be an important forum of disseminating research findings with experts. Further, I believe that GEOSYM will enhance the image of the Faculty of Geomatics and Sabaragamuwa University of Sri Lanka as research is an essential and integral part of teaching at the University level.

In concluding, I would like to thank the organizing committee of GEOSYM 2022 for their dedication and untiring efforts to make the GEOSYM 2022 a great success. Also, I would like to express my gratitude to all the invited speakers, guests and presenters whose contribution has enlightened this event.

I hope that you all will have a fruitful academic experience at the GEOSYM 2022.

Thank you.

Dr. H.M.I. Prasanna
Chair-GEOSYM 2022
Faculty of Geomatics
Sabaragamuwa University of Sri Lanka



SESSION OVERVIEW			
Date	Time	Technical Session	Chairperson (C) Rapporteur (R) Judges (J)
30 th November 2022	1030- 1245	Surveying & Geodesy	C – Dr. Brian Rupasinghe R – Dr. Nishamanie Ranasinghe J – Dr. M.D.E.K. Gunathilake J – Mr. A.N.D. Perera J – Mr. K.K.D.W.S. Kannangara
	1400- 1630	Land Management	C – Prof. Jagath Munasinghe R – Dr. N.M.P.M.Piyasena J – Dr. H. Divithure J – Dr. A.K.R.N.Ranasinghe J – Ms. D.S. Munasinghe
01 st December 2022	0830- 1100	Hydrography	C – Dr. S.U.P.Jinadasa R – Dr. Eranda Gunathilaka J – Mr. A.N.D. Perera J – Mr. P.G.V. Abeyatne J – Dr. H.M.I.Prasanna
	1115- 1330	Integrated Spatial Science Applications	C – Prof. Saman Koswatta R – Ms. Kalani Illeperuma J – Prof. H.R.S. Bandara J – Dr. G.S.N.Perera J – Dr. P.G.R.N.I. Pussella
	1400- 1630	Remote Sensing & GIS	C – Dr. Lal Muthuwatta R – Dr. Nalani Hettiarachchi J – Dr. D.R. Welikanna J – Ms. J.A.S Jayakody J – Ms. D.S. Munasinghe