International Conference on Changing Landscape of Science & Technology Libraries (CLSTL 2019), 28 February – 02 March, 2019, IIT Gandhinagar

A Report

Libraries all around the world are undergoing a major change and transforming themselves as creative places offering new approaches to learning, knowledge generation and sharing as well as dissemination of information. Libraries which are part of science and technology academic Institutions, research and development organizations, industries and other institutions known for delivering latest information, are leading this change and are quickly adapting to the new eco- system.

During the last few years, higher education sector within India and outside, particularly in Science & Technology, has seen major developments. Increasingly, more emphasis has been given on improving quality in teaching, learning and research productivity. Equally, the focus has been on innovation, incubation, capacity building, collaboration between industry and academic Institutions in India. To understand and navigate successfully through these developments and collectively address some of the challenges, IIT Gandhinagar had organized the second edition of the international conference on "Changing Landscape of Science & Technology Libraries (CLSTL 2017)" at Indian Institute of Technology Gandhinagar from 28th February -2^{nd} March 2019.

Library professionals, to the tune of more than 250 attendees coming from science & technology institutions, research organizations and industries, teachers and researchers in the field of Library & Information Science. publishers, information intermediaries, vendors and technology solution providers for libraries, attended this conference. The 3-day Conference was structured into eleven technical sessions and four workshops. Several articles and papers were contributed to this Conference authored by several library professionals from various Institutes in India and abroad. The following paragraphs provide a detailed account of the conference.

The conference started with the Inaugural Session on 28February at 9.30 am. Dr. T. S. Kumbar, Librarian of IIT Gandhinagar, introduced the event to the audience. Professor R. Sharan, Chairman, Library Committee of IIT Gandhinagar, delivered the welcome address. Thereafter, Professor S. K. Jain, Director, IIT Gandhinagar, in his inaugural address shared his experience of developing a National Information Center for Earthquake Engineering (NICEE) in IIT Kanpur, whose prime motto was to serve as an information center for the literature on earthquake engineering ever published in the whole world. But, with time, the paradigm changed and to remain relevant, the information center had to be transformed into a training center. Drawing parallels, Professor Jain emphasized on rewriting the mandates of library profession keeping in view the developments that are occurring over time.

"Old friends, new ways: science & engineering libraries looking forward" - was the keynote delivered Erika Linke from Carnegie Mellon spoke University Libraries, USA.She about Engineering and Science Education & Research Practice, Educational Goals, Research and Education, What is important to faculty, and how we must work on Expanding and Recasting the library role from responder to initiator. She ended her talk withthought provoking questions about new roles to reshape the professional profile of science and technology librarians, skills sets required for new librarians, etc.

The first Technical Session on "Managing Change in Science & Technology Libraries" started with an invited talk by Rachel Sarjent- Jenkins, University of Saskatchewan Libraries, Saskatoon, Canada. Titled "Leading change: transitioning the library using change management and evidence based practice", the talk focused on the principal drivers of change, namely, Interdisciplinary and international research, Fiscal challenges, Changing pedagogical approaches, Ubiquity of access to online resources, and Shifting institutional priorities. Then, Lucille Elizabeth Webster from Durban University of Technology, South Africa, spoke about "The transformation of academic libraries in a post-apartheid South Africa". Thereafter, we heard Mayank Singh, the young Faculty Member of Computer Science & Engineering and also the Member of IIT Gandhinagar Library Committee speak on "Innovations in Digital Library curation, ranking and management" focusing on the platforms that curate, rank and manage the scientific documents today; and the how and why of their relevance to us. The session concluded with two short presentations from the participants and a product presentation from CIVOM.

Post lunch, the Technical Session 2, on "Developing and Managing Access to Library E-Resources in the Changing Context" began with Julia Gelfand, University of California, Irvine, USA addressing the participants on Intersections between scholarly communication and library collections. The question was "does one diffuse the other?" Then, short presentations from four participants and product presentations from two vendors ACS and IEEE formed a part of this session.

The Technical Session 3 had an Invited Talk by B. P. Prakash. He spoke about *Excellence in libraries*; Excellence must be the default defining characteristic of our libraries and Excellence is The Mantra for survival in libraries. Prakash expressed his views on Achieving Excellence in Library Services through Collaboration and User Engagement. After that, a recorded address on "Library as a partner in Learning & Research" by Dr. J. K. Vijaya kumar, Library Director at King Abdullah University of Science & Technology (KAUST), Saudi Arabia. Three participant presentations and two product presentations from Balani Infotech and Emerald and 1-minute presentations by the poster presentersfollowed the talk.

Day 2 began with an invited talk by Anand Byrappa, Librarian of the Indian Institute of Science, Bengaluru. Anand addressed the audience on "Innovation in Science & Technology Libraries" and kept his talk focused on the points of Innovation-Invention-Discovery, Global Scenarios in Innovation, 4 Innovation Lessons for LIS, Innovation Path for LIS, the Challenges for Innovation in LIS, and Recent Innovations with IISc Examples of Innovation. Neelam Bharti from Carnegie Mellon University, shared her experiences of Maker spaces in her library, reaching out to the community with the like projects, concentrating her talk on the changing landscape of academic libraries, pushing beyond the traditional boundaries. Lillian Maria Alvares, from University of Brasilia, Brazil, then spoke about "*Cartography in libraries in science & technology in Brazil*". She highlighted the application of spatial analysis for the construction of scientific & technological information policies, which is, the cognitive cartography. Shailesh Yagnik spoke about *Library Branding*, a case of the Knowledge Exchange & Information Center, MICA School of Ideas. The session came to a closure after two product presentations by IEEE and Elsevier Science.

The theme of the Technical Session 5 was "Trends in Scholarly Communication: Open Science, Open Access and Open Data". Colleen Campbell from Max Planck Digital Library, Italy, addressed the audience on "Leverage & Leadership". Margo Bargheer from Gottingen State & University Libraries, Germany spoke about open access, taken serious means more than free content. She explained how the university's history shapes our present, making sense of the "open", our principles in supporting open access and open science, our support for primary open access, support for OA publishing, publishing platforms, our support for parallel open access, teaching and consulting platforms. "Emergence of open education resources in science & technology disciplines" was a topic of talk delivered recorded by Jay Bhatt and Larry Milliken from Drexel University Libraries, USA. Thereafter four participants presented their work.

The theme for Technical Session 6 was "Designing, Redesigning & Managing Library Spaces". Opening this session, Erika Linke, from Carnegie Mellon University Libraries. USA. addressed the audience with her talk titled "Fit for purpose: renovating & refitting an engineering library". Then, Dr. Anil Kumar, Librarian, IIM Ahmedabad, walked the audience through his journey and experience of restoring and upgrading his library, the Vikram Sarabhai Library at IIM Ahmedabad. Following this talk, Giridhar Kunkur shared the case of his library at Birla Institute of Technology & Sciences, Pilani, India, how they re-engineered their library spaces for enabling and upscale learning and collaboration.

The last session for the day, the Technical Session 7 focused on Managing Research Impact Using Library Analytics & Metrics. Stacy Konkiel shared her views on Measuring Impact: traditional and emerging approaches. There were four short presentations from the participants on the theme of the session followed by a product presentation by Clarivate Analytics.

Two parallel hands-on workshops followed this session, towards the end of the day. One on *Virtual Reality in the Libraries: Creating new experiences*; and the other on *Research Data Management & FAIR data in the Dataverse infrastructure*.

The last and the final day of the 3-day Conference started with two more parallel workshops. One on *Makerspaces in Libraries: learning the why and how to support making in our libraries*; and the other on *Data & Visualisation in libraries*. We learnt about these services and practice of the same.

Developing Research Support Infrastructure & Services, the theme for Technical Session 8, in this session, there were two invited talks. Maria Jao Amante from Institulo Universitario de Lisboa, Lisbon, Portugal shared her views about Managing research information at an academic library. Pablo de Castro from University of Strathclyde, UK, then spoke on "Opening up the 'treasure chests': the use of research information management systems for open science implementation at research libraries". Two participants, then, presented their views on the topic.

Post-lunch session had an opening talk by Dr. Jagdish Arora, former Director, INFLIBNET Center, and Advisor, National Board of Accreditation, India. He spoke about "*Transformed Libraries: Role of librarians*", sharing his thoughts about the disruptive technologies in libraries, how they are affecting other walks of life, the rise of ebook culture, and amongst all these how to reposition the library and its resources.

Moving to the thematic Technical Session 9 on Innovative Practices in Science & Technology Libraries, we heard Aditi Gupta from University of Victoria, Canada, speak on "Cross-cultural information literacy research". Zac Painter from Stanford University Libraries, USA, shared his experiences of Innovative perspectives in information literacy instruction and how to manage diversity and social inclusion with two traditional examples and two alternative examples. Changing the Canadian academic librarianship landscape through diversity among librarians was the topic that Maha Kumaran shared her thoughts on. She is working in the University of Saskatchewan Libraries, Canada. Thereafter, Emir Suaiden from University of Brasilia,

Brazil, presented his study on Libraries & Social Inclusion: A comparative study between Brazil and India. Sandeep Kumar Pathak, Deputy Librarian, IISER Bhopal shared his views on the possibility and challenges of One Nation One Subscription.

The technical sessions that followed were organized parallely and had four invited talks, all virtually delivered. The Technical Session 9 on Information Technology Trends in Science & Technology Libraries had two invited talks. First one on "Open scholarly data & machine learning in 2018 – tools and trends" by Aaron Tay from Singapore Management University Libraries, Singapore. Second one was by Ece Turnator from MIT Libraries, USA, on Digital Humanities & Role of Libraries. The third one on the investigation of possible library applications of Block chain by Sandra Hirsch & Sue Alman from School of Information, San Jose State University, USA.

The parallel Technical Session 10 on *Increasing the Library Reach through Resource Sharing* had one invited talk by Cecilia Leite Oliveira from Brazillian Science & Technology Information Institute, Brazil. She spoke about Library network of the Brazilian research institutes: innovation & social development based on inter-library cooperation in scientific & technological environments.

Towards end of intensive and exhaustive technical sessions, a Panel Discussion, moderated by Dr. G. Mahesh, Senior Principal Scientist, CSIR-National Institute of Science Communication & Information Resources (NISCAIR), on the topic *Envisioning the future of Science & Technology Libraries through the Eyes of Users*. The panellists for the discussion were the Faculty Members from IIT Gandhinagar, namely, Kabeer Jasuja and Neeldhara Misra.

The conference ended with a *Feedback & Concluding Session* chaired by Professor Amit Prashant, Dean (Research & Development) at IIT Gandhinagar. The session had a welcome note by Dr. T. S. Kumbar, followed by reading of the *Conference Report* by Dr. Kshema Prakash, Deputy Librarian, IIT Jodhpur; address by Professor R. Sharan, IIT Gandhi nagar, and a *Valedictory Address* by Professor Amit Prashant.

Kshema Prakash Deputy Librarian Indian Institute of Technology Jodhpur