



Proceedings of the Library Research Symposium 2024

University of Colombo

Fostering Sustainable Future: Libraries for Impactful Research



19th November 2024



The Library
University of Colombo

Library Research Symposium 2024

‘Fostering Sustainable Future:Libraries for Impactful Research’

Extract from the Proceedings of Annual Research Symposium
University of Colombo

19th November 2024

The Library

University of Colombo



***Fostering Sustainable Future:
Libraries for Impactful Research***

19th November 2024

MESSAGE FROM THE VICE CHANCELLOR

Senior Professor (Chair) H.D. Karunaratne

Vice Chancellor

University of Colombo



It is with great pleasure that I extend my warmest greetings to all contributors and participants of the Library Research Symposium of 2024, on “Fostering a Sustainable Future: Libraries for Impactful Research”. This theme is well aligned with the theme of the Annual Research Symposium of the university - “Building a Sustainable Future through Impactful Research”. The theme chosen by the library this year, is highly significant in the current information scenario experienced by our universities, and particularly our university libraries, which are perceived as pillars for supporting research that addresses some of the most demanding challenges facing our world today. Libraries have always been the heart of knowledge generation and dissemination, but in today’s rapidly evolving information landscape, they are also catalysts for innovation, collaboration, and sustainable development. The role of libraries in supporting impactful research is crucial; they provide the resources, tools, and environments that researchers need to answer the critical questions and uncover transformative solutions. By nurturing digital literacy, supporting open access, and managing massive and diverse resource collections, libraries empower scholars to engage in research that contributes to sustainable practices across disciplines. I am positive that this symposium will serve as a significant platform for exchanging ideas, insights, and strategies to strengthen the role of libraries in achieving a sustainable future. I take this opportunity to thank the two eminent keynote speakers from our university, Senior Prof. Premakumara De Silva, and Senior Prof. Nalin de Silva, and invited panelists Emeritus Prof. D. Tantrigoda of University of Sri Jayawardenepura and Senior Prof. K.P. Hewagamage of University of Colombo and all other invited speakers, the Technical Session chairs, and the presenters. Last but not least I would like to thank the Librarian, Dr. Pradeepa Wijetunge, Conference Chair Dr. Kalpana Manatunge, Conference Convener Dr. Neluka Karannagoda, Editor Mrs. Samanlatha Adhikari and all other members of the organizing team, not forgetting the Senior Assistant Registrar Mr. Chamal ABeygunawardene and all the library staff members for organizing this flagship event of the library. Thank you, and I wish you a productive and inspiring symposium.

MESSAGE FROM THE LIBRARIAN

Dr. Pradeepa Wijetunge

Librarian

University of Colombo



The Annual Research Symposium of the Library, University of Colombo is a significant component of the series of annual symposia of the University of Colombo. This year, we selected the theme “*Fostering a Sustainable Future: Libraries for Impactful Research*” in conformity with the main theme of the university symposium, “*Building a Sustainable Future through Impactful Research*”. The theme highlights the critical role libraries play in advancing sustainability and how libraries can support impactful research by providing access to sustainable practices, resources, and education. Libraries can underpin the interdisciplinary collaborations, promote open access to information, and serve as hubs for community engagement on sustainability issues. By combining sustainable practices into their operations and services, libraries can make a significant contribution to the sustainability agenda in a national as well as international context and empower the researchers to address the challenges effectively. Today we will be deliberating on our contributions to the nation.

I would like to extend my heartfelt gratitude to the Vice-Chancellor, University of Colombo, Senior Prof. (Chair) H.D. Karunaratne for his valuable leadership and gracing the occasion as the Chief Guest. I also extend my sincere gratitude to the two Keynote Speakers; Senior Prof (Chair) Premakumara de Silva, Chairman of SCOLIS of UGC, Sri Lanka and Senior Prof. (Chair) Nalin de Silva, Department of Chemistry, Faculty of Science, University of Colombo for gracing this occasion and their immensely inspirational addresses. I am also thankful to Prof W. D. N. Dissanayake, Chairperson of the ARS 2024 for her constructive guidance. I wish to extend my gratitude to all reviewers and presenters for their conscientious contributions, and to the session chairs and discussion panelists. Last but not least I wish to express my gratitude to Mrs. P.K. S. Manatunga the Symposium Chair – 2024 and to all members of the Program Committee, Senior Assistant Registrar, Library Services Mr. Chamal Abeygunawardhena and all the staff members of the library untiring efforts made to make this august event a success. I wish a very successful symposium. Finally, I would like to thank all the participants for their presence and sharing of thought enriching the event.

MESSAGE FROM THE SYMPOSIUM CHAIR

Ms. Kalpana Manatunga

Senior Assistant Librarian

University of Colombo, Sri Lanka



I am delighted and honoured to present this message as the Chair of the Library Research Symposium 2024 of the University of Colombo. This esteemed gathering, themed "Fostering Sustainable Future: Libraries for Impactful Research," highlights the transformative role of libraries in advancing the boundaries of academic research. The Symposium promises an in-depth exploration of innovative library practices and their significant contributions to research excellence.

We are privileged to have Senior Professor H.D. Karunaratne, Vice-Chancellor of the University of Colombo, as our Chief Guest. We also welcome our distinguished keynote speakers, Senior Professor (Chair) Premakumara de Silva from the Department of Sociology and Senior Professor (Chair) Nalin de Silva from the Department of Chemistry, whose scholarly contributions have significantly impacted the academic community. I extend my deepest gratitude to Dr. Pradeepa Wijetunge, our Librarian, and Dr. D.C. Kuruppu, Deputy Librarian, for their visionary leadership in organizing this event. I also wish to thank our reviewers, session chairs, and authors, whose rigorous efforts have been instrumental in shaping our program. Your contributions are invaluable, and your active participation is essential to the Symposium's success. I encourage you to fully engage in rich discussions, share your insights and foster collaborations that will elevate the role of libraries in supporting research advancements. My sincere appreciation also goes to the symposium convener, the organizing committee, and all staff members, whose dedication ensures the success of this Symposium.

The Library Research Symposium 2024 is not merely an event but a catalyst for change and a significant milestone in advancing a sustainable and impactful research landscape. I look forward to the inspiring outcomes and future directions that our collaborative efforts will yield, shaping the future of research profoundly.

MESSAGE FROM THE CONVENER

Dr. N. M. Karannagoda

Senior Assistant Librarian
University of Colombo, Sri Lanka



With immense pleasure and pride, I welcome you to the Library Research Symposium 2024, held under the theme "Fostering a Sustainable Future: Libraries for Research Excellence." This theme reflects our commitment to leveraging libraries' power to drive impactful research and support sustainable development, underscoring their role as dynamic spaces for knowledge and innovation.

I sincerely thank the University Annual Research Symposium Committee for their unwavering support and guidance. My heartfelt gratitude goes to the Library Research Symposium Committee, our Librarian, and the esteemed university and library staff, whose dedication has been instrumental in bringing this event to fruition.

A special acknowledgement goes to all authors, reviewers, presenters, and contributors whose hard work and intellectual contributions enrich our symposium and broaden our understanding of excellence research. Your commitment to advancing library and research practices is invaluable, and we are honoured to host you here today.

Thank you all for joining us on this discovery, learning, and collaboration journey. This symposium will inspire meaningful discussions and innovative ideas for fostering sustainable research practices within and beyond our academic community.

ORGANIZING COMMITTEE

Chair of the Symposium

Mrs. Kalpana Manatunga

Senior Assistant Librarian

Convener

Dr. Neluka Karannagoda

Senior Assistant Librarian

Advisory Committee

Dr. Pradeepa Wijetunge

Librarian, University of Colombo

Dr. D C Kuruppu

Deputy Librarian, University of Colombo

Editorial Committee

Ms. Samanlatha Menike Adhikari (Editor)

Senior Assistant Librarian

Dr. D C Kuruppu

Deputy Librarian

Ms. Sajeewanie Somaratna

Senior Assistant Librarian

Dr. T Sritharan

Senior Assistant Librarian

Ms. Anuja Silva

Senior Assistant Librarian

Dr. Chiranthi Wijesundara

Senior Assistant Librarian

IT and Publicity Committee

Mrs. W P G L Perera (Coordinator)

Senior Assistant Librarian

Mr. M A Lankathilaka

Assistant Librarian

Mr. S G N C Senanayake

Assistant Librarian

Inauguration Committee

Dr. (Mrs) C K Gamage

Senior Assistant Librarian

Mr. T Ramanan

Senior Assistant Librarian

Mrs. P M Ayomi

Senior Assistant Librarian

Mrs. K K N L Perera

Senior Assistant Librarian

Mrs. S S Johoran (Coordinator)

Senior Assistant Librarian

Mrs. K I D F Senanayake

Assistant Librarian

Administrative Support

Mr. Chamal Abeygunawardhana

Senior Assistant Registrar

Cover Designing

Mr. M A Lankathilaka

Mr. S G N C Senanayake

SYMPOSIUM PROGRAMME

Time	Programme
09.30 am - 09.40 am	Inauguration
09.40 am - 09.45 am	Welcome Address by the Chair LRS- 2024 Mrs. P. K. S. Manatunga Senior Assistant Librarian, Main Library, University of Colombo
09.45 am - 09.55 am	Address by the Librarian Dr. (Mrs.) P. Wijetunge University of Colombo
09.55 am - 10.00 am	Launch of the Electronic Proceedings
10.00 am - 10.10 am	Address by the Chief Guest Senior Professor (Chair) H.D. Karunaratne Vice Chancellor, University of Colombo
10.10 am - 10.15 am	Introduction to the Keynote Speaker I
10.15 am - 10.30 am	Keynote Address I Senior Professor (Chair) Premakumara de Silva Department of Sociology, University of Colombo
10.30 am - 10.35 am	Introduction to the Keynote Speaker II
10.35 am - 10.50 am	Keynote Address II Senior Professor (Chair) Nalin de Silva Head, Department of Chemistry, University of Colombo
10.50 am - 11.00 am	Vote of Thanks by the Convener – LRS 2024 Dr. N. M. Karannagoda Senior Assistant Librarian, Main Library, University of Colombo
11.00 am - 11.20 am	Refreshments
11.20 am - 12.00 noon	Panel Discussion on ‘Sustainable Future of University Librarians’
12.00 noon - 01.00 pm	Lunch
01.00 pm - 02.15 pm	Technical Session 1
02.30 pm - 04.00 pm	Technical Session 2
4.00 pm	Tea

Technical Session 2

Artificial Intelligence and Emerging Technologies in Academic Libraries

Session Chair – Dr. Nayana Wijayasundara, Librarian, University of Sri Jayewardenepura

Time	Presentation
2.30-2.45 pm	Bibliometric Analysis of Artificial Intelligence in Academic Libraries <i>S. S. Johoran</i>
2.45-3.00 pm	Emerging Technologies in Academic Libraries: A Scientometric Analysis based on the Scopus Database <i>W.P.G.L. Perera, M.A. Lankathilaka, and H.P. Koralage</i>
3.00-3.15 pm	Use of Conversational Artificial Intelligence Tools in Higher Education: Perception of Science Undergraduates <i>M.A. Lankathilake, Anuja Silva, and Sajeewanie D. Somaratna</i>
3.15-3.30 pm	Effectiveness of Academic Integrity in the Age of AI in the Sri Lankan Higher Education Sector: Challenges and Solutions <i>M.H.F. Nuskiya and Fareena Ruzaik</i>
3.30-3.45 pm	Application of Google Analytics to Optimize User Engagement on University Library Websites: A Case Study Based on a State University in Sri Lanka <i>S.G.N.C. Senanayake</i>
3.45-4.00 pm	Factors Associated with Using Automated Content-Generating Tools by Academics in a State University in Sri Lanka <i>K. M. P. G. A. J. Bandara and P. K. S. Manatunga</i>

Effectiveness of Academic Integrity in the Age of AI in Sri Lankan Higher Education Sector: Challenges and Solutions

M.H.F. Nuskiya¹, Fareena Ruzaik²

¹*Department of Geography, South Eastern University of Sri Lanka*

²*Department of Geography, Faculty of Arts, University of Colombo, Sri Lanka*

The rapid integration of artificial intelligence (AI) into higher education has revolutionized teaching and assessment practices, yet it has also presented significant challenges to maintaining academic integrity. The study focuses on higher education institutions in Sri Lanka. The purpose of this study is to analyse the effectiveness of academic integrity practices in the context of AI technologies within the higher education sector of Sri Lanka. Specifically, it examines AI-driven assessment methods, concerns about plagiarism detection tools, and the effectiveness of current certification methods in preserving academic integrity. A structured online questionnaire was administered to 147 participants from diverse academic backgrounds and institutions across Sri Lanka. Quantitative data were collected through extracted from Likert-scale responses and demographic data. Hypothesis tests including the chi-square test and ANOVA were used to assess the statistical significance of differences in perceptions among demographic variables. The survey findings suggest mixed views on the effectiveness of academic integrity practices in the AI age. While 64% of respondents expressed confidence in AI-driven assessment methods, they raised particular concerns about the potential for algorithmic biases to influence assessment fairness ($\chi^2(1) = 15.32, p < 0.001$). Additionally, 79% of participants highlighted the importance of increasing transparency and accountability in AI-based theft detection tools. Statistical analysis reveals notable differences in perceptions based on participants' academic discipline and years of experience in higher education. In particular, respondents from engineering disciplines showed greater confidence in AI technologies compared to those from humanities and social sciences ($F(2, 144) = 5.78, p < 0.01$). Based on the research findings, strategic recommendations are made to address these challenges and enhance academic integrity practices in AI development. This survey-method study provides empirical insights and compelling statistical evidence on the evolving landscape of academic authenticity in higher education in the context of hybrid AI technologies in Sri Lanka. It provides practical recommendations for institutions and policymakers to address ethical challenges and effectively promote honesty in educational settings.

Keywords: *Artificial Intelligence, Academic Integrity, Higher Education, Assessment Methods, Plagiarism Detection*