INFLIBNET

Article

Semantic-based Researcher Profile Management System: A Case Study on VIVO

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VIDWAN
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e-PG Pathshala
http://epgp.inflibnet.ac.in/

INFLIBNET's Institutional Repository
http://ir.inflibnet.ac.in/

N-LIST (E-resources for College)
http://nilst.inflibnet.ac.in/

Open Journal Access System (OJAS)
http://www.inflibnet.ac.in/ojs/

Integrated e-content Portal
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Contents

From Director's Desk

* Wish you all a very happy, healthy and prosperous 2016 *

It is indeed a matter of pride and privilege that the task of operating and executing the e-ShodhSindhu: Consortium for Higher Education e-Resources (CHEERs), formed by merging three existing national-level consortia namely, UGC-Infonet Digital Library Consortium, INDEST-AICTE Consortium and N-LIST is assigned to the INFLIBNET Centre. The Centre has started the process of negotiating rates of subscription for all existing e-resources subscribed by the three consortia for the member institutions of unified consortium. It is indeed a herculean task to negotiate rates of subscription for more than 42 e-resources catering to the diverse needs of various categories of institutions, i.e. colleges, universities and centrally-funded technical institutions. Yet another prestigious project awarded to the INFLIBNET Centre is development of a Web portal for the National Institutional Ranking Framework (NIRF) for ranking institutions of higher education. The portal is being designed to capture data required for ranking of institutions desirous of ranking themselves in six major categories namely, Engineering, Pharmacy, Management, Architecture, Colleges and Universities. The process of developing Web portal for data capturing as well as for ranking of institutions in the above-mentioned categories have already been started.

Imparting training to librarians and computer professionals working in universities and colleges through Workshops and Conferences are one of the important mandates assigned to the INFLIBNET Centre. During the quarter under report, 15 training programmes, workshops and a International Symposium Namely, ETD 2015 were organized for the benefit of library and computer professionals.

The Centre collaborated with Jawaharlal Nehru University and National Digital Library of Theses and Dissertations (NDLTD) for organizing ETD India 2015; the first International Symposium on Electronic Theses and Dissertations in India. The Symposium was organized between 4th & 6th November, 2015 at Convention Centre, Jawaharlal Nehru University, New Delhi on the theme on "Evolving Genre of ETDs for Knowledge Discovery". The main theme of the Symposium was further divided into four sub-themes, i.e. Managing ETDs, ETDs for Research & Development, Legal & Ethical Issues for ETDs and Tools & Technologies for ETDs. One of the sessions during the Symposium was devoted to Shodhganga and major activities and services by the INFLIBNET Centre related to ETDs.

The INFLIBNET Centre is privileged to work with JSTOR for organizing the JSTOR India Users Forum for six consecutive years. During the quarter under report, two JSTOR India Users Forum were organized for one day each at

the North-Eastern Hill University and University of Kerala, Thiruvananthapuram on 6th and 9th October, 2015 respectively. Both the Forum were well-attended and highly appreciated for its content and for the presentations made by the experts.

The Centre subscribes to URKUND, a plagiarism detection software, for more than 140 eligible universities who have signed MoU with INFLIBNET Centre. Four training programmes were organized during the quarter under report, one each at Pondicherry University, Puducherry, University of Madras, Chennai, University of Calicut, Calicut and Bharatidasan University, Tiruchirappalli to impart training on use of Urkund for its effective and efficient use for detection on plagiarized portion of research work submitted for scrutiny.

Three specialized Training Programmes and National Workshops were organized on i) VIVO: Semantic-based Profile Management and Discovery System (two days); ii) Advanced Training Programme on Shodhganga (two days); and iii) National Workshops on Capacity Building programme of the National Mission on Libraries for Public Library Personnel (five days). All the programmes were well-attended and appreciated greatly by those who benefited from them.

The task of developing e-content under e-PG-Pathshala continued unabated and meetings / workshops were organized for Women Studies/Gender Studies, Food Technology and Library and Information Science at various places in India.

We are pleased to welcome Prof. Sachidananda Mohanty, Vice-Chancellor of Central University of Orissa, Koraput as a member of Governing Council, INFLIBNET Centre for a period of three years beginning from December 2015 onwards. I am sure the Centre would benefit to large extent from his suggestions during the meetings of the Governing Council.

This issue of the Newsletter carries a feature article on "VIVO: Semantic-based Profile Management System" by Mr. P Kannan, Scientist C (LS). The article elaborates on VIVO, an open source semantic-based application and its important components consisting of ontology editor, data ingestion tools, and content management system. This issue of the Newsletter also includes a detailed write-up on "PHP My Library: an Open Source Library Management System" under open source software series of the Newsletter. I am sure, readers would find these articles interesting.

(Jagdish Arora)

Training Programme on SOUL 2.0, INFLIBNET Centre, Gandhinagar

Training Programme on SOUL 2.0, INFLIBNET Centre, Gandhinagar

The INFLIBNET Centre regularly conducts SOUL 2.0 Training Programmes to impart Training on Installation and Operation of SOUL Software for its users. The following two training programmes were organized at the INFLIBNET Centre, Gandhinagar during this quarter. These Programmes were coordinated by Mr. H G Hosamani, Scientist C (LS), INFLIBNET Centre. 31 participants attended these two training programmes as per the details given below:

Sr. No.	Name of the Programme	Date of the Programme	No. of Participants
1	122nd Training Programme on SOUL 2.0	12th -17th October, 2015	09
2	123rd Training Programme on SOUL 2.0	07th -12th December, 2015	22

Participants of 122nd Training Programme on SOUL 2.0 with the Director and Technical Staff of the INFLIBNET Centre

Participants of 123rd Training Programme on SOUL 2.0 with the Director and Technical Staff of the INFLIBNET Centre

User Awareness Programmes on Access to E-resources under UGC-Infonet Digital Library Consortium

One-day User Awareness Programme on Access to E-resources under UGC-Infonet Digital Library Consortium, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, 9th October, 2015

One-day User Awareness Programme on Access to E-resources under UGC-Infonet Digital Library Consortium was organised by Dr. Babasaheb Ambedkar Marathwada University Library in collaboration with INFLIBNET Centre, Gandhinagar at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad on 9th October 2015 for the benefit of the researchers, students, faculty and librarians of the affiliated colleges and nearby institutes. Dr. D. K. Veer, University Librarian and Coordinator of the programme welcomed guests and participants. Prof B. A. Chopade, Hon'ble Vice-Chancellor, inaugurated the programme. In his inaugural speech, he highlighted the significance of access to scholarly publications and role of libraries in enhancing the quality of research. He also appreciated and lauded the research productivity of the university departments and also emphasized the need of library professionals in updating themselves with concepts and tools of e-resource management and digital library. Mr. Ashok Kumar Rai, Scientist D (CS), INFLIBNET Centre delivered Keynote address. He stressed upon the role of INFLIBNET Centre in networking and sharing the knowledge amongst the universities all over the country. He also mentioned about various initiatives of the INFLIBNET such as Library Automation, Union Catalogue of books, theses, serials, manpower training and capacity development programmes for the university libraries, e-PG Pathshala, Vidwan Database, etc. He also elaborated on UGC-Infonet Digital Library Consortium and NLIST programmme.

Prof. M. D. Shirsath, Registrar, Chief Guest highlighted the need of extensive use of e-resources i.e. e-journals, e-books and also appreciated the work of INFLIBNET

Participants of User Awareness Programme on Access to E-resources under UGC-Infonet Digital Library Consortium at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

Centre. Representatives of Thomson Reuters, Oxford University Press, Cambridge University Press, Wiley India made presentation on their respective products. Dr. D. K. Veer, University Librarian extended a warm vote of thanks at the end of the programme. More than 500 participants including faculty members and research scholars participated in the programme and interacted with INFLIBNET Centre's resource person and representatives of publishers and content service providers.

User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool

One-day User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool, Pondicherry University, Puducherry, 28ᵗʰ October, 2015

Around 540 participants attended the programme. Certificates of participation were distributed to the participants at the end of the programme.

Mr. Manoj Kumar K., Scientist D (CS), INFLIBNET Centre delivered a lecture on Shodhganga and URKUND: a Plagiarism Detection Tool at Pondicherry University, Puducherry

One-day User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool was organised by Ananda Rangapillai Library, Pondicherry University in collaboration with INFLIBNET Centre at J. N. Auditorium, Pondicherry University, Puducherry on 28ᵗʰ October, 2015. Dr. R. Samyuktha, University Librarian and Coordinator of the programme welcomed the guests and participants. Dr. Anisa B. Khan, Vice-Chancellor (I/C) inaugurated the programme. Mr. Manoj Kumar K., Scientist D(CS), INFLIBNET Centre gave a presentation and live demonstration on Shodhganga and URKUND. The session was highly interactive with a number of questions from the audience and relevant response from the speaker. Mr. Olirvel Z., Computer /Information Scientist extended a warm vote of thanks.

One-day User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool, University of Madras, Chennai, 29ᵗʰ October, 2015

One-day User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool was organised by University of Madras in collaboration with INFLIBNET Centre at University of Madras, Chennai on 29ᵗʰ October, 2015. Dr. K. Kaliyaperumal, University Librarian (I/C) and Coordinator of the programme welcomed the guests and participants. Prof. R. Thandavan, Hon'ble Vice-Chancellor inaugurated the programme in presence of Dr. P. David Jawahar, Registrar, Dr. S. Thirumagan, Controller of the Examination, Prof. R. Sahadevan, Director & Head, Department of Mathematics and Prof. A. Amudhavalli, Member Syndicate, University of Madras and Mr. Manoj Kumar K., Scientist D (CS), INFLIBNET Centre. Mr. Manoj Kumar spoke about the recent trends in the area of the research. He explained different types of plagiarisms and their legal consequences. He gave a live demonstration on URKUND: a plagiarism detection tool. He also explained the possible ways to avoid plagiarism while writing a research document. More

Prof. R. Thandavan, Vice-Chancellor, Dr. P. David Jawahar, Registrar, Dr. S. Thirumagan, Controller of the Examination, Prof. R. Sahadevan, Director & Head, Department of Mathematics, Prof. A. Amudhavalli, Member Syndicate, Dr. K. Kaliyaperumal, University Librarian (I/C),University of Madras and Mr. Manoj Kumar K., Scientist D (CS), INFLIBNET Centre on the dais during User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool at University of Madras, Chennai

than 320 participants including faculty, research supervisors of the university and its affiliated institutions and research scholars attended the programme. Dr. K. Kaliyaperumal, University Librarian (I/C) extended a warm vote of thanks at the end of the programme. Certificates of participation were distributed to the participants at the end of the programme.

One-day User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool, University of Calicut, Calicut, 30th October 2015

One-day User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool was organised by University of Calicut in collaboration with INFLIBNET Centre at EMS Seminar Complex, University of Calicut, Calicut on 30th October 2015. Dr. T.A. Abdul Azeez, University Librarian-In-Charge and Coordinator of the programme welcomed the guests and participants.

Dr. Abdul Majeed T. A., Registrar, University of Calicut presided over the function. Dr. M. K. Abdul Khader, Hon'ble Vice-Chancellor inaugurated the programme in presence of Dr. T. M. Vasudevan, Dean, Faculty of Humanities and Dr. Santhosh Nampy, Director of Research, University of Calicut and Mr. Manoj Kumar K.

Mr. Manoj Kumar K., Scientist D (CS), INFLIBNET Centre, Dr. M. K. Abdul Khader, Hon'ble Vice-Chancellor, Dr. Abdul Majeed T. A., Registrar, Dr. T. M. Vasudevan, Dean, Faculty of Humanities, Dr. Santhosh Nampy, Director of Research, Dr. T. A. Abdul Azeez, University Librarian-In-Charge, University of Calicut on the dais during User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool at University of Calicut, Calicut

Scientist D (CS), INFLIBNET Centre. Mr. Manoj Kumar gave a presentation and live demonstration on Shodhganga and URKUND. About 290 participants including faculty members, research scholars, students and library professionals attended the programme. Dr. Muhammed Salih T. K., Information Scientist, extended a warm vote of thanks at the end of the programme. Certificates of participation were distributed to the participants at the end of the programme.

One-day User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool, Bharathidasan University, Tiruchirappalli, 6th November 2015

Participants of User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool at Bharathidasan University, Tiruchirappalli

One-day User Awareness Programme on Shodhganga and URKUND: a Plagiarism Detection Tool was organised by Bharathidasan University in collaboration with INFLIBNET Centre at Department of Library & Information Science, Bharathidasan University, Tiruchirappalli on 6th November, 2015. Dr. S. Srinivasa Ragavan, HOD, DLIS and Coordinator of the programme welcomed guests and participants. Dr. V. M. Muthukumar, Hon'ble Vice-Chancellor, Bharathidasan University inaugurated the programme. In his inaugural address, he stated that Bharathidasan University is one of the prominent member and contributor to the Tamil Nadu University Library Network and University Library has always been proactive in acquiring the newer facilities and resources for the benefit of faculty and students. He also emphasized that it is imperative for faculty and researcher to make of a regular practice to keep themselves updated with latest knowledge and skills. He also stated that research should be relevant and useful to the society. Further, he added that the participants who have taken part in the Workshop should share their knowledge on Electronic Thesis and Dissertation databases with their respective institutions and prompt them to join this initiative.

Mr. Kannan, Scientist C (LS), INFLIBNET Centre delivered keynote address and made a presentation on Shodhganga and URKUND. He discussed various features and benefits of Shodhganga repository and emphasized the need of research for submitting theses of the university into the repository. He also explained about URKUND plagiarism detection software and its benefits for the academic community to improve the quality of research output. He also demonstrated various services and activities of INFLIBNET Centre. Dr. B. Jeyapragash, Assistant Professor, DLIS extended a warm vote of thanks. Around 220 participants from university departments, affiliated colleges and institutions across the state and neighbouring states attended the programme. Certificates of participation were distributed to the participants at the end of the programme.

Specialized Training Programmes and National Workshops

Three-day National Workshop on VIVO Profile Management System and Discovery, INFLIBNET Centre, Gandhinagar, 26th-28th November, 2015

Three-day National Workshop on VIVO Profile Management System and Discovery was organized at INFLIBNET Centre, Gandhinagar from 26th to 28th November, 2015. The Workshop covered introduction to website design and development, overview of semantic web and its application, installation and configuration of VIVO in Windows, content creation on people and organizations, import publications from various external sources, backup and restore, etc. Mr. Kannan P, Scientist C (LS) welcomed the participants. Mr. Manoj Kumar K, Scientist D (CS) inaugurated the Workshop. In his inaugural address, he stated the benefit of profile management system and its impact on the academic and R&D organization. Mr. H G Hosamani, Scientist C (LS) extended a warm vote of thanks at the end of the inaugural session. Presentation and live demonstration was given during the theoretical sessions on the following concepts of VIVO Profile Management, System and Discovery:

Topics	Name of the Experts (INFLIBNET Centre)
INFLIBNET Activities and Services	Mr. Yatrik Patel, Scientist D (CS)
Introduction and Overview of Semantic Web Technology	Mr. Manoj Kumar K., Scientist C (CS)
VIVO Overview	Mr. Kannan P., Scientist C (LS)
Level 1: VIVO Installation and Basic Configuration	Mr. Raja V., Scientist B (CS)
Academic Identity Overview	Mr. Yatrik Patel, Scientist D (CS)
Level 2: Understanding of Admin Features	Mr. Kannan P., Scientist C (LS)
Level 2: Content Creation for the People and Organization	Mr. Gaurav Prakash, Scientist B (CS)
Level 3: Publications import including Co-Author Network and Map of Science.	Mr. Miteshkumar Pandya, Scientist B (LS)
Level 3: Backup & Restore for Existing VIVO environment	Mr. Raja V., Scientist B (CS)

Mrs. Hetal Oza, Sr. Project Officer (CS), Mr. Akshay Kumar Choudhary, Project Assistant (CS), Ms. Dipika Makwana and Ms. Bhakruti Rastrapal, Project Assistant (LS) from INFLIBNET Centre were resource persons in practical session. 10 participants attended the workshop including librarian, information scientists and IT professionals from academic and research institutes.

Participants of National Workshop on VIVO Profile Management System and Discovery along with the Technical Staff of the INFLIBNET Centre

Five-day National Workshop on Capacity Building Programme of the National Mission on Libraries for Public Library Personnel, INFLIBNET Centre, Gandhinagar, 14th-18th December, 2015

Five-day National Workshop on Capacity Building Programme of the National Mission on Libraries for Public Library Personnel was organized at INFLIBNET Centre, Gandhinagar from 14th to 18th December, 2015. Mr. H G Hosamani, Scientist C (LS), Mr. Kannan P, Scientist C (LS) and Mr. Miteshkumar Pandya, Scientist B (LS), INFLIBNET Centre coordinated the programme. Mr. Kannan P, Scientist C (LS) welcomed the participants. Dr. Arun Chakraborty, Mission Director, NML & Director General, RRLF inaugurated the programme. Mr. H G Hosamani, Scientist C (LS) extended a warm vote of thanks. The National Workshop covered theoretical and practical sessions on the following concepts related to Capacity Building Programme of National Mission on Libraries for Public Library Personnel:

Participants of National Workshop on Capacity Building Programme of National Mission on Libraries for Public Library Personnel along with Dr. Arun Kumar Chakarborty, Director General, RRRLF, Mission Director, NML, Dr. Jagdish Arora, Director and Technical Staff of the INFLIBNET Centre

Topics	Name of the Experts
National Mission on Libraries : An Overview	Dr. Arun Kumar Chakarborty, Director General, RRRLF, Mission Director, NML
Open Source Tools for Libraries	Mr. Manoj Kumar K, Scientist D (CS), INFLIBNET Centre
Library Automation: Overview	Dr. Jagdish Arora, Director, INFLIBNET Centre
Library Automation : (Acquisition-Koha)	Mr. Miteshkumar Pandya, Scientist B (LS), INFLIBNET Centre
Multilingual information representation through Unicode for Indic Scripts	Mr. Miteshkumar Pandya , Scientist B (LS), INFLIBNET Centre
Understanding Modern Library Standards MARC and Dublin Core	Mr. Abhishek Kumar Scientist C (CS), INFLIBNET Centre
Library Automation (Cataloguing and OPAC-Koha)	Mr. H G Hosamani, Scientist C (LS), INFLIBNET Centre
Changing Roles of Public Libraries and Community Based Information Services	Dr. Parthasarathi Mukhopadhyay, Head, Kalyani University
Library Automation (Koha-Circulation)	Mr. H G Hosamani, Scientist C (LS), INFLIBNET Centre
Emerging Trends for Libraries in Context of Public Libraries	Dr. Usha Munshi, IIPA, Delhi
Introduction to e-resources and Discovery Tools	Mr. Dinesh Pradhan, Scientist B (LS), INFLIBNET Centre
Standards and Formats for Digitization	Mr. Manoj Kumar K., Scientist D (CS), INFLIBNET Centre
Digitization Process and Hands On Practice	Mr. Pallab Pradhan, Scientist B (LS), INFLIBNET Centre
Effective Communication Skill	Dr. T S Kumbar, Librarian, IIT Gandhinagar
Library Services for Specially abled persons	Prof. Muttayya Koganuramath, Head, SLIS, Central University of Gujarat, Gandhinagar
Use of Social Media and other Web 2.0 tools for Libraries	Ms. Kruti Trivedi, Scientist B (LS), INFLIBNET Centre

Two-day Advanced Training Programme on Shodhganga, INFLIBNET Centre, Gandhinagar, 21ˢᵗ-22ⁿᵈ December, 2015.

Two-day Advanced Training Programme on Shodhganga was organised at INFLIBNET Centre, Gandhinagar from 21ˢᵗ to 22ⁿᵈ December 2015. Mr. Manoj Kumar K, Scientist D (CS) coordinated the Workshop and welcomed the participants and gave an overview of the two days training programme. Dr. Jagdish Arora, Director inaugurated the programme. Mr. H G Hosamani, Scientist C (LS) extended a warm vote of thanks. The Advanced Training Programme covered theoretical and practical sessions on the following concepts related to Shodhganga.

Topics	Name of the Expert
Institutional Repositories & IPR Issues	Dr. T S Kumbar, Librarian, IIT, Gandhinagar
Shodhganga and Deterring Plagiarism in Research Outputs in Indian Universities	Mr. Manoj Kumar K., Scientist D(CS), INFLIBNET Centre
Standards and Formats for Digitisation & Academic Identity an Overview	Mr. Kannan P., Scientist C (LS), INFLIBNET Centre
Introduction to DSpace and Building IR	Mr. Swapnil Patel, Scientist B (CS), INFLIBNET Centre
Anti-Plagiarism Tools and Services: Hands on for URKUND	Mrs. Suboohi Siddiqui, STO (LS), INFLIBNET Centre

Mrs. Archita Muchhadia and Mr. Kuldeep Mateida, Project Officers (LS), Mr. Rahul Mehta, Project Assistant (CS), Mr. Monika Shroff and Ms. Neha Jain, Project Assistant (LS) from INFLIBNET Centre were resource persons for practical sessions. 15 Participants from various academic and research institutes attended the Workshop. Certificates of participation were distributed to the participants at the end of the programme.

Participants of Advanced Training Programme on Shodhganga along with Director and Technical Staff of the INFLIBNET Centre

E-Content Development / Meeting /Workshop under e-PG Pathshala

Meeting for the Stake-holders of the papers 'Women's Studies/Gender Studies' and 'Food Technology', BHU Guest Room, Varanasi, 10th-11th October, 2015

The INFLIBNET Centre organised a meeting for the stake-holders of the papers 'Women's Studies/Gender Studies' and 'Food Technology' who belongs from Varanasi on 10th to 11th October, 2015 at BHU Guest Room, Varanasi. Mr. Abhishek Kumar, Scientist C (CS), INFLIBNET Centre attended the meeting to demonstrate / guide the content writers about creation of self-learning module. Representatives of the Nexzenpro Media Technologies, facilitated their studio to record the modules being developed under 'Women's Studies/Gender Studies' and 'Food Technology'.

Workshop for Video recording of e-Content Development for the paper 'Knowledge Organisation and Processing: Cataloguing, Digital Library and Special and Research Library', Bharathidasan University, Tiruchirapalli, 30th November-2nd December, 2015

The INFLIBNET Centre organised Workshop for video recording of e-content development for the paper 'Knowledge Organisation and Processing: Cataloguing, Digital Library and Special and Research Library' at Bharathidasan University, Tiruchirapalli from 30th November to 2nd December, 2015. The programme was the part of e-content development activities of e-PG Pathshala Project funded by the MHRD under its National Mission on Education through ICT (NME-ICT). The purpose of the programme was to review the modules and voice recording of self-learn script by the content writers. Seven participants were invited for the video recording and self-learn script was recorded for the respective modules for incorporating them into power point presentation. Mr. Kannan P, Scientist C (LS) coordinated the video recording as the INFLIBNET Centre representative with the support of Multimedia Team, Department of Educational Technology, Bharathidasan University, Tiruchirapalli.

ETD INDIA 2015 : 18th International Symposium on Electronic Theses and Dissertations

ETD India 2015: 18th International Symposium on Electronic Theses and Dissertations was organized by Central Library, Jawaharlal Nehru University in collaboration with NDLTD, USA and INFLIBNET Centre, Gandhinagar from 4th to 6th November, 2015 at Convention Centre, Jawaharlal Nehru University, New Delhi on the theme "Evolving Genre of ETDs for Knowledge Discovery". The main theme of the Symposium was divided into four sub-themes i.e. Managing ETDs, ETDs for Research & Development, Legal & Ethical Issues for ETDs and Tools & Technologies for ETDs.

Dr. Ramesh C. Gaur, Chair, ETD India 2015 welcomed the dignitaries and guests and introduced the journey of the ETD and theme of the symposium. He informed that there are around 400 national and international participants from different countries. Dr. Jagdish Arora, Director, INFLIBNET elaborated on Shodhganga and different other initiatives of the Centre with regard to ETD including provision made for providing access to plagiarism detection software. Prof. Prasenjit Sen, Rector II, JNU talked about the initiatives of JNU with regard to theme. Mr. Al-Amin Yusuph, Adviser (Communication and Information) for South Asia, UNESCO discussed about the UNESCO's efforts in this regard. Mr. Pawan Agarwal, Joint Secretary, Government of India, one of the pioneers of the ETD movement in India, discussed about early efforts of the UGC. Prof. Gail M McMillan, Director, Scholarly Communication and Professor, University Libraries, Virginia Tech, USA delivered keynote address. Prof. Edward A Fox, Chairman & Executive Director, NDLTD delivered inspiring and motivating Video message. Dr. Parveen Babbar, Deputy Librarian, JNU extended a warm vote of thanks.

Dr. Ramesh C. Gaur, University Librarian and Chair, ETD India 2015, Prof. Prasenjit Sen, Rector-II, JNU, Dr. Jagdish Arora, Director, INFLIBNET Centre, Mr. Pawan Agarwal, Joint Secretary, Government of India, Mr. Al-Amin Yusuph, Adviser (Communication and Information) for South Asia, UNESCO, Prof. Gail M McMillan, Director, Scholarly Communication and Professor, University Libraries, Virginia Tech, USA Releaseing Conference proceedings and CD during the Symposium

Mr. Manoj Kumar K., Scientist D (CS), INFLIBNET Centre Presented the Special Session on Shodhganga during the Symposium

The Symposium was divided theme-wise into three Sections i.e. A, B & C and were conducted at three different venues simultaneously i.e. Session A in the Lecture Hall –I, Session B in the Auditorium Hall and Session C in the Lecture Hall-II. There were 6 pre-conference workshops namely, i) ETD for Beginners; ii) Lifecycle Management Best Practices in ETD; iii) Trends & Opportunities in Retrospective Digitization and Publishing of Theses and Dissertations; iv) Exploring the Terrain of Qualitative Research; v) ORCID (Open Researcher & Contributor ID); and vi) Panel Discussion on Impact of ORCID for the scholarly infrastructure in India and Digital archiving of ETDs using FEDORA. The conference was also having two plenary sessions, 18 theme papers, 60 presentations in 15 different technical sessions followed by 3 panel discussions and a valedictory function.

There were 3 special sessions on different topics such as National Digital Library of India, Shodhganga and ETDs in South Asian Universities etc. A special session was devote for disabled persons on reaching the unreached through ETDs. Mr. Manoj Kumar presented the special session on Shodhganga. He discussed the social, academic, financial and technical aspects of Shodhganga. He further elaborated on submission interface developed by INFLIBNET for submission of thesis. He also highlighted the evolution, policy, work flow, standards and format, implementation strategy adopted by INFLIBNET Centre to enhance Shodhganga as a national portal along with incentives given to universities for digitisation of the backlist of theses, funds for setting-up of ETD Lab and access to a plagiarism detection software. Shodhganga session had other eminent speakers such as Dr. Samyuktha Ravi, Pondicherry University, Dr. Laila Abraham, M. G. University and Dr. Devika, Shankara University. The session was coordinated by Dr. Nabi Hasan, Deputy Librarian, IIT Delhi and chaired by Mr. Hussein Suleman, Uni. of Cape Town, South Africa. The presentation followed by success story of ETD of Pondicherry University presented by Dr. Samyuktha Ravi. She mentioned about issues and challenges faced initially and strategies adopted to them. She emphasized that all the universities should come forward and contribute to ETD@INFLIBNET Centre. Dr. Laila Abraham presented the current status of ETD of her university. Dr. S. S. Devika, in her talk mentioned about lack of awareness, she initially faced in digitization work and the support she got from INFLIBNET Centre. The session ended with a question answer session.

The valedictory session was presided over by Dr. Ramesh C Gaur, Chair, ETD 2015. The session started with the special acknowledgement to the Chief Guests Prof. P.B. Mangla, Former Dean and Head of Department, University of Delhi, Dr. R. K. Chadha, Former Additional Secretary, Parliament of India, Dr. Jagdish Arora, Director, INFLIBNET Centre, Dr. Joan Lippnicoat, NDLTD, USA and Dr. Nabi Hasan, IIT Delhi. More than 400 librarians, information officers, communication officers, ETD experts, media professionals and other invitees from India and other countries including over 50 specialists from outside

Workshop on "Big and Open Data-Evolving Data Science Standards & Citation Attribution Practices", Indian National Science Academy, New Delhi, 5th-6th November, 2015

Workshop on "Big and Open Data-Evolving Data Science Standards & Citation Attribution Practices" organised by Indian Institute of Public Administration in collaboration with International Council for Science-Committee on Data for Science & Technology, Indian National Science Academy, Department of Science & Technology, Department of Electronics and Information Technology, MCIT, Department of Biotechnology, Ministry of Earth Sciences and ICSSR, DRDO, NIC & INFLIBNET Centre as knowledge partners at the Indian National Science Academy, New Delhi from 5th to 6th November, 2015. The aim of the Workshop was to take a stock of what is being done in the data citation area, the existing culture of data sharing and citation practices along with needs and interests of the respective disciplinary areas and domains. The Workshop was divided into two sub-themes i.e. Data science, technology, research and applications: developments in the Indian context and Data management, sharing and services: current & future role of data stakeholders.

Dr. Jagdish Arora, Director, INFLIBNET Centre made a presentation on ICSSR Data Service: Social Science Data Repository during the Workshop. Dr. Usha Mujoo Munshi, Librarian, IIPA coordinated the Workshop. Mr. Pallab Pradhan and Mr. Miteshkumar Pandya, Scientists B (LS), INFLIBNET Centre were rapporteurs for several sessions during the Workshop.

JSTOR India User's Forum

JSTOR India User's Forum, North Eastern Hill University, Shillong, 6th October 2015

The JSTOR, in collaboration with INFLIBNET Centre, Gandhinagar and North-Eastern Hill University, Shillong organized JSTOR India User's Forum at Multi-Use Convention Hall, North-Eastern Hill University on 6th October 2015. The forum is a collaborative effort to enhance the awareness and optimal use of digital content provided by JSTOR across Indian universities which are members of the UGC-INFONET Digital Library Consortium. Dr. F. R. Sumer, Acting University Librarian welcomed the invitees and participants. Prof. B. Mishra, Dean, School of Economics, Management and Information Sciences, NEHU inaugurated the forum. In his inaugural address, Prof. Mishra expressed his deep appreciation for the efforts jointly put in by JSTOR and INFLIBNET Centre in bringing the event to North-Eastern Hill University, and added that it was indeed a privilege for the University and the participants to have such eminent resource persons in the field of library and information science of a single platform.

Mr. John Lenahan, Associate Vice President IPSP-JSTOR|Portico presented "JSTOR Future Direction" and "Usage Analysis and Impact on Collection Development". Dr. Jagdish Arora, Director, INFLIBNET Centre made presentation on "Ranking of Indian Universities: An INFLIBNET Initiative"and Dr. R. K Chadha, Former Additional Secretary, Parliament Library, presented "Changing Landscape of Library and Information Services". The presentations not only provided the audience with ample opportunities to know more about the e-resources provided by JSTOR but they also highlighted ways in which usage, analysis and discovery services would impact library resources and acquisition decisions. The followed with lively and stimulating interactions between the participants and the speakers.

Participants of JSTOR India User's Forum at North Eastern Hill University, Shillong

The highlight of the forum was the handing over of perpetual user access licenses of selected JSTOR e-books collection by Mr. John Lenahan, Associate Vice President IPSP-JSTOR | Portico to Prof. B. Mishra, Dean, School of Economics, Management and Information Science, NEHU as a token of appreciation to North-Eastern Hill University for hosting the JSTOR Forum. More than 270 participants including students, research scholars and faculty of the University, librarians from colleges and other institutions located in Shillong and from other parts of the region. Dr. Lalhmachhuana, Documentation Officer, NEHU Central Library extended a warm vote of thanks on behalf of the host institution and the joint organizers at the end of the programme.

JSTOR India User's Forum, University of Kerala, Trivandrum, 9th October 2015

The JSTOR, in collaboration with INFLIBNET Centre, Gandhinagar and University of Kerala, Trivandrum organized JSTOR India User's Forum at the University Senate Chamber, University of Kerala on 9th October 2015. Dr. H. Majeed, Assistant Librarian, University of Kerala coordinated the forum. Mr. A. Hamsa, Deputy Librarian-In-Charge, University of Kerala welcomed invitees and participants. Dr. N. Veeramanikandan, Hon'ble Pro-Vice Chancellor, University of Kerala inaugurated the programme. Dr. Jagdish Arora, Director INFLIBNET Centre delivered presidential address. Dr. Varghese P.O., Member Syndicate, University of Kerala expressed his felicitation.

Mr. John Lenahan, Associate Vice President, JSTOR, discussed the "Future Direction of JSTOR" and also spoke on the usage analysis and impact on collection development. Mr. P. Jayarajan, Library Advisor, Thunchath Ezhuthachan Malayalam University shared his views on the "Digital Content: A Way to Reach the Unreached". Dr. Jagdish Arora, Director, INFLIBNET Centre focused on the "Ranking of Indian Universities: An INFLIBNET Initiative". Dr. P. K. Suresh Kumar, Assistant Librarian, University of Kerala extended a warm vote of thanks. Mr. John Lenahan, the Vice President of JSTOR handed over the agreement of free e-books contributed by JSTOR to Dr. Mohammed Basheer, the Registrar, University of Kerala. More than 150 participants including students, research scholars and faculty of the university, librarians from colleges and other institutions located in Trivandrum.

Project on Developing Web portal for National Institutional Ranking Framework (NIRF)

The INFLIBNET Centre was given a project on developing a web portal for "National Institutional Ranking Framework (NIRF)" awarded by National Board of Accreditation (NBA). NIRF was approved by the MHRD and launched by Honourable Minister of Human Resource Development on 29th September, 2015. This framework outlines a methodology to rank institutions across the country. The methodology draws from the overall recommendations broad understanding arrived by a Core Committee set up by MHRD, to identify the broad cover "Teaching, Learning and Resources," "Research and Professional Practices". The portal would provide the facility to view the ranking result with these parameters.

Ranking methods have been worked out for 6 categories of institutions i.e. Engineering, Management, Pharmacy, Architecture, Universities and Colleges. Although the Ranking Frameworks are similar, the exact methodologies are domain specific. The Centre is developing a web application for institutions for capturing required data online. Besides, an offline data submission utility is also being developed to capture data offline to address the issue related to poor Internet connectivity. The Centre has also been given the responsibility to provide data on the research publications and citations from Web of Science, Scopus, Google Scholar and Indian Citation Index.

E-Shodh Sindhu

The MHRD has constituted an Expert Committee on Library Consortium with an aim to survey the current scenario of Government-funded library consortia in India, to explore the possibilities of joint negotiations and collaborative services amongst various consortia and to recommend future course of action. The survey report on Government-funded library consortia carried out by the INFLIBNET Centre revealed that there is more than 65.71% duplication of resources amongst various Government-funded consortiums. Moreover, there is 14.81% duplication in the number of resources that are being subscribed by three MHRD-funded consortia and 33.33% among two MHRD-funded consortia, i.e. UGC-INFONET and INDEST-AICTE Consortium. Moreover, resources that are not common are being either subscribed by individual libraries or are being cross-subscribed through N-LIST project. Considering these facts, the report submitted by the Expert Committee to the Ministry of HRD recommended that there would be a huge advantage in bringing the three MHRD-funded consortia under one umbrella.

Based on the recommendations of the Expert Committee, the MHRD formed e-Shodh Sindhu: Consortium for Higher Education Electronic Resources (CHEERs) merging three consortia initiatives, namely; UGC-INFONET Digital Library Consortium, N-LIST and INDEST-AICTE Consortium. The e-Shodh Sindhu would continue to provide current as well as archival access to more than 15,000 core and peer-reviewed journals and a number of bibliographic, citation and factual databases in different disciplines from a large number of publishers and aggregators to its member institutions including centrally-funded technical institutions, universities and colleges that are covered under 12(B) and 2(f) Sections of the UGC Act. A detailed account of e-Shodh Sindhu, its activities and services would be given in the next issue of the newsletter.

The first Meetings of the National Advisory Committee and the National Steering Committee of e-Shodh Sindhu were held at MHRD, New Delhi on 18th December, 2015 under the Chairmanship of Mr. Vinay Sheel Oberoi, Secretary (HE), MHRD and Prof. Subrata Chattopadhyay, Director, IIT Kharagpur.

PhpMyLibrary: An Open Source Library Management System

PhpMyLibrary is an open source library management system that is being used by small libraries for automating their library routines. PhpMyLibrary is a Web-based library automation software developed using PHP as front end scripting language and MySql as backend database. The software consists of three modules i.e. cataloguing, circulation and OPAC. The catalogue module allows users to maintain database of bibliographic information. The circulation module allows maintaining database of patrons and corresponds with catalogue module as well as OPAC module. The catalogue module also facilitates export and import a bibliographic data in USMARC format. The Web OPAC module facilitates search and browse of library database by various bibliographic fields.

The software was developed in the year 2004 and later it was declared as an open source library management system with GNU GPL license. The software is maintained by Polerio Babao Jr II. The software is being used by the libraries not only to provide search and browsing but also for the efficient and effective processing of documents.

Significant development in the software was witnessed during the year 2005, when USMARC standard for cataloguing was incorporated in it. Since then it came in the preferred list of small libraries (School and Public Libraries with small collection) and new establishments for automating their libraries. As it is declared as an open source product, freelancers and professional organizations are modifying the code according to their own requirements and contributes patches for others.

The software is used by libraries not only for providing access to their online public access catalogue (OPAC) for search and browsing but also for managing house-keeping operations such as circulation (check-outs and check-ins), cataloguing of library materials, etc. The architecture of the software is capable for handling various requirements from administrative side as well as patron side. Through its staff interface, it facilitates to manage the master database, cataloguing, and circulation of library materials.

Since it is released under GNU General Public License, one can freely download, use, view, modify, and share. It has user community who provides support for implementing software. The software is browser independent and enables users to perform in-house operations as well as search and retrieval.

Pre-requisites

The following software should be pre-installed on the server before installing PhpMyLibrary software:

- Operating System Linux (Debian, Ubuntu, CentOS, Fedora) or Windows
- Apache Web Server
- Php
- MySQL

The staff client requires minimum: Windows (XP, Vista, Windows 7, 8), Mac OS X 10 or later, or Linux operating system, 2GB RAM or greater, Dual Core CPU or greater. Broadband Internet connection is required to access server and staff client out-side LAN.

Technical Features

- Uses Php as scripting language, MySQL as backend database and Apache as web server;

- Uses MARC21 standard for bibliographic records;
- Supports Z 39.50 protocol for information retrieval;
- Export import of bibliographic records in ISO 2709 format;
- Web based interface for in-house operations as well as OPAC;
- Supports copy cataloguing of records from different catalogues;
- Supports Unicode standard for multi-lingual contents; and
- Facilitates simple search as well as advanced search for end users;

Forum and Support

The development for PhpMyLibrary is stable and no significant development is seen in past few years. However, there are few users who offer quick solution to the queries. The software is based on USMARC standard and solutions are offered for various problems through list forum. User can register themselves at https://lists.sourceforge.net/lists/listinfo/phpmylibrary-users/ and raise their questions to get possible solution of the query.

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Welcome to the New Member, Governing Council, INFLIBNET Centre

Prof. Sachidananda Mohanty, Member, Governing Council, INFLIBNET Centre

Prof. Sachidananda Mohanty was appointed as Vice-Chancellor of Central University of Orissa, Koraput in August 2015. He was Professor and Former Head, Department of English, University of Hyderabad. He is the recipient of several national and international awards including those from the British Council, the Salzburg, the Katha and the Fulbright. He has recently been nominated to the Commission on Education for UNESCO as an individual member with other noted academician of the Country by His Excellency, Hon'ble President of India. The tenure of the membership is for four years.

He has to his credit 28 books in English and in Odia including Understanding Cultural Exchange, Vision Books 1997; Travel Writing and the Empire, Katha; Early Women's writing in Orissa, 1898-1950: A Lost Tradition, Sage Publications, 2005; Gender and Cultural Identity in Colonial Orissa, Orient Longman 2008; Sri Aurobindo: A Contemporary Reader, Routledge India, 2008; Sarala Devi, Central Sahitya Akademi, 2011; and Cosmopolitan Modernity in Early Twentieth Century India, Routledge India, 2015. Recently, a path breaking book "Periodical Press and Colonial Modernity" written by Prof. Mohanty has been released by Oxford University Press, Global Academic Publishing, a prestigious and renowned International publishing house.

Dr. Mohanty's essays and articles have appeared in some of the leading journals and forums in the country and elsewhere including India Today, The Hindu, The Indian Express, The New Quest, The Toronto South Asian Review, The Indian Literature, The Book Review, Economic and Political Weekly, the South Asia Review and the Seminar Magazine.

He has lectured at a number of leading Universities in India and abroad including Cornell University, Pittsburgh University, the City University of New York, California State University, University of New Mexico at Taos, Loyola University at Chicago and Australia National University, Canberra. The Director and INFLIBNET staff welcomes him as a member of the Governing Council of the INFLIBNET Centre.

Navratri

The INFLIBNET Centre celebrated Garba festival with great enthusiasm. The Garba night was organized for its employees and their families on 14ᵗʰ October 2015. The function started with the Durga Puja and everyone from the campus, staff member and their families participated. The employees and their families turned out in their best traditional attire. Dr. Jagdish Arora, Director, INFLIBNET Centre distributed the prizes for the best dance performers, best-dressed persons and children. The function concluded with the ceremonial dinner.

Semantic-based Researcher Profile Management System: A Case Study on VIVO

Mr. P Kannan, Scientist C (LS)

Abstract

The Internet has provided ample opportunity to this generation of scholars to communicate, share and discover information. Development of profile management system is crucial to organise research activities of an organisation and showcase them to the peer group. The semantic web is the extension web standard to organise the information through common data format and exchange protocol. This article explains about the semantic technologies such as Resource Description Framework, Web Ontology Language, Open Linked Data. The purpose of this article is to discuss about what is profile management system, how it is used in the scholarly communication, etc. The article emphasis on semantic-based profile management system called: VIVO and its architecture, data integration tools and major features and functionalities, etc.

1. Introduction

The rapidly growing scholarly community are connected electronically to their peers, colleagues, academic administrators, funding agencies and policy makers. The Internet has provided ample opportunity to this generation of scholars to communicate, share and discover information at push of a button. Evaluation, assessment and its impact play a vital role in academic institutions, R&D organisations and researchers has paramount importance. Sophisticated software system and database are needed to collect, process and analyse the huge amount of complex data produced by the scholars all over the world. The Profile Management system is a web-based tool to organise research activities carried out by a researcher such as interests, skills, experience, expertise, mentor, projects, publications, etc. The profile management system act as knowledge management as well as discovery tool for the researchers, faculty, scientists, etc. within the institutions as well as across the institutions. Development of profile management system compatible with international standard is vital for any organisation to showcase the research activities to the peer group or the funding agencies. There are number of proprietary and open source profile management system available with different features and functionalities. The article emphasis about important components of semantic technologies and case study of semantic-based profile management called VIVO.

2. Semantic Technologies

The content available on internet is very scattered in nature, to consume this information from various sources, semantic technologies can be used, Semantic technologies are to promote standards and exchange protocol to represent information on internet in meaningful way. Semantic technologies are extension of web standard.

2.1   RDF and OWL

Resource Description Framework / Resource Description Framework Schema is a data module used to store data on the semantic web. The components of RDF are subject, property and object. Subject or resource are the things, which talks about author, publishers, person, organisaiton, etc, and can be represented by Uniform Resource Identifier (URI). The properties describe the relationship between subjects and objects i.e. written by, colour, name, worked in, etc. The object may be the literal value or subject of another triple store e.g. Kumar, red. For self-description of the data in RDF the Web Ontology Language (OWL) is being used. It has been designed in such a way so that data could be processed by computer and human in an efficient way.
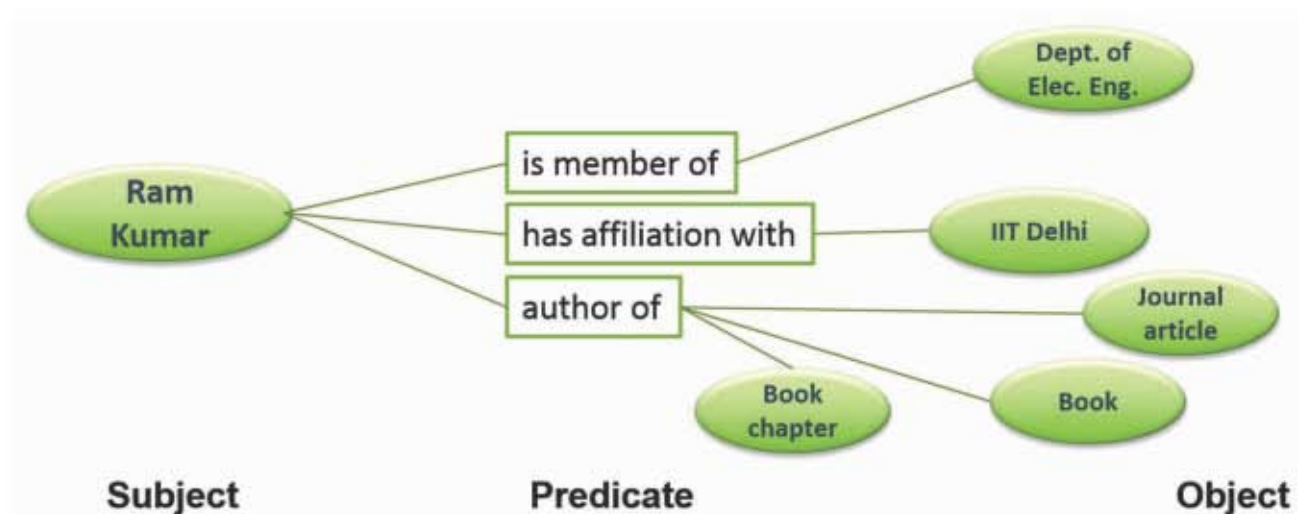
Data Representation in the RDF Graph

2.2   Linked Data

World Wide Web relies on HTML files linked by the hyperlink and HTTP protocol to process the data, whereas Semantic Web relies on the Linked Data or Open Linked Data, which consist of RDF data model called triple statement with self-described URI. Linked Data refers to data published on the Web in such a way that it is machine-readable as well as understandable by human, it is a self-described data linked to other URI in the same domain as well as outside the domain, it lead to open linked data and enable us to generate the linked data graph based on the semantic inter relationship (Bizer, Heath, & Berners-Lee, 2009). The semantic-based application store the datasets in RDF/XML format. Also the semantic-based application are capable to generate the linked data or open linked data, which could be interlinked with the same kind of resources inside or outside the organisation and reused beyond the World Wide Web.
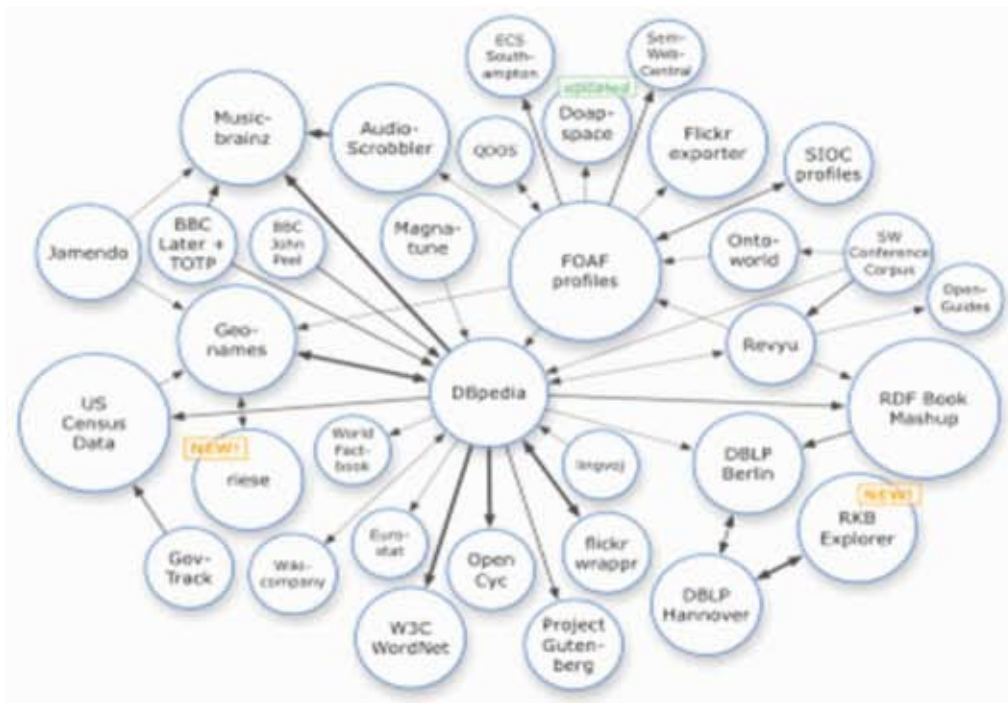
Linking Open Data cloud Diagram

2.3 SPARQL Query Language

The Simple Protocol and RDF Query Language (SPARQL) is a W3 recommendation to retrieve the data from the RDF triples. The semantic-based application represent the data in RDF format such as N3, Turtle and deploy SPARQL endpoint to process the query from the client. SPARQL uses four form of query i.e. SELECT, ASK, CONSTRUCT and DESCRIBE and most of the semantic application support for the SELECT clause. A SELECT query allows you to identify which subset of the selected data is returned. The WHERE clause allows you to define graph pattern find the match in the data set. The semantic-based application has the capability to consume the RDF data from various source and produce the report, analysis, visualisations as desired by the client.

3. VIVO Overview and Architecture

Developed in 2004 by Cornell University Library, the VIVO is a semantic-based, open source, the community-maintained software tool for research discovery and networking of scholars. The VIVO software is a part of multi-million dollar project to promote inter-disciplinary collaboration in the field of Life Science (1997) and Social Science (2004). In 2009, the University of Florida along with Cornell University received a grant of about $12.2m from the National Center for Research Resources of the National Institutes of Health (NIH) to use VIVO as a framework to develop national level network of science community in US (Krafft etal., 2010). The VIVO enable the administrators to store, retrieve, analyse, visualise and showcase the research activities of the scholars in the effortless way using Linked Open Data.

The VIVO application consisting of ontology editor, data ingest tools and lightweight content management system. The ontology editor defines the type of information to be modelled, define the relationship between

types and develop data property statement to describe individual, object property statement to connect individual. The VIVO data ingest interface enable import of information about the scholars such as personal, affiliation, education, accomplishment, projects, publication, etc. from different sources. The content management system provides the visual interface to display the scholars' information in a sophisticated way.

The software architecture consist of three layers including data, business logic and presentation. The data layer represent the information about individual person or institution or resources and their relationship. The logic layer consist of database connection, user privileges and authorisation. The presentation layer is the front end, consisting of templates, style sheets and JSP pages to display information to the user.
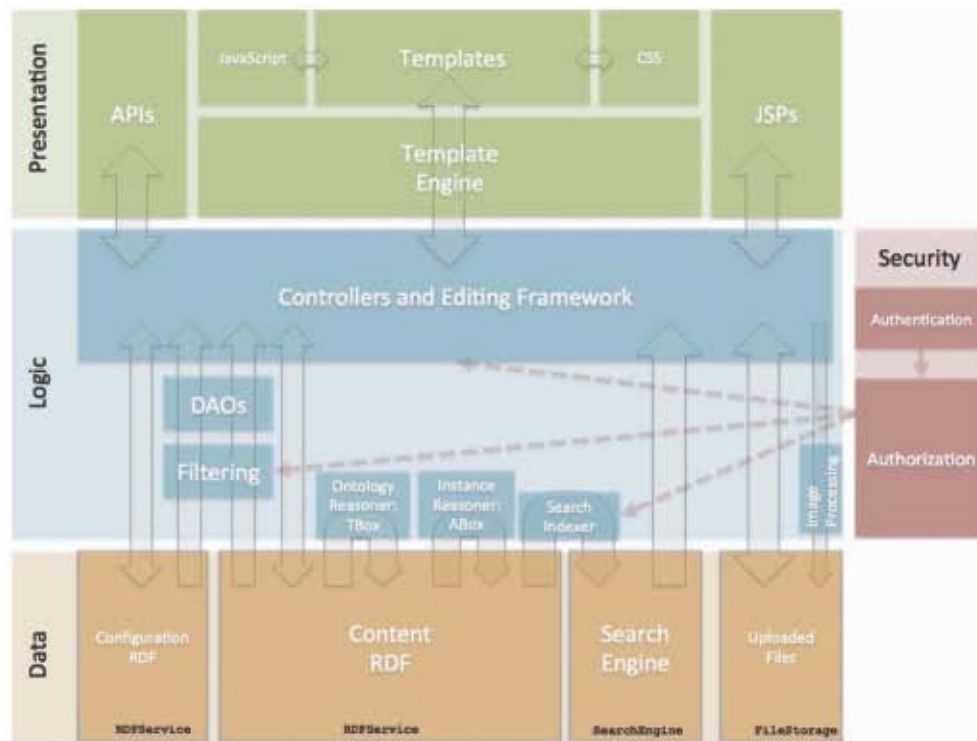
Software Architecture Overview

4.   Open Source Components used for building VIVO Application

The VIVO application is constructed based on open source tools and libraries. The Jena Semantic Web framework is the container to build Java-based VIVO web application and deployed in Servlet Engine to execute the JSP files. The entire VIVO application, placed in the HTTP Server, in front of the Servlet container receives a request from the clients and process the data in triple store. The VIVO uses Jena Simple Relational Database or Trivial Database storage model to save the triple store in a relational database such as MySQL, PostgreSQL and also supports commercial relational database. VIVO uses Apache Solr search server to index the data and speed up the query result with the facet. The Free Marker Java Template Engine Library used to display the data in the desired manner. Apart from the above, JQuery and other JavaScript Libraries are used for asynchronous response and interaction.

VIVO components and workflow
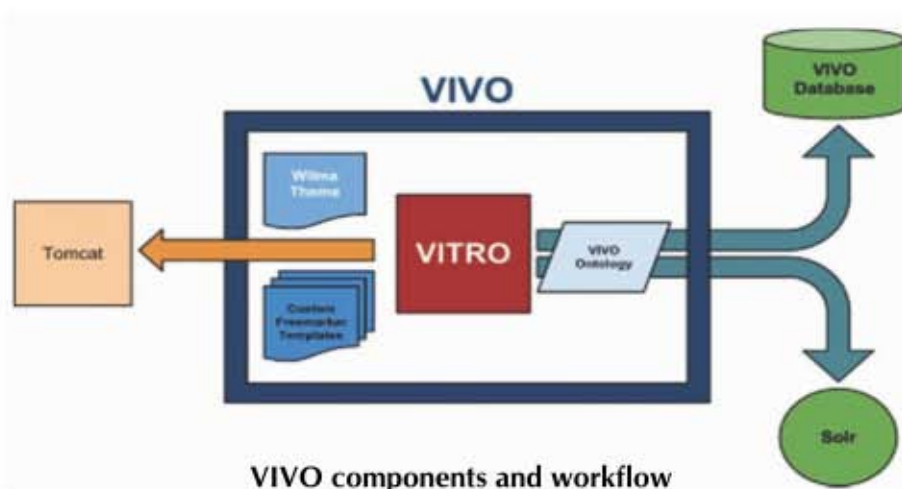
5. VIVO Core Ontology

The Integrated Semantic Framework Ontology for VIVO called VIVO-ISF ontology is explicit and formal specification of information about organisations, researchers, research activities, events and their relationship (Krafft et al., 2010). It provides a set of types (classes) and relationships (properties) to represent the researcher's and their research activities. The VIVO-ISF or VIVO Core ontology is the extension of existing ontologies for various entity model such as Friend-of-Friend (FIFO), ontology provides the specification for people and organisation. Bibliographic (BIBO) Ontology provides the specification for research publications such as books, journal articles. Event ontology is the model to describe the conference, workshop, and Geopolitical (Geo) ontology is used to define the geographical location, and Simple Knowledge Organisation System (SKOS) used to describe the research interest and area of expertise. Apart from the above, VIVO uses various ontologies as per the organisational need and allow the developer to extend the existing ontologies for specific localisation such as expert ID, Google Scholar ID, Microsoft Academic ID, etc. Every entity such as person, article, department, event in VIVO is represented by the URI. Human readable web pages will be generated, when you access the URI from the browser and machine readable triple store or JSON file will be generated, when you access the same URI from the semantic application.
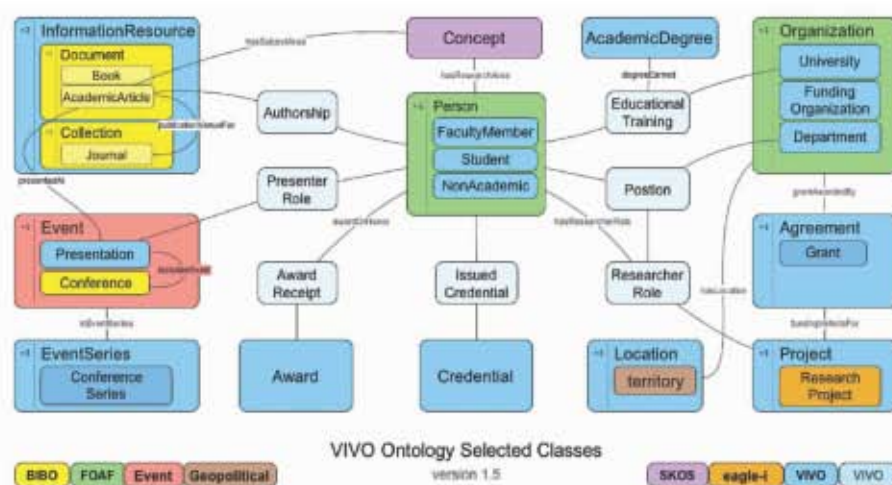
VIVO Ontology with Selected Classes

6. Tools Used to Process the Data

The Institute or organisation gather a large amount of data about the researchers, organisations, courses, events, grants, research articles, etc. from various sources in different formats such as MySQL, XML, CSV, etc. Feeding this data into VIVO by manual means is a difficult task and huge wastage of money and manpower. The VIVO team from participant universities have developed various tools to add, edit, update and ingest data from different sources and different formats. The VIVO provides built-in ingest tool to transform the CSV and XML file into RDF triple store. The SPARQL Constructer used to map the RDF triple store with the ontology, generate new triple store with proper meaning while importing in the VIVO system.

6.1 VIVO Harvester

The Clinical and Translational Research Informatics Program, University of Florida developed the java based library tool called VIVO Harvester (Barnes et al., 2012). The VIVO Harvester fetch data from external sources such as PubMed, SCOPUS, Web of Science, CSV file, OAI repositories, relational databases, translate into self-described RDF with the VIVO ontology, map with the VIVO data, and generate triple statement for VIVO store. The data fetching process uses XML as the intermediate and XSLT as translator to generate XML/RDF triples compatible with VIVO ontology.

6.2 GoogleRefine + VIVO

OpenRefine, formerly known as GoogleRefine, is an open source tool for cleaning the unstructured data. It enable the user to clean the unstructured data such as excel worksheet, comma delimited txt files, CSV files and convert into desired format such as XML, RDF,etc. (OpenRefine, 2015). The GoogleRefine has the capability to convert grid data into graph data and export it into the triple-store format that is building block for Semantic Web. The Weill Cornell Medical College developed the Reconciliation API interface for VIVO and the extension of GoogleRefine, called GoogleRefine+VIVO (Cole, Dickinson & Lee, 2013). The Reconciliation API, ingest data from VIVO, extract data from other reliable sources against the data from VIVO, reconcile datasets with additional data, align data to the VIVO Schema and export standardise RDF triples for VIVO.

6.3 Karma

The Karma is an open source information integration tool developed by Information Sciences Institute, University of Southern California, that enables users to quickly and easily integrate data from a variety of data sources including databases, spreadsheets, delimited text files, XML, JSON, and Web APIs (Karma, 2015). The user-friendly graphical interface has the capability to import the structured datasets from external sources, map data with the vocabulary in VIVO ontology and generate standard RDF. These RDF triples are directly imported into the VIVO application in an efficient way.

7. VIVO Features and Characteristics

The VIVO is a ready-to-use researcher profile management system, which provides extensive range of features, functionalities and also accustomed to international standard for reusability and interoperability. Some of the

significant features of VIVO are integration with various bibliographical information providers (e.g. ORCID, SCOPUS, Web of Science, Google Scholar) for research information import, co-author network, co-investigator network, map of science network, QR code, OpenSocial gadget, etc.

7.1 Research Information Standards and Interoperability

There is an increased need to develop structured CV for project proposals and to make effective communication between applicants and funders. The HR system maintaining the personal informational of the faculty or researcher may not have proper information about the research activities. There are hundreds of funding agencies requesting CV for funding opportunity in different form. These CVs should be standardised for effective communication. The Consortia Advancing Standards in Research Administration Information (CASRAI) is a not-for-profit standard development organisation and an international community of leading research funders and institutions collaborating to develop standard vocabulary for research information interoperability. European Current Research Information Systems (euroCRIS) is another not-for-profit organisation established to develop and promote Common European Research Information Format (CERIF) for European member state institutes. The VIVO collaborates with CASRAI and euroCRIS to advance the common approach to research interoperability and also enhance the implementation of VIVO around the World.

7.2 Visualisation and Reporting

The principle use case of the VIVO profile management is the discoverability of researchers based on their expertise, finding collaborators for research project based on the research output of organisation and create the national level network of faculty and scientists. Organisations and funding agencies are very keen and give emphasis on Return on Investment related to research activity. Academic administrator need the research report or research impact analysis in the graphical representation, which lead to greater understanding of the research progress and decision making for research funding. The VIVO provides temporal, geospatial, topical, and network analysis and visualization of data at the individual (micro), local (meso), and global (macro) levels (Tank et al., 2012) and also provide support for outside application to access the RDF data for various network analysis. A Sparkline is a small line chart that is typically drawn without axes or coordinates (Engelhardt, 2007). Total no of publications with year and co-authors of the faculty member or expert represents by Sparkline graph. Temporal visualisation allow the users to compare the publications and grants information of faculty or department in an organisation through visual graph as well as numerical value.

7.3 Map of Science

VIVO uses UCSD map of science to visualise the expertise or specialisation of the people, department, organisation, group of organisation. The science map allow the user to compare specialisation of people in the department, compare the department within the organisation, etc. The UCSD map of science and classification system developed by University of California San Diego (UCSD) comprising of article level data of the journals from Elsevier's Scopus and Thomson Reuters' Web of Science (WoS) for the years 2001-2010 (Börner et al., 2012). The 25,000 journals grouped into 13 broad discipline and regrouped into 544 sub discipline and these discipline represented by specific colour. Article not published in the 25,000 journals are represented by grey

colour. The graphical representation of research activities helpful to the student to overview the specialisation of the organisation or department or faculty, which lead to find mentor or guide for the research project. Faculty and researcher could find potential collaborator and analyse the research output of respective project in efficient way. Funding agency could use the graphical representation as a tool to visualise the project progress, funding pattern and growth of the inter-disciplinary research also help them in decision making for project funding.
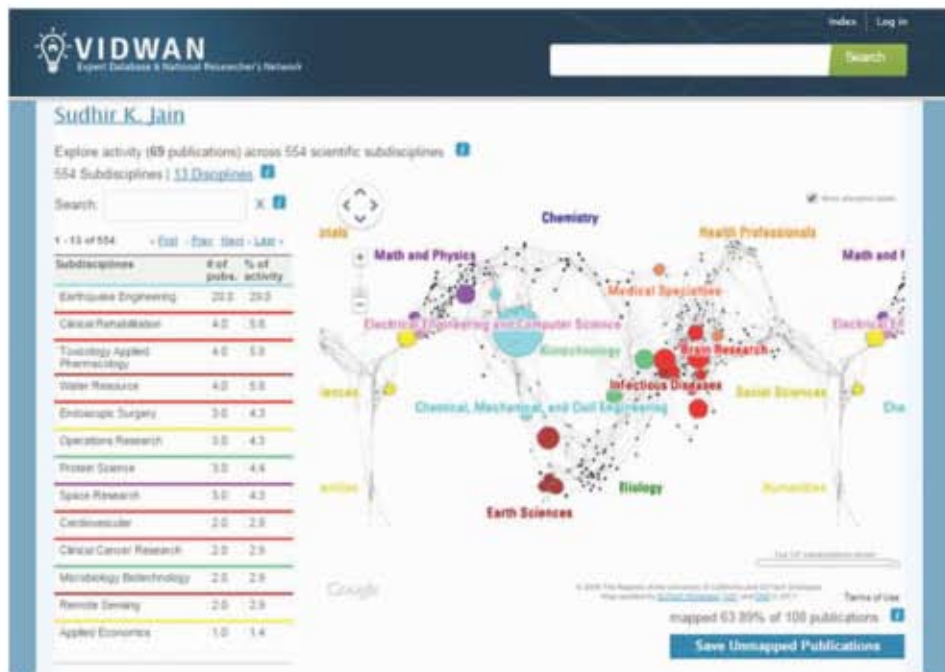
Area of Expertise Represented through Map of Science

8. VIVO Implementation at Institute and National Level

The data about researcher and research activity such as personal information, projects, publications, expertise, accomplishment, etc. scattered across the institute / organisation website or locked inside the institute database. These data are less utilised or underutilised due to lack of standard format for interoperability. The ultimate aim of VIVO is to explore the data into the outside world through open linked data. It enable the researchers and funding agencies to reuse for discovery and research data analysis. The W3C SWEO Linking Open Data community project assert that the aim of Linked Open Data is "to extend the Web with a data commons by publishing various open data sets as RDF on the Web and by setting RDF links between data items from different data sources" (The World Wide Web Consortium, 2015). The library play a vital role in any organisation to collect the research information, processing and disseminate to the academic community and it is a trusted entity between resources and faculty or researchers. Since the VIVO application itself first developed at Cornel University Library, the librarian or information scientist should play the lead role in the process of setting up infrastructure, content development and outreach activities to implement the VIVO at institute level. The VIVO is also used to interconnect the scholars working across the institutions through national level research network. The VIVO community project has developed various tools, applications and API for multi-institute harvest and search, which facilitates the end user to search the researcher profile of various institutions from a single interface.

9. Summary

There is an increased demand for ROI, impact factor analysis, ranking of institution to evaluation and assessment of research done by an organisation or institution. Semantic web and linked open data has been growing enormously, academic institution and R&D organisation have shown interest in joining linked open data and Govt. also promotes such activities that leads to national level open data. The VIVO application enable the organisation to showcase the research activity of faculty and researcher and will be the helpful tool for the administrator to analyse the research focus area, progress of research and funding opportunity. Since 2013, DuraSpace become the incubator for developing the VIVO software through open source community and promote the VIVO to the world. National level institutions such as Information and Library Network Centre, National Institute of Science Communication and Information Resources, Documentation Research and Training Centre should take the lead role to promote VIVO among the academic and R&D organisation in India.

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Visitors

Dr. Arun Kumar Chakarborty, Director General, RRRLF, Mission Director, NML, Kolkatta

Dr. Parthasarathi Mukhopadhyay, Head, Kalyani University, Kalyani

Dr. Usha Munshi, Librarian, Indian Institute of Public Administration(IIPA), Delhi

Staff News

Dr. Jagdish Arora, Director

Dr. Jagdish Arora delivered 10th Prof. K. A. Isaac Commemoration Annual Lecture on 9th October, 2015 for the year 2015 organized by the Kerala Library Association at the Department of Library and Information Science, University of Kerala, Thiruvananthapuram. Dr. Arora was appointed as the National Coordinator of E-Shodh Sindhu: Consortium for Higher Education Electronic Resources launched by the Ministry of Human Resource Development merging three consortia namely UGC-INFONET-Digital Library Consortium, INDEST-AICTE Consortium and National Library and Information Services Infrastructure for Scholarly Content (N-LIST).

He was invited as Member of the Board of Studies, Dept. of Library and Information Science of Aligarh Muslim University, Aligarh, UP and School Board, School of Information Science and Technology, Babasaheb Bhimrao Ambedkar University, Lucknow, UP for the years 2015 to 2017. He was nominated a Member of the Advisory Committee for Setting up Data Centre at the ICSSR, New Delhi. Dr. Arora was invited to attend the Meeting of the Committee appointed by the Chairman, UGC for Developing National Institutional Ranking Framework (NIRF) for Colleges and Universities held on 21st October, 2015 to make a presentation on Ranking of

Indian Universities developed by the INFLIBNET Centre based on bibliometric parameters. As Member of the Implementation Core Committee, National Institution Ranking Framework (NIRF), Dr. Arora attended its Meetings held at the National Accreditation Board, New Delhi on 9th November and 19th December, 2015.

As a member of the Standing Committee and its Sub-committee on e-PG Pathshala, he attended its 31st Meeting on 9th November, 2015 and its 22nd Meeting on 14th December, 2015 respectively organized in the UGC Main Office, New Delhi. Dr. Arora attended the 13th Meeting of the Finance Committee of the Central University of Gujarat organized on 28th October, 2015 as its Member. As a member of the Court of the Central University of Gujarat, he attended its 2nd Meeting on 20th November, 2015.

Mr. Manoj Kumar K., Scientist D (CS)

Mr. Manoj Kumar was invited to deliver a lecture on Shodhganga during IASLIC 30th All India Conference, 2015 at Gujarat University, Ahmedabad on 28th December, 2015. He also invited to deliver a lecture on "E-Resources for Education and Digital Library in the workshop "Inspire Internship Science Camp" organised by ARIBAS, Anand on 30th November, 2015.

Mr. Yatrik Patel, Scientist D (CS)

Mr. Yatrik Patel was invited as a resource person for the Faculty Development Programme to deliver a lecture on 'Use of e-resources' at Knowledge Consortium of Gujarat, Ahmedabad on 16th October, 2015.

Mr. Abhishek Kumar, Scientist C (CS)

Mr. Abhishek Kumar attended the Meetings of subcommittee, e-PG Pathshala held on 16th October 2015 and 14th December 2015 at University of Grant Commission, New Delhi. He also attended Meetings of the Implementation Core Committee of the National Institute of Ranking Framework (NIRF) held on 19th October 2015, 9th November, 2015 and 19th December 2015 at National Board of Accreditation, New Delhi and the Ministry of Human Resource Development, New Delhi on 21st October, 2015.

Mr. Hiteshkumar Solanki, Scientist B (CS)

Mr. Hiteshkumar attended meeting of the National Institutional Ranking Framework (NIRF) at the National Board of Accreditation, New Delhi on 19th October 2015. He also attended meeting of National Institutional Ranking Framework (NIRF) for universities at the Association of Indian Universities, New Delhi on 21st October, 2015.

Users' Speak

On Training Programme

"Organising training programme on Capacity Building Programme of National Mission on Libraries for Public Library Personnel is an excellent work undertaken by the Central Government to abolish Digital Virtual Library knowledge gap. Such type of training programme should be organised for Village Library Staffs to serve better library service for farmers and local users" by one of the participant of National Workshop on Capacity Building Programme of National Mission on Libraries for Public Library Personnel organised by INFLIBNET Centre, Gandhinagar during 14th to 18th December, 2015.

On NLIST

"E-resources provided by NLIST are boon for the academic libraries of rural areas. I request to you kindly insert the more titles of Indian author" by Tarsem Lal, JC DAV College Dasuya, Panjab State.

"This E-resource service is very useful for research student and lecturers, please add more linguistic journals Sanskrit, Marathi" by Rajamansing G Damale, Lal Bahadur Shastri College, Satara Maharashtra.

सटीक अनुसंधान के लिए ई-रिसोर्सेस का इस्तेमाल जरूरी

चुनौतीशास्त्र विशेषज्ञ अशोक कुमार राय ने कहा, डिजिटल लाइब्रेरी पर हुई कार्यशाला

अचूक संशोधनासाठी ई-रिसोर्सेसचा वापर गरजेचा

डिजिटल लायब्ररीविषयी कार्यशाळा तज्ज्ञ अशोककुमार राय यांचे मत; वसाहती प्रकल्प राबवण्याचा सल्ला

PU holds workshop on plagiarism detection tool

Puducherry: Ananda Rangapillai Library Pondicherry University (PU) in association with Information and library network (Inflibnet) centre held a workshop on URKUND, a plagiarism detaction tool provided by Inflibnet on Thursday in the university premises.

Inflibnet scientist K Manoj Kumar gave a live demonstration on URKUND in the presence of vice-chancellor (incharge) Anisa B Khan and university librarian R Samyuktha followed by a question and answer session.

PU was embroiled in a controversy in the past two years over plagiarism charges against the vice-chancellor Chandra Krishnamurthy, who has been placed under compulsory wait, by the Union human resource ministry in August.

Academic community, which views plagiarism as a serious crime, has been demanding stringent action against violators.

Nainital-based Kumaun University vice-chancellor B S Rajput resigned following plagiarism charges last year.

Pondicherry University dismissed a teaching faculty member plagiarising his publication to an extent of 65% two years ago.

इन्फ्लिबनेट सेंटर के विशेषज्ञ अशोक कुमार की सलाह

ई-संसाधन के उपयोग की जरूरत

'ஞ்ஞலேலனில்' காப்பியெடுத்து இஜி பிஎச்.டி., வாங்க முடியாது

CHENNAI TODAY · "The Hindu" Dated : 29-10-2015

ரூம்டி மாணவருக்கு மட்டுமே...

GU among country's top ten depositors of theses

CORRESPONDENT

JALUKBARI, Jan 6: Gauhati University reached the top 10 in the matter of submission of theses of its research scholars at Shodhganga, a repository of theses submitted by Indian scholars.

The Shodhganga provides a platform for research scholars to deposit their PhD theses and make them available to the entire scholarly community in open access. The repository has the ability to capture, index, store, disseminate and preserve ETDs submitted by the researchers.

Aligarh Muslim University tops the chart with 3,990 theses deposited by it, followed by Anna University with 3,054 theses and Gauhati University with 1,784 theses.

The KK Handiqui Library has so far scanned eight lakh two thousand pages of theses and made it available in Shodhganga, an open source for research references which can be accessed by researchers from wherever they are. The librarian of the library told this correspondent that in the near future they would be able to put in more research works in order to facilitate the students.

The submission of theses will ensure that the work of a research scholar cannot be replicated by other scholars.

दिव्य समाचार

रविवार · 02.12.2015 · 5

વિધાનગરની એરીબાસ કોલેજમાં જુદા જુદા વિષયો ઉપર વૈજ્ઞાનિકોનું વ્યાખ્યાન

આણંદ, તા. ૧

ઇન્સ્પાયર ઇન્ટર્નશીપ પ્રોગ્રામ અંતર્ગત તા. ૩૦ નવેમ્બર ૨૦૧૫ ના રોજ એરીબાસ કોલેજમાં જુદા જુદા વિષયો ઉપર વ્યાખ્યાન યોજાયું હતું. જાણે વૈજ્ઞાનિકોનું સ્વાગત પરિચય ડૉ. ડીગ્રી મિસ્ત્રી, ડૉ. પીનાબેન અને ડૉ. ઝળાભાઇ ચૌહાણ દ્વારા કરવામાં આવ્યું હતું. ડૉ. પી. માનીવેલનું વ્યાખ્યાન સીક્રેટ ઓફ સક્સેસ પર રાખેલ જેમાં વિદ્યાર્થીઓને સાયન્સમાં ઉચ્ચ અભ્યાસ માટે કયા ગોઝવા પસંદગી કરવી, ઉચ્ચ ધ્યેય નક્કી કરવા માટે કયા મહત્વના મુદ્દાઓ પર ધ્યાન કેન્દ્રીત કરવું અને જીવનમાં સફળતા કેવી રીતે

મેળવવી તેના જીવંત ઉદાહરણો દ્વારા વિદ્યાર્થીઓને પ્રેરણા પૂરી પાડી હતી.

મનોજકુમારે તેમના વ્યાખ્યાનમાં વિદ્યાર્થીઓને ગુડ ઓફ ફર્ડ હેડર્સ એન્ડ ટેક્નોલોજી, ડિજિટલ લાઇબ્રેરી, ઇન્ટરનેટ રિસોર્સ, નોલેજ મેનેજમેન્ટ ઇન લાઇબ્રેરી, ઇ-બુક્સ, ઇ-જર્નલ, વર્ચ્યુઅલ રિસોર્સ, વેબ ૧.૦ અને વેબ ૨.૦ એજ્યુકેશન વગેરે બાબતોની વિસ્તૃત માહિતી ઇન્સ્પાયર ઇન્ટરનશીપમાં ભાગ લીધેલ તા. ૧૧ અને ૧૨ ના સાયન્સના વિદ્યાર્થીઓને બતાવ્યા હતા. એસ. રત્નાકુમારે તેમના વ્યાખ્યાનમાં વિદ્યાર્થીઓને

માઇક્રોસ્કોપ ડિસ્કવરી અને સાયટોજનેટીક્સ, સ્ટડી ઓફ લાઇફ, જનેટિક્સ મોડ્યુલ્સ, ડિસ્કવરી નોટ ડીએનએને અને ક્રોમોજોન, જનેટીક્સ મટીરીયલ્સ, ચે-રોબીન, જનેટીક્સ અને સાયટોજનેટીક્સની મગજની ઉત્પાદન વધારવા માટેના સંશોધનની ઉંડાણથી વિદ્યાર્થીઓને માહિતગાર કર્યા હતા. આ અંગે વિદ્યાર્થીઓને ખૂબ ઉત્તર પક્ષ કર્યા હતા અને વિદ્યાર્થીઓને ... વિદ્યાર્થીઓને ... કારકિર્દી બનાવવા માટે પ્રેરણા પૂરી પાડી હતી. સમગ્ર કાર્યક્રમનું સંચાલન સંસ્થાના ડાયરેક્ટર ડૉ. નિર્મળજન રોય તેમજ ડૉ. બબિત બાજપાઈ, ડૉ. કે. સરોજા, ડૉ. કે. બી. ચૌહાણ, ડૉ. દિગ્વિજય રાણા, ડૉ. કલ્પના ઇસરાણા અને ડૉ. સંદીપ ચૌધરી તેમજ હરેશ સ્ટાર્મિલ દ્વારા કાર્યક્રમના સફળતામાં સહભાગી બન્યા હતા.

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