CLSTL 2019: 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. A national initiative to setup Incubation and Innovation Centers, Research Parks, Start-up support systems and other similar activities on academic campuses has been announced. Along with it, the increase in research output and its impact on society is gaining due attention. All these and many more developments have increased expectations from the libraries in their respective institutions. Considering these developments, Libraries in Institutes’ of Science, Technology and allied areas, have been striving to be relevant and play a meaningful role by realigning their mission with that of the parent institution. It is in this context, libraries in these institutions are redefining their collection development policies, resource sharing mechanisms, new services and reconfiguring their space, using the opportunities offered by newer technologies. They are also garnering support for scholarly communication related activities and at the same time are working continuously to up keep the skills of their personnel.

To understand and navigate successfully through these developments and collectively address some of the challenges, IIT Gandhinagar had organized an international conference on the theme “Changing Landscape of Science & Technology Libraries (CLSTL 2017)”. Having organized the first conference successfully and considering the feedback of the speakers and participants both from India and abroad, IIT Gandhinagar is organising the 2nd International Conference, “Changing Landscape of Science & Technology Libraries (CLSTL 2019)” to be held at Indian Institute of Technology Gandhinagar from 28th February – 2nd March 2019.

The major objectives of this conference were:
1. To bring together library professionals and researchers from India and abroad to exchange their innovative ideas, new initiatives, experiences, research work, best practices etc.;
2. To understand as to how the Science & Technology (S & T) libraries are transforming themselves in the midst of rapid technology developments;
3. To share and discuss different set of library services offered to support the academic and research work at the parent institutions;
4. To learn innovative management strategies, emerging tools & technologies used to create and deliver research support services; and
5. To discuss current issues, recent developments and their impact, and future challenges to prepare science and technology libraries for the future.
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 28 February at 9.30 am. Dr. T. S. Kumar, Librarian of IIT Gandhinagar introduced the event to the audience, its purpose along with a brief overview of this second edition of the event. It is a pleasant coincidence for Science & Technology Librarians to begin a brief time-cycle of 3-days to learn-relearn-unlearn the most coveted topics of the profession, on the auspicious National Science Day. Professor R. Sharan, Chairman, Library Committee of IIT Gandhinagar, then welcomed all the invitees and participants to the event, which is a continuing effort being made by the IIT Gandhinagar Library to bring together leading experts and professionals in the field of Library & Information Science, from India and abroad. One thing that he expressed, which has firmly landed in the hearts of all library professionals present, probably adding a pinch of pride is – he said he goes to library when he is sad, he goes to library when he is happy, he goes to library when is feeling ecstatic and also when feeling depressed. Such is the power of library. Such a powerful statement from a user must have ignited our librarian minds to plan to nurture such ardent library users in our respective places. Thereafter, Professor S. K. Jain, Director, IIT Gandhinagar, in his inaugural address tread back on his student days, how he developed a prized possession of books in his field. He then narrated 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 our profession keeping in view the developments that are occurring over time. It is time to reorient ourselves from inward looking librarian to an outside looking contributor. Dr. Kumbar, then, presenting a vote of thanks.

“Old friends, new ways: science & engineering libraries looking forward” - was the keynote delivered Erika Linke from Carnegie Mellon University Libraries, USA. She shared with us about Mr. Carnegie Mellon, an eminent industrialist and how post his retirement he worked on his interest in books, how the Carnegie Mellon university and library were established and were developed. She spoke 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 by provoking the thoughts like – How can our vision be translated into reality? How might new roles reshape the professional profile of science and technology librarians? Are there different skills sets we need from new librarians? As seasoned librarians, how/where do we get the skills for a different future? And, What if there is resistance from the administration or from the faculty to making change, to taking on new roles? Anyhow, one step at a time to accomplish the journey of a thousand miles.
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. Change is happening all around us, all the time; the pace of change is not slowing, and the demand (and the need) for us to participate actively in the changing environment is growing, she quipped. Rachel shared the University of Saskatchewan’s approach to change by citing some examples and the lessons learned from their response to change.

Lucille Elizabeth Webster from Durban University of Technology, South Africa, spoke about “The transformation of academic libraries in a post-apartheid South Africa”. She walked us through the history of South Africa from 1994, the year of Political change in South Africa – a country in transition, thru Enabling legislation, Higher Education Act 2001, National Plan for Higher Education, the Transformation of academic landscape in SA – 2002, to the National Development Plan 2030; and the implications for academic libraries. Having shared her views on various components of academic libraries undergoing the paradigm shift, we can only agree with Lucille when she says the emerging technology will continue to impact on Library strategies, Operations and services, Library spaces and places, Research and Digital scholarship, and Information management.

Then 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?” Setting relevancy to the theme, Julia spoke about Influences on intersections, the earlier inspiration, New myth vs reality, Summary of accounting distributions in ARL libraries, Cost of library operations, Post “Access vs Ownership”?, the value driven today’s collections, the Core Values of Librarianship, the evolution of Scholarly Communication and the dilemma that we many times are grappled with, i.e., the charged and openly accessible resources, assuming change amidst the Digital Services surge in libraries. She also shared her views on Changes in Scholarly Communication and Future Role for Libraries & Librarians.

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. Excellence can be achieved only through systematic & integrated approach; to achieve this, we must look beyond the conventional methods of metrics and analysis; Embrace appropriate technologies and modern management tools; Keep your library team energised by using the methods like counselling, training, rewards and upskilling, or whatever other methods as may be required to keep them charged. Rework on optimising the space usage; and do not skip to share good practices and success stories. These were the few tips Prakash elucidated on.

A recorded address on “Library as a partner in Learning & Research” by Dr. J. K. Vijayakumar, Library Director at King Abdullah University of Science & Technology (KAUST), Saudi Arabia. He shared his experiences at the University Library.

Three participant presentations and two product presentations from Balani Infotech and Emerald and 1-minute presentations by the poster presenters followed the talk.


Neelam Bharti from Carnegie Mellon University, shared her experiences of Makerspaces 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. Where we are all excited to take off with developing makerspaces in our libraries, her talk gave an interesting insight into the possible risk factors of setting up one and how to overcome such perils.

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.

Library Branding, a case of the Knowledge Exchange & Information Center, MICA School of Ideas. Despite the paradox “a rose by any other name would smell as sweet”, we cannot but agree with him that a picture is worth a thousand words. Such is the power of visuals. Visual merchandising is one of the tricks of the trade that we can employ to re-emphasise the importance of our spaces and services. 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 us on “Leverage & Leadership”. She spoke about the role of libraries in shaping the landscape of scholarly communication & open access to research. She spoke about the Max Planck Society for the Advancement of Science and Open Access 2020 Initiative. How paywall access does not meet the needs of our researchers, the reality of open access and its associated risks, and required compliances set forth by the funders.
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. She wrapped in with a few points saying push for more free content but make a change, with awareness building and wise market interventions, keep diversity in place and help all disciplines according to their needs, stay open about what we do and how and share our approaches and knowledge with others.

“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.

1. How do we motivate faculty members to use open educational resources in their courses to help students in saving costs?
2. What are some ways in which science and engineering librarians educate faculty members about these resources?
3. How do we inspire them in contributing towards their own OER resources? Open Textbooks? Developing awareness?

With these questions to be answered, they spoke about developing awareness about these open educational resources, including authoring of the open textbooks and implications for their use in teaching and learning, using examples from Drexel. All in all, the key takeaway points were:

1. Science and Technology Text Books are expensive!
2. Students need assistance to save cost for their education.
3. Libraries have a tremendous role to play in this mission.

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 us with her talk titled “Fit for purpose: renovating & refitting an engineering library”. She shared her experience of renovating her library and repurposing a few things wherever needed. Then, Dr. Anil Kumar, Librarian, IIM Ahmedabad, walked us 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 Konkkel shared her views on Measuring Impact: traditional and emerging approaches. She spoke about how research impacts us and how is it currently measured; measuring other aspects of research influence; how we understand impact, various data sources, and other ways to understand this influence.

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 Instituto Universitario de Lisboa, Lisbon, Portugal shared with us her views about Managing research information at an academic library. She took us through the Mission and Values that guide the Research Data Management in academic libraries; and the associated challenges. In her words, being embedded in the research process allows libraries and library professionals:

1. To engage in regional, national and international projects and initiatives
2. To act as a partner and not as a support service in learning, teaching and research activities
3. To continuously reinvent the Library
4. To align Library objectives with the organization strategic objectives.

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”. What is Research Information Management (RIM)? He shared his insights on

1. euroCRIS (Current Research Information Systems): an introduction
2. Joint OCLC/euroCRIS survey on RIM practices: some findings
3. The role of libraries (a case study from the University of Strathclyde):
4. CRIS-mediated workflows

Pablo also spoke about the International Network of Research Management Societies (INFORMS 2018) and India’s participation there in and the India Research Management Initiative (IRMI). So, in the area of Research Information Management, the message is loud and clear - *Things are moving in this area and there’s a role for research libraries to play in it!*

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 addressed us on “*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. He then shared his thoughts about the library consortia, ranking of institutions, involvement of library and librarians in research through research data management, research information management, and making deeper collaborations with the faculty.

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*”. It is a Canada-India feasibility study. She shared with us her exciting journey of making this interesting joint project with IIT Gandhinagar Library, a reality.
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. The facts and thoughts she shared are the partial results from a sabbatical project, whose background factors were to study:
1. Diversity and Leadership in Canadian Academic Libraries
2. President’s Social Sciences & Humanities Research Council (P-SSHRC) Award
3. Qualitative Survey using REDCap
4. Retrospective and Prospective - Best characteristic of the library job
   The results of the study direct towards the three psychological needs satisfaction (PNS):
   1. Autonomy: self-determination, volition, willingness (Innovation)
   2. Relatedness: Intimacy and genuine connection with others (Relationship and Resource Adequacy)
   3. Competence: Feeling effective and capable of achieving (seeking Mentorship, want Career Advancement)
   Without these there will be no engagement in work

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 parallel which had four invited talks in all, 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 Blockchain by Sandra Hirsh & 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 Brazilian 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, 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. They deliberated on this very interesting and rather important topic only to share their glee that the students of IIT Gandhinagar have this library culture very well woven into the fabric of their curriculum and library becomes a natural part of their life. One major reason for this habit is the way their library and librarian take proactive steps in turning their library to most lovable
hang-around spot, not merely to spend their time but to gather knowledge. What is an interesting point to muse for us is the panellists reminiscence their early memories of the libraries they've experienced. Talking of the pace of change in libraries, though one could feel it was a bit fast or slow, the pace has to render sustainability. And, this is based on several external and internal factors to be considered while affecting change. For obvious reasons, certainly, a humanistic touch to higher cognitive functions in library, the panellists feel, should remain unautomated. Supporting the open access of scholarly publications, the panellists opined that in spite of several different challenges posed by predatory publishing or soaring Article Processing Charges, the crusade for making scholarly publications openly accessible to one and all must continue.

So, this brings us to the end of this thought provoking, idea sparking, and gripping professional discussions and idea exchanges.

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 Gandhinagar, and a Valedictory Address by Professor Amit Prashant.

Dr. Kshema Prakash
Deputy Librarian
Indian Institute of Technology Jodhpur