



SHRI RAWATPURA SARKAR UNIVERSITY RAIPUR (C.G.)

National Conference on
Technological and Ethical Dimensions of Research Data
Management: Navigating the Digital Frontier
(TEDRDM 2025)

29th – 30th April 2025

Proceedings of the Selected Papers

Editor Sachin Kumar Diwan

Organized by

Department of Library and Information Science Shri Rawatpura Sarkar University, Raipur-492015 Chhattisgarh, India





Sponsored by

Raja Rammohan Roy Library Foundation, Kolkata Autonomous Organization, Ministry of Culture Government of India

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Technological and Ethical Dimensions of Research Data Management: Navigating the Digital Frontier (TEDRDM 2025)

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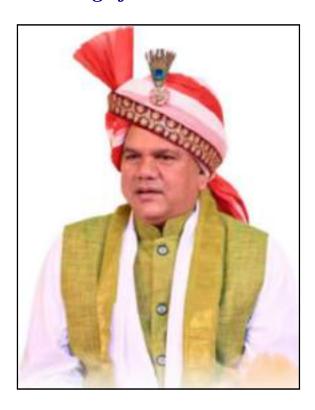
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Message from Chancellor



I am profoundly happy to learn that Department of Library and Information Science, Shri Rawatpura Sarkar University, Raipur is organizing the National Conference on "Technological and Ethical Dimensions of Research Data Management: Navigating the Digital Frontier" 29th – 30th April 2025.

This multidisciplinary approach will advance our understanding of complex problems and drive innovation towards more sustainable and equitable solutions. The conference will provide scope to enhance scientific and research activities in the University and also it would provide valuable and informative ideas to the participating students, researchers and academicians.

I convey my best wishes for the success of the conference.

Anant Shri Vibhushit Shri Ravishankar Ji Maharaj Honorable Chancellor Shri Rawatpura Sarkar University Raipur, Chhattisgarh



Message from Pro-Chancellor



It gives me immense pleasure to know that Department of Library and Information Science, Shri Rawatpura Sarkar University, Raipur, is going to organize a National Conference on "Technological and Ethical Dimensions of Research Data Management: Navigating the Digital Frontier" $29^{\text{th}} - 30^{\text{th}}$ April 2025.

The National Conference will offer a premise for experts to gather and interact intensively on the theme covering in the fields of Library and Information Science and the deliberations will derive multifold benefits for students, researchers and academician of India and abroad.

I congratulate the Department of Library and Information Science, Shri Rawatpura Sarkar University, Raipur for bringing out the proceedings and at the same time wish them success in their entire future endeavor.

I wish the National Conference a great success.

S. S. Bajaj Pro-Chancellor Shri Rawatpura Sarkar University Raipur, Chhattisgarh



Message from Vice-Chancellor (I/C)



It is with great pride and enthusiasm that I welcome all the participants to the National Conference on "Technological and Ethical Dimensions of Research Data Management: Navigating the Digital Frontier" scheduled during $29^{th}-30^{th}$ April 2025. The conference serves as an essential platform for fostering academic excellence, interdisciplinary collaboration and innovative research in addressing the pressing challenges of Research and Data Management.

In today's rapidly evolving academic landscape, research data management is more than a necessity, it is a cornerstone of integrity, transparency, and scholarly impact. As knowledge creation accelerates, effective data stewardship ensures that our research remains credible, reproducible, and ethically sound. I urge all members of our academic community to embrace best practices in data collection, organization, storage, and sharing. By leveraging advanced technological tools while adhering to ethical standards, we can enhance collaboration, promote innovation, and safeguard the authenticity of our research.

I extend my sincere appreciation to all researchers, academicians, and industry experts for their contributions. I am very much confident that the deliberations and insights shared during the conference will lead to transformative advancements in Research and Data Management.

I wish for the grand success of the conference.

Prof. R.R.L. Birali Vice-Chancellor (I/C) Shri Rawatpura Sarkar University Raipur, Chhattisgarh



Message from Registrar



I am delighted to extend my warm greetings to all participants of *TEDRDM* - 2025 – Technological and Ethical Dimensions of Research Data Management: Navigating the Digital Frontier, being held on 29th – 30th April 2025. This conference serves as a vital platform for researchers, academicians, and industry experts to exchange ideas and innovative solutions for addressing climate challenges through an interdisciplinary lens.

As we advance further into the digital age, research data management has become a crucial aspect of academic integrity and innovation. The intersection of technology and ethics in this domain presents both opportunities and challenges that require careful navigation. With the growing reliance on digital tools, artificial intelligence, and cloud-based storage, ensuring data accuracy, security, and ethical compliance is more important than ever. We must uphold transparency, privacy, and responsible data sharing, maintaining the highest standards of ethical research conduct.

I encourage all members of our academic community to engage in thoughtful discussions, explore best practices, and collaborate in shaping the future of research data management. Your dedication to ethical and technological advancements in this space will strengthen the integrity and impact of our collective scholarly efforts.

Wishing you all a successful and enriching TEDRDM 2025!

Dr. Saurabh Kumar Sharma

Registrar Shri Rawatpura Sarkar University, Raipur, Chhattisgarh



Message from Dean



Dear Esteemed Participants and Contributors,

It is with immense pleasure and pride that I extend my warmest greetings to all of you as we come together for this remarkable conference. This event signifies not only an exchange of ideas but a celebration of intellectual curiosity, innovation, and collaboration key pillars that drive progress in academia, industry, and society at large.

The conference proceedings presented in this book are a testament to the dedication, creativity, and rigor of the researchers and scholars who have worked tirelessly to advance knowledge in their respective fields. Each paper reflects the diverse and dynamic spirit of inquiry that defines this institution and our global academic community.

This conference serves as a platform to bridge gaps, foster connections, and ignite conversations that have the potential to shape the future. I am confident that the knowledge shared here will inspire all of us to think beyond boundaries and contribute meaningfully to the challenges and opportunities ahead.

Let us take this opportunity to applaud the organizing committee, contributors, and participants for their unwavering commitment to excellence. Your efforts ensure that this conference remains a beacon of inspiration and learning.

As Dean, I encourage you to engage actively, question boldly, and collaborate openly. May this event be an enriching experience that leaves you with renewed purpose and insight.

I wish for the grand success of the conference.

Dr. Manish Kumar Pandey
Dean of Arts
Shri Rawatpura Sarkar University
Raipur, Chhattisgarh



Message from Convener



`Dear Scholars, Researchers, and Academic Professionals, In the ever-expanding digital landscape, research data management stands at the intersection of ethics, technology, and sustainability. As we navigate this dynamic space, it is imperative to uphold integrity, security, and accessibility in data handling, ensuring that our research contributes meaningfully to global knowledge.

Key areas such as ethical and committed research data management in information science, data integrity and security, and privacy and confidentiality in data handling require unwavering attention. With the technological advancements in data storage, evolving data repositories and APIs, and the integration of AI and machine learning in research data management, we are witnessing a paradigm shift in how data is collected, stored, and analyzed.

Furthermore, responsible practices in ethical data sharing and accessibility, adherence to compliance and legal frameworks, and the pursuit of sustainability in research data management are vital to ensuring transparency and longevity in scholarly contributions. Educating researchers and academicians on ethical data management principles strengthens our collective commitment to rigorous and responsible research.

As we delve into specialized domains such as text mining, data science, data analytics, big data, and emerging methodologies in bibliometrics, scientometrics, altmetrics, and webometrics, it is crucial to refine our approaches to data stewardship. In the context of research data management practices in India, fostering a collaborative and ethical research environment will drive innovation and global impact.

I encourage all members of our academic community to actively participate in discussions, workshops, and knowledge-sharing initiatives that enhance our understanding of research data management. Let us work together to uphold ethical, secure, and sustainable data practices for the advancement of academic excellence.

Dr. Abhay MauryaConvener TEDRDM 2025
Shri Rawatpura Sarkar University
Raipur, Chhattisgarh



Message of Organizing Secretary and Editor



It is with great enthusiasm that I present this compilation of proceedings for the National Conference on "Technological and Ethical Dimensions of Research Data Management: Navigating the Digital Frontier (TEDRDM 2025)". This National conference is proudly sponsored by the Raja Rammohun Roy Library Foundation (RRRLF), Kolkata, an autonomous organization under the Ministry of Culture, Government of India, and organized by the Department of Library and Information Science, Shri Rawatpura Sarkar University, Raipur.

I wholeheartedly encourage all participants to engage actively and share their valuable research contributions. Your insights and discussions will significantly enrich the academic discourse and help navigate the evolving landscape of research data management.

I extend our sincere gratitude to all contributors, participants, and the dedicated members of the organizing team, whose hard work and commitment have made this event a success. A special note of thanks goes to the university management for giving me the opportunity and responsibility of organizing this prestigious event.

Sachin Kumar Diwan

Organizing Secretary and Editor (TEDRDM 2025) Shri Rawatpura Sarkar University Raipur, Chhattisgarh



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INDEX

S.No.	Particular	P.N.
01.	Opportunity and Challenges of Artificial Intelligence (AI) and Machine Learning in Agricultural Libraries Research Data Management Dr. Madhav Pandey, Dr. Akanksha Pandey	01
02.	Technological and Ethical Dimensions of Research Data Management: Navigating the Digital Frontier Amresh Prasad Gujrati	06
03.	How Artificial Intelligence is Transforming Research Data Management: Understanding the Need and Exploring Available Tools Dr. Monika Singhai, Mr. Sunil Kumar Gautam	10
04.	The role of librarians in managing research data in academic libraries: A comprehensive study of challenges and opportunities Meghanada Pradhan	15
05.	Transforming Research Data Management through AI and Machine Learning Technologies Mr. Sachin Baburao Padwal, Dr. Mohammad Nasir	22
06.	Educating for Ethical Data Management: Building Responsible Digital Practices in the Information Age Dr. Prashant	28
07.	Technological Advancements in Data Storage Sachin Kumar Diwan, Dr. Abhay Maurya	34
08.	Role and Importance of Digital Library (Electronic Information) in Education and Research fields Prof. (Dr.) Girja Shankar Patel	37
09.	Research Data Management Tools Used in Informetrics: A Review and the Effects Mr. Sanjay Karak, Dr. Mohammad Nasir	42
10.	Artificial Intelligence Applications in Libraries: A Transformative Approach Bhasha Agrawal	50
11.	Data integrity in healthcare: Safe Guarding Electronic Health Records (EHR) Athira Mahesh	55
12.	Exploring Strategies for Outsourcing Skills: Knowledge Management Venture Dr Sanjeev, Mr. Yadunath Prasad	60
13.	Use of Open Educational Resources by UG and PG students of Mahatma Gandhi Antarrashtriya Hindi Vishvavidyalaya, Wardha Toran Lal Khunte, Dr. Harish Kumar Sahu	69
14.	Adoption of library Software in Polytechnic college libraries: A study of Raipur and Bilaspur Divisions in Chhattisgarh Neelam, Dr. Harish Kumar Sahu	76

15.	Awareness and Use of CeRA resources among the PhD Scholars of College of Agriculture, Raipur and Jabalpur : A Study Monika Tripathi Sharma, Dr. S. R. Kashyap	82
16.	Collection And Services Of Chandulal Chandrakar Government College of Arts and Commerce Library, Dhmadha Durg, Chhatisgarh: A Study Dr. Vishwadeep Kharwar	94
17.	Use and Awareness of e-Resources by Post Graduate Students of Science and Social Science in Govt. Bilasa Girls P.G. (Autonomous) College, Bilaspur (C.G.): A Comparative Study Vinod Kumar Khunte, Dr. Santu Ram Kashyap	100
18.	A Literature Review on Essential Competencies For 21st Century Library Professionals Ambika Bhadauria, J. N. Gautam	109
19.	Use of Print and E-Print Resources by Teachers at AMITY University of Jharkhand Ranchi: A Survey Nishant Kumar Pandey, Shreya Yadav	112
20.	Information Integrity and Digital Protection in Academic Libraries: A Cybersecurity Perspective Rikta Turul, Dr. Mohammad Nasir	121
21.	Research Data Management in Scientometrics Sunil Kumar	128
22	A Modern Perspective of Digital Libraries: Technical Institutes used on Communication Technology Patrik Minz, Dr. Girja Shankar Patel	131
23.	The Concept of Digital Library: An Overview on Information Technology based Services in Chhattisgarh, District Libraries Vikram Kumar Singh, Dr. Girja Shankar Patel	137
24.	On Weighted and Parametric Information Measures Based on Two Dimensional Probability Distribution Rohit Kumar Verma, M. Bhagya Laxmi	143
25.	Tribal Women's Empowerment: Social and Economic Contributions to Community Development Kashyap Shruti, Ranveer, Shivam Yadav	153
26.	नैतिक डेटा प्रबंधन के लिए शिक्षा : पुस्तकालय विज्ञान के परिप्रेक्ष्य में ver dekj ikri ohjm dekj ikiMY;] MkW dYiuk pakdj	159
27.	How academic Libraries and NEP 2020 can Complement Each Other: Possibilities and Challenges Sunil Kumar Gautam, Dr.Monika Singhai	164
28.	Enhancing Infometrics through Effective Research Data Management: Strategies for Accurate and Ethical Information Analysis Lukeshwaree Dhruw, Sachin Kumar Diwan	169
29.	Integrating Research Data Management in Bibliometrics, Scientometrics, Altmetrics, and Webometrics: Strategies for Unified and Ethical Impact Analysis Rajetri Ratde, Dr. Abhay Maurya	175

30.	Ensuring Research Integrity: Research Data Management and Regulatory Compliance Arvind Berma	179
31.	Research Data Management Framework for Libraries Laxmi Sahu, Dr. Abhay Maurya	183
32.	Innovating Research Data Management for Long-term Sustainability and Impact Dr. Anupam Saigal, Dr. Rajesh Panday, Devendra Mani Panday	187
33.	छत्तीसगढ़ के आयुर्वेदिक पुस्तकालय में ई. संसाधनों की उपयोगिता fn0; k jkul MkW fxjtk 'kadj i Vsy	193
34.	भारत में उच्च शिक्षा में विश्वविद्यालय के पुस्तकालयों में महिलाओं की भूमिका पर अध्ययन MKW jktsk ik.Ms] MKW vuie l gxy	197
35.	From Shelves to Servers: A Study of Library Automation and Data Management in Indian Academic Institutions with Special Reference to Agriculture Colleges of Chhattisgarh Praveen Kumar Dewangan, Dr. Abhay Maurya	202
36.	Research Data Management at the Digital Frontier: Ethical and Technological Insights Dr. Anupam Saigal, Prabha Sharma, Mukesh Rani	208

"शिक्षा का मुख्य कार्य मनुष्य के भीतर नये नये विचार उत्पन्न करना है। ईश्वर ने मानव मस्तिष्क में अपार ऊर्जा एवं योग्यता दी है। शिक्षा इन शक्तियों को प्रयोग में लाने में मदद करती है।"





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