The second day of the ICDL 2013 was marked by the intensity and depth of the discussions held in the day-long sessions. An underlying theme of the papers presented and the talks delivered during the conference was that no aspect of digital libraries can be understood in isolation or without paying attention to the needs of the people who create and use the information, and that viewing digital libraries (DLS) from a social as well as technological perspective is important. DLSs are thus a socio-technical system, network of technology, information artifact which helps people interact with the larger world of work and society. The emergence of the Internet and the wide availability of affordable computing equipment have created tremendous interest in digital libraries and electronic publishing.

Speakers debated on how the open information culture has shifted focus from subject experts and limited the modes to a common man’s participative domain where inputs can be simultaneously added and accessed and new modes such as wikis, blogs,

Web 2.0, and other tools of social media are now well entrenched, which increases academic libraries’ onus of queaching the quests of information seekers by incorporating the revolutionary technological changes to provide state-of-the-art services.

Mr P Anandan, Country-Head, Microsoft India — in the plenary session of the conference — talked on “Digital Media and Interactivity”. He spoke about the rich interactive narratives and also visually explained — with video and audio clips — how useful it is to make the people learn and understand with the help of these formats with voiceover techniques. Mr Anandan further explained how convergence of media is helping deliver content. He emphasized on the developing importance of digital contents and informed how Microsoft is innovating in this direction. His talk was followed by technical sessions.

This session began with Mr P Anandan, Country-Head, Microsoft India — in the plenary session of the conference — talked on “Digital Media and Interactivity”. He spoke about the rich interactive narratives and also visually explained — with video and audio clips — how useful it is to make the people learn and understand with the help of these formats with voiceover techniques. Mr Anandan further explained how convergence of media is helping deliver content. He emphasized on the developing importance of digital contents and informed how Microsoft is innovating in this direction. His talk was followed by technical sessions.

Session 1A: Digital library development, architecture, and management

Dr Jagdish Arora who talked about the collection infrastructure of INFLIBNET. He also discussed the UGC-INFONET and N-List programme and the Open Access initiatives, such as Shodhganga, ShodhGangotri, OJAS, ShodhSagar (under planning), and E-PG Pathshala undertaken by INFLIBNET. The second invited speaker Dr Felix N Ubogu started his talk by giving a general description of the digital library landscape in Africa. He also highlighted information gathered from existing surveys, internet searches, and the author’s personal experience and knowledge. Challenges such as underdeveloped infrastructure, skills, severe lack of funding, and lack of leadership were also addressed. The lecture by Dr Umar Maiwada was titled ‘Academic Libraries in the Digital Age: Problems and Prospects’. The discussion described new problems in academic libraries and their digitalization and identified prospects towards their resolution. Another contributed paper was presented by Dr Ajit Sagaji Sonawane and Dr Prabhakar Rath.

Session 1B: E-Learning platforms and mobile technology

This session chaired by Dr H Anil Kumar broadly focussed on the relevance of MOOC and hype cycle for education. An invited speaker, Dr Mangla Krishnamurthy spoke about the impact of library instruction in an E-learning environment and the importance of the faculty– librarian collaboration in an academic institution. Prof. Dion Goh, also an invited speaker, talked about human computation games, mobile tagging of objects and people, the development of a content-sharing HCG, introduction of SPLASH, etc. Also, two more presentations by the contributed speakers took place. The first one was a discussion on the role and usefulness of mobile devices in Calicut University. The second one looked into the use of electronic databases. The presenters concluded that electronic databases are a major source of information for researchers, especially mentioning SciFinder and Ebisco.

Session 1C: Social media and network analysis

The technical session on social media and networked analysis was chaired by Dr Usha Mujoo Munshi. The session began with the invited speaker, Hannelore...
Vogt, making a presentation in which she shared her experiences of social media practices in the Cologne Public Library and explained the organizational model on which the said library is based upon.

This was followed by presentations by three contributed speakers. Stoyan Denchev spoke on socialization of cultural heritage through digital libraries within the university environment. This presentation treats problems related to the socialization of Bulgarian cultural heritage through digital libraries within the frames of specialized university information environment. A second paper by Shaharima Parvin presented a developing country perspective with a focus on Bangladesh. She spoke on the acceptance of social networking tools by the female LIS professionals in the country. The last paper by Urmila L. Jagtap and Surekha R Khare presented a case study of IGDTU library and explored the role of Facebook in the same. Dr Munshi added that the aim of all social media technology developments within library management is to transform real world into digital world.

**Session 1D: Human computer interfaces multimedia visualization**

This session was chaired by Prof. Yan Quan Liu with an introductory remark and highlights about the speakers. The first speaker, Matthias L Hemmje, shared his experience about the study on European infrastructures and supporting scientific communities in their knowledge society’s e-Infrastructures and digital libraries. He started with the vision and mission about their programme PARSE for requirement analysis, digital preservation services, etc. He explained about their workflow management of their project with OASIS model and how it also improved with the value-added concept of an information cycle called ‘SHAMAN’—an archive-centric information cycle. He demonstrated the value of documentation and preservation of LEVEL 2 GOME satellite instrument datasets. He described the alliance of permanent access (APA) and their website information. The PARSE Insight is based on a large-scale survey of data for evaluation and he also the Data manager Plan. Finally he highlighted their project SCIDIP-EP.

The second speaker Alejandro Bia, elaborated the speech on Megaservices with the context of where DL and DH meet. He described the evolution of written text such as digital textuality 2.0 to digital textuality 3.0. Role digital and traditional librarian skills. He touched with format conversion, annotation, and dictionary lookup, etc.

**Session 2A: Digital rights, management, and policy**

This session was chaired by Dr R K Chadha. The invited speaker was Dr Michael Seadle who spoke on the topic, Permission to archive: The long term of orphaned works: The first contributed paper of the session was presented by Md Abu Sayeed on E-Governance and AI2 programme in Digital Bangladesh: Involvement of information professionals for effective information service to ensure peoples’ right to information and transformation in public administration. He spoke about these two programmes for development, which are relating to information services importance and involvement of Information Professionals, their experiences, education and skills were explained in his lecture. The second paper was on ‘Psychological assessment of the attitudes towards IPR infringement: A case study of faculty of humanities University of Kashmir’ by Ms Rehtaf-un-nisa. She spoke about the psychological assessment of the attitudes and gave few imperative suggestions to be implemented. Ms Shaharkina, spoke on ‘Development of Digital Libraries in the IPR Regime’ She talked about DL and IPR issues and concluded with the different types of DL initiatives in India. Another paper was on ‘Digital rights management: Issues for digital libraries’ by Parul Zaveri. She spoke about important issues of DRM for libraries and its impact factor on content creator.

**Session 2B: Collaborative knowledge creation**

The invited speakers for this session were Prof. Atsuyuki Morishima and Prof. Kavi Mahesh. The first presentation talked about the L-Crowd Project by LIS and CS researchers in Japan and the importance of crowdsourcing, especially in Japan. Prof. Mahesh talked about the use of tag and content management in the present scenario, drawbacks of hyperlinks, and requirements for semantic content management. He concluded that content sharing should be a global activity. This was followed by a talk by the contributed speakers who spoke on the importance of collaborative knowledge creation in informatic networks, with a special focus on the Bandra-Kurla complex knowledge network, Mumbai. The need for collaboration among librarians and library resources and tools was emphasized upon. Yet another presentation on managing enterprise knowledge took place which discussed knowledge management and initiatives taken by his organization SAIL. This session was chaired by Dr Sanjay K Bihani.

**Session 2C: Application of web 2.0 tools and techniques**

This technical session focused on the application of Web 2.0 tools and techniques and was chaired by Dr Ramesh Gaur and two invited speakers — Jean Marc Comment and Rahul Agarwala. In his presentation, Mr Comment shared information about the Open Government Data at the Confederation (OGDataConfederation), a joint undertaking of the Swiss Federal Archives and their project partners. He shared the experiences of working on an Open Data solution named CSKAN which is an Open Source. Mr Agarwala in his presentation focused upon why libraries needed to develop knowledge networks and what efforts were needed for this. He then introduced Knimbus and its advanced features which may help libraries and its end-users. Contributed speakers also made a number of presentations. Dr Gaur concluded the session by speaking on how the current demand is to integrate content, people, and technology.

**Session 2D: Best practices in DL-I**

S Majumdar chaired the session on best practices in DL-1. Alberto H F Laender gave a speech on disambiguating citation records in large bibliographic repositories with two major kinds of methods — Author grouping and Explore evidence. He started with HHIC methods of cluster and comparative

**Session 3A: Best practices in DL-II**

After lunch Dr S S Dholakia chaired the next session. The invited speaker Dr Namita spoke on ‘Building Digital Repository of NSTMIS Research Publications: A Case Study.’ She threw light on the results of an initiative by the NSTMIS to build a web-enabled digital repository of all its publications. The first contributed paper was presented by Dr Partha De on ‘Establishing Digital Library in Universities and Other Academic Institutions: An New Challenge for Librarians of Developing Nations.’ He talked about the challenges librarians are facing in the digitization process, and establishing in-house digital library in universities and other academic libraries of developing nations. The second paper was on ‘Application of Appropriate Technologies in TERR Librariy and Information Centre: An Exploratory Study’ by Reeta Sharma. She highlighted the digital library project done by TERR Library for other institute and how it has built its capacity to be a technosound second generation library. The third paper was titled Awareness, Use and Impact of Electronic Information Services by the UG and PG students at JNMC Library, AMU Aligarh, India by Tanveer Haider Naqvi. It discussed the importance of EISs and the role of user education programme or information literacy programme to boost the usage of available EISs at JNMC library, AMU Aligarh, India. The next paper by Sabahat Nausheen was on ‘Towards the Digital Library: Initiative and Development of Visva-Bharati Library at a Glance.’ The paper discussed about Visva-Bharati, its genesis, progress, and Rabindranath Tagore’s view. The paper also discussed development of Visva-Bharati Library at length and highlighted the initiative taken by the Visva-Bharati to build this library as a digital one by converting its own resources into digital form and its usage. The next paper titled ‘Legal Implications of Digital Libraries’ was by Sidhant S Kondarwar. It highlighted the different legal issues of library and rights of author in the light of digitalization such as copyright issues, contractual issues, etc.

**Session 3B: Multi-linguality and interoperability and natural language processing**

The session on multi-linguality and interoperability and natural language processing was chaired by Prof. A R D Prasad. Three
invited speakers, Anna Maria Di Sciuollo, Niladri Chatterjee, and Ratna Sanyal presented papers during the session. The first paper was titled ‘Natural language processing biolinguistics and digital libraries’ the second, ‘Role of natural language processing in knowledge management’, and the final one was ‘Natural language processing and information retrieval techniques for aggregative digital repository’.

**Session 3C: DL Networking**

This session on DL networking was chaired by Prof. Jean-Marc Comment, along with two invited speakers, Prof. Akira Maeda and Dr Gulshan Wadhwa. The former emphasized on a digital humanities center with multilingual access to multiple databases, while the latter highlighted the role of Delcon, which can be accessed around the clock. The guest speaker, Ms Hasina Afroz from Bangladesh shared her experience of introducing KOHA in the BARC University Library, Bangladesh.

**Session 4A: Digital preservation**

Dr P R Goswami chaired this technical session. The invited speakers were José Borbinha, Francesca Schulze, and Heather Brown. The session started with the paper of Dr Borbinha on Digital Preservation. Contributions to a Unified View: He gave an overview of the problem of digital preservation and a view of relevant challenges, i.e., cultural heritage sector, organizational or business sector, and scientific and technical area. He also proposed a unified view of the problem of digital preservation, demonstrating several challenges — that communities have been trying to face isolated — that should be in fact understood not as specific to the community level, but as fundamental challenges whose solutions should fit to all. The second lecture was delivered on ‘Deutsche Digitale Bibliothek’ — Central Access to Digital Cultural and Scientific Heritage in Germany: Our Experiences and Visions by Francesca Schulze. She spoke about DDB and its complexity which would need to be dealt with technology experts, but not common DL practitioners. She further added that interoperability is a very vital issue in interconnecting these national DL projects. He further added that interoperability is a very vital issue in interconnecting these national DL projects. She discussed the importance of implementing global standards in local contexts. Dr Frederic Blin, IFLA, France, talked about his experience with the Europeana Digital Library Project. He said that all major national libraries in Europe used different descriptors for representation of digital documents, and different types of thesauri for vocabulary control. The French National Library also operated its own standards for digital library systems. He further added that interoperability is a very vital issue in interconnecting these national DL projects with the Europeana DL.

**Thematic Workshops**

**Workshop 1: Applying standards and addressing interoperability: Digital libraries in a networked world**

Ms Iskra Panevska gave the inaugural address. She spoke about UNESCO’s approaches to building knowledge societies with different key programmes such as Memory of the World Programme (MoWP) and Information for All Programme (IFAP) through which it supports standardizations in different aspects of digital libraries in a networked world. Some standardizations help in making digital library systems interoperable and harvestable.

**Workshop 2: National mission on libraries**

Dr V Srinivas gave the inaugural address. He talked about the progress on the recommendations of the working committee of NML. He informed the audience that the recommendations should get a cabinet approval in a few days and the programme is scheduled to be launched on 19 December 2013. He also highlighted the various components of the Mission, such as the National Virtual Library and the State Model Libraries.

**Workshop 3: Future of science publishing: Focus on open access**

This workshop started with the welcome address delivered by Mr M D Brahmachary of Nature Publishing. Dr James Butcher of Nature introduced how Nature has moved into publishing hybrid journals with open access contents. He also introduced indicators for measuring impact of articles in Cyberspace, including altmetrics.

**Workshop 4: ODOL (Open, Distance, and Online Learning), e-publishing, and e-learning**

Chaired by Dr Sudhir K Arora, a university librarian, this session contained a number of presentations. The paper presented by the invited speaker, Dr Sanjay Mishra, discussed role of library professionals as collectors, creators, communicators, and consolidators of knowledge. The session also had five contributed speakers, of which Dr Prakash Bodke conducted a survey and found a majority of users satisfied with e-resources. There was also a presentation on UGC INFONET download statistics, preference of PDF and HTML formats, and total month-wise downloads of data.
Dr Joseph Sunday Qpaleke from Nigeria expressed his views on the ICDL conference. He said the conference is a pleasant one, the arrangements are impressive, well-arranged, and hospitality is unmatchable.

Dr Jagdish Arora, Director, INFLIBNET How do you feel about ICDL 2013? It is great and becoming more and more professional with so many delegates from all over the globe gathering here together for the conference.

Are we moving towards one national e-resource consortium? The Planning Commission, Government of India has already formed a committee for the purpose. To begin with, Ministry of Human Resource Development (MHRD) consortia may soon be under one umbrella with a Common Advisory and Negotiation Committee.

What is your opinion about the Open Source Movement? It is becoming popular but to compete with the commercial publishers, someone has to take care of the financial liabilities as nothing comes free. Contributors should not be charged for their publications.

What do you think about the Institutional Repositories (IRs)? INFLIBNET has proposed a programme known as ‘SHODHSAGAR’ under NME-ICT through which all the IRs can be harvested into INFLIBNET’s proposed Central Repository.

Where do you see INFLIBNET in the next couple of years? There are several initiatives in pipeline but emphasis is on consolidation of large number of projects which have been already launched.