



National
Digital Library
of India



—SPONSORED BY—
शिक्षा मंत्रालय
MINISTRY OF
EDUCATION



—DEVELOPED BY—
INDIAN INSTITUTE
OF TECHNOLOGY
KHARAGPUR



4th

INTERNATIONAL SYMPOSIUM ON —

3-5
NOVEMBER
2025

Knowledge Engineering in Digital Library Design [KEDLD2025]

Organized by

National Digital Library of India (NDLI)
& Central Library, IIT Kharagpur



KEDLD
2025



IIT KHARAGPUR
KHARAGPUR,
WEST BENGAL-721302



VIEW DETAILS

<https://kedld.ndl.gov.in>

ABOUT THE NATIONAL DIGITAL LIBRARY OF INDIA

National Digital Library of India (NDLI) is a comprehensive virtual repository of learning resources designed to serve a diverse learner community. Sponsored and mentored by the Ministry of Education, Government of India, under the National Mission on Education through Information and Communication Technology (NMEICT), NDLI is developed, operated and maintained by the Indian Institute of Technology, Kharagpur. As of April 2025, the platform offers 125 million digital resources and has 94 million registered users, demonstrating its nationwide reach. Its federated search architecture, built on open-source technologies, supports a high volume of concurrent queries, ensuring swift and reliable access even during peak demand.

NDLI delivers tailored services for school and college students, job aspirants, researchers and lifelong learners. It accommodates content in all languages and currently supports search in the 14 most widely used Indian languages, making it a truly multilingual and inclusive platform. Accessible via both web and mobile app, NDLI organizes content across dedicated domains- School Education, Higher Education, Research, Career Development, Cultural Archives, Judicial Resources, Newspaper Archives, and Patents & Standards. Beyond aggregation, NDLI develops high-quality learning modules for major national competitive examinations such as JEE, NEET and various government recruitment tests. The NDLI Club outreach initiative promotes activity-based learning in alignment with NEP 2020, helping students and educators make the most of the platform.

CENTRAL LIBRARY IIT KHARAGPUR

Established in 1951 as the first institute of the IIT system, IIT Kharagpur was founded to advance knowledge in areas of national and global significance. With over 770 faculty members, more than 900 staff and a community of 15,000 students and researchers, the institute pursues broad-based education to equip learners with best-in-class professional capabilities.

The Central Library is the institute's learning hub, offering a conducive environment across six air-conditioned reading halls that can seat over 2,000 users simultaneously. It operates from 8 AM to midnight on regular days and provides

round-the-clock access for 15 days during semester examinations. The Library subscribes to more than 2,76,000 print books, 26,466 e-journals, over 257,726 e-books and 31 electronic databases as of March 31 2025. It also holds subscriptions to standards from ASME, SAE, ISO, BIS, IEC and ASTM, and provides access to all major publisher e-journals via the One Nation One Subscription (ONOS) Phase-I scheme. Various digital library services are continuously rendered to meet the needs of its user community.

OBJECTIVES OF THE SYMPOSIUM

In today's rapidly evolving digital information landscape, Knowledge Engineering, Artificial Intelligence (AI) and Machine Learning (ML) are pivotal to enhancing the scope, accessibility and performance of digital libraries. This symposium will:

- Highlight the strategic importance of digital libraries, focusing on the NDLI initiative
- Demonstrate how metadata engineering improves resource accessibility for diverse user groups
- Share technical, administrative and policy insights for digital library systems
- Foster international collaboration among digital library stakeholders
- Advocate for smart, open and interoperable library technologies
- Showcase AI and ML innovations in digital library services
- Facilitate the exchange of best practices and success stories
- Identify key challenges and explore practical solutions

CALL FOR PAPERS

NDLI invites researchers, scholars, practitioners and policymakers to submit papers for the international symposium "Knowledge Engineering for Digital Library Design (KEDLD)." The event will examine how knowledge engineering drives sustainable development in education through digital libraries. Papers may address any of the following sub-themes:

KNOWLEDGE ACQUISITION & REPRESENTATION IN DIGITAL LIBRARY

- Knowledge-based system design
- Knowledge organization
- Knowledge management
- Digital humanities
- IPR issues & digital rights management
- Role of LIS professionals in digital library

DIGITAL LIBRARIES AND METADATA ENGINEERING

- National digital library of India (NDLI)
- Metadata standards and its application in DL
- Metadata curation
- Metadata schema for manuscripts, artifacts, multimedia etc.
- Metadata harvesting & integration

DIGITAL KNOWLEDGE CREATION AND SHARING

- Sustainable development in digital libraries
- Issues and challenges on access, searchability and personalization
- Security aspects in knowledge-sharing platforms.

OPEN ACCESS AND EDUCATIONAL RESOURCES

- Learning objects
- OA repositories
- Ontology for information organization in DL
- Vocabulary control system in educational platform
- Digitization and preservation of rare documents

EMERGING TECHNOLOGIES IN DIGITAL LIBRARIES

- Digital library design
- Leveraging AI/ML tools in developing smart library systems
- Generative AI, expert systems
- Semantic web and linked data technologies
- Knowledge discovery, knowledge graph
- AR/VR/MR for enhanced library experiences
- Cloud computing, internet of things (IoT), blockchain technologies
- Data carpentry, data wrangler and library carpentry
- Deep learning, large language model (LLM)

SUBMISSION GUIDELINES

Paper must be written in English and should adhere to academic standards.

- Submissions should be in .doc or .docx format and follow a standard academic paper structure.
- The maximum paper length should not exceed 3000 words, Page Size- A4, Single line space.
- Font Name: Times New Roman, and Size: 12pt
- Authors should mention sub-theme of the paper (choose from the list of themes of the symposium).
- Title, abstract (250 words maximum), six keywords, and author affiliations with contact information.
- References (APA Style 6th ed.).
- Please comply the plagiarism percentage as per UGC guidelines of the manuscript and attached the report at the time of submission.
- All submissions must be original work and should not have been previously published or be under review.
- Tables and Figures may be incorporated into the text of the paper.
- NDLI holds the copyright of the selected papers, which will be published at the symposium.

Selected papers will be presented at the symposium and published in the proceedings only if at least one author register in the symposium.

Submission Process: Authors are requested to submit their papers by visiting the symposium's official website <https://kedld.ndl.gov.in>. For any inquiries, please contact kedld@ndl.gov.in. We look forward to receive your valuable contributions and engaging in meaningful discussions on "Knowledge Engineering in Digital Library Design (KEDLD)" symposium.

Note: Please refer to the symposium's official website and guidelines for any updates or changes regarding the submission process and important dates.

IMPORTANT DATES

PAPER SUBMISSION DATE (NO ABSTRACT SUBMISSION IS REQUIRED)

Full Paper Submission	: August 18, 2025
Peer Review Comments	: within 15 days of submission
Camera-Ready Paper	: September 18, 2025
Symposium Dates	: November 3–5, 2025

TARGET AUDIENCE

- Library Professionals working in universities, institutes and research centres
- Teachers and researchers working in the interested fields
- Those who are involved in handling information and knowledge activities in diverse areas in educational and research institutes

STRUCTURE OF THE PROGRAMME

Day-1

Inauguration and Technical Session on NDLI

Day-2

Theme-based selected paper presentation, product presentation

Day-3

Expert Lecture, Panel Discussion, Valedictory Session and Certificate Distribution

REGISTRATION

Category	Description	Registration Fee* (including GST)
Participants from India		
Sponsored	Working professionals deputed by Universities / Institutes / Projects	₹ 7000
Individual (Non-sponsored)	Working professionals, not sponsored by their organization	₹ 4000
Research Scholars	Pursuing Ph.D. and Post Doc. (Only 5 Participants)	₹ 3000
Students	Pursuing MLIS degree (Only 5 Participants)	₹ 1000
Participations from Outside India		\$ 120

NB : *Participation in the symposium is purely based on registration. Registration fee is non-refundable. Registration fee does not include accommodation charges.

ACCOMMODATION

The accommodation for the participants may be arranged in our institute's guesthouses on a payment basis. There are limited rooms available in the institute guesthouse. Booking may be confirmed only after successful registration. Participants need to pay the accommodation charges on arrival through Debit/Credit cards.

Category	Description	Accommodation Charge**
Ashutosh Guest House (AGH)*	D/B Non-AC Room	₹600/- (Double occupancy)
Technology Guest House (TGH)	D/B AC Room	₹1680/- (Single occupancy), ₹2240/- (Double occupancy)
Others	D/B AC Room	₹ 2000/- (Double occupancy)

NB : * Only limited seats are available.

**** Accommodation charges may be revised as per latest institute rule.**

TRANSPORTATION

IIT Kharagpur enjoys excellent connectivity via both rail and air. The closest railway stations are Kharagpur and Hijli. One can get taxi/ toto/ rickshaw from railway station, it will take hardly 15 minutes to reach the venue. The closest airport is Netaji Subhas Chandra Bose International Airport (CCU) in Kolkata, which is approximately 140 km away. The journey from the airport to IIT Kharagpur can take about 3 hours by road.

VISA REQUIREMENT

Citizens of all countries, except Nepal and Bhutan, require a valid Visa granted by Indian Missions Abroad for entering India. Those wishing to visit a neighbouring country like Sri Lanka or Nepal and then return to India should obtain a double/multiple entry Visa. Upon confirmation of registration, the Organizing Committee shall issue the necessary documents as required for obtaining Visa from the Indian consulate of the country of the applicant.

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The Principal Investigator of
National Digital Library of India.



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Joint Principal Investigator

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Joint Principal Investigator

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www.ndl.gov.in

ONE LIBRARY ALL OF INDIA



What is NDLI?

- ✓ A 24X7-enabled Digital Library with single window search/ browse facility
- ✓ Covers all academic levels (KG to PG), life-long learners, and all disciplines
- ✓ Domain-wise organisation: School Education, Higher Education, Career Development, Research, Cultural Archives, Law, Patents, Newspaper, etc.
- ✓ Diverse Multimedia contents including Text, Video, Audio, Image, Simulation, Animation, etc.
- ✓ Searching Facility in English & 14 Indian languages
- ✓ Diverse Types of contents including E-books, Audio-books, Lecture materials, Thesis, Articles, Journal papers, etc.

Services Provided by NDLI:

- ✓ Available platforms are NDLI Website, Mobile App, UMANG
- ✓ NDLI Club
- ✓ Cloud Hosting Service for Institutional Digital Repository (IDR)
- ✓ IDR Support Service
- ✓ Digital Preservation of Rare Documents
- ✓ Training and Awareness Building
- ✓ Published "Copyright Guide" for Indian libraries
- ✓ Contents are available in 39 Indian Languages and 400+ foreign languages

Services for End Users

General Services

Accessibility Services:

- Free Access to 130 Million (June, 2025) contents
- Nationally Licensed Content of 0.65 Million

Trending AI-driven Services:

- AI-powered recommendations
- Semantic search

Job Aspirants and Students

- In-house created solutions for JEE, NEET Exams
- In-house created solutions for Competitive Exams like SSC, RRB, IBPS etc.
- Covers all Indian State and Central School Board Text Books, Syllabus etc.
- Question Papers of various Entrance Examinations and job oriented competitive exams.

Services for Organizations/Institutions

- IDR Cloud Hosting Service
- Customized Digital Library Service
- Digitization Services
- Training and Awareness Sessions



GET IT ON
Google Play

**130
Million+
Contents**

**9.5
Million+
Users**

**6.7K+
NDLI Club**

**Search in
14 Indian
Languages**



NDLI Club

Empowering learners through
Topic Centered & Project Based Clubs
to fulfill the NEP 2020 Mandate

<https://club.ndl.iitkgp.ac.in>

An online platform for conducting
learning-oriented activities

NDLI Club is providing a platform for hand-holding so that Institutes can fulfill the NEP 2020 recommendations

Our Mission

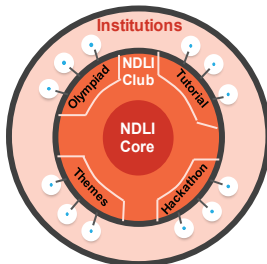
To create ambassadors at an exponential rate who will become the creators, disseminators, and progenitors of NDLI



Benefit to Institutes

- ✓ Create a vibrant environment where students can achieve academic excellence as well as shape their personal interests and hobbies.
- ✓ Students benefit immensely from vast online free resources in NDLI.
- ✓ Activity-based learning is recommended in NEP 2020.
- ✓ Club registration and promotion of NDLI is mandated by AICTE and helps in improving NIRF ranking.

NEP 2020 Mandate: Topic Centered & Project Based Clubs



MoE issued letters to all CFTIs to form NDLI Clubs

- NDLI Core
- NDLI Club Governance
- Theme specific activities
- Institution Level Club

Collaborative Learning

Activity based learning
Hybrid mode (Physical & Online)
Resources required accessed from NDLI
Teachers' Training for Digital Pedagogy

In the portion of the Clubs set up in Schools & HEIs across India

No. of Clubs set up: **6.7K+**
No. of Club Members: **2 Million+**
No. of Events conducted: **25K+**
Established **250+** clubs in remote areas like North-Eastern, Andaman & Nicobar Island, Ladakh to support dissemination of Education

<https://club.ndl.iitkgp.ac.in>



NDLI Olympiad



Winners Coimbatore



Role Play





<https://kedld.ndl.gov.in>

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