Report of the 4th National Conference Scientometrics & Internet Of Things (SIOT) : *Organised by Institute of Scientometrics and NCSI-Net Date: 25-26 September 2015. Venue: the Solitaire Hotel, Bangalore 560001*

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The 4th National conference of the Institute of Scientometrics on 'Scientometrics and the Internet of Things (SIOT)' has started with an invocation. The dais was occupied by inaugural speaker *Dr. Abhinanda Sarkar, Prof. V.G. Talawar*, president of the occasion, Dr.S.L.Sangam Conference Chair, Prof. T.D. Kemparaju, organizing chair, *Dr. I.R.N. Goudar*, technical Director and Rapporteur General Dr. R.B. Gaddigimath.

The occasion has kick started by lightning the auspicious lamp with traditional customs by the dignitaries. Mr. Anand T Byrappa, organizing secretary welcomed the gathering and highlighted the theme of the conference. Prof. S. L. Sangam, the conference chair introduced the Institute of Scientometrics, its origin, establishment, development, activities and also briefed about the developments in the area of Scientometrics and the making of the 4th conference at the national level on the theme "Scientometrics and the Internet of Things (IoT)".There were 200 deligates and 59 papers presented.

The inaugural speaker Dr. Abhinanda Sarkar, Co-founder, Omix Lab in his inaugural address highlighted the developments in Scientometrics and the Internet in evaluating impact and output analysis in his talk

entitled "Machines, Metrics and Measures". In his address he opined that the Internet and ICTs have played a big role in the present day world. He opined that at present for every 60 seconds – there are 98,000 tweets by people; 695,000 status updates takes place; 11 million instant messages exchanged; 698,445 Google Searches conducted worldwide; 168 million emails sent/ received; 1,820 TB of data created; and 271000 users use and download mobile web applications.Dr. Sarkar went on and highlighted the smart mind, smart homes, smart office, smart cities, smart phones as well as smart apps and stressed on the initiative by the prime minister of India *Shri. Narendra Modiji's* on smart cities, *Make in India and digital India.* Dr. Sarkar also mentioned in length about Internet of Things (IoT); Connectivity of Objects & talking each other through internet; networking; Machines controlled by machines using sensors; Application of IoT in libraries - how best the concept of IoT can be integrated in the modern day libraries and Information centers; automatic controlling lights in reading areas; automatic controlling AC/Heater in humid conditions and to automatically check the availability of computers/printers whenever needed.Dr. Abhinanda Sarkar concluded his inaugural speech that he is looking forward to a brave new world of rapid dynamic things and activities enabled by the Internet of Things.

The keynote address was delivered by *Dr. Guido Zosimo-Landlfo* (Germany) the publishing editor of Scientometrics and international journal of repute. In his keynote address he said that the internet was created by things. The problems encountered by him as an editor of Scientometrics Journal were presented. The problems of plagiarism;

coping with copying, Fake Research Papers, Fake peer reviewing, self-citations and other publishing related areas.

Book on "Scientometrics" written by Prof. S. L. Sangam, the conference chair was released by Dr. V. G. Talawar. In his presidential address Dr. Talawar hoped that the universities in the country covered prescribed the book on "Scientometrics" by Dr. S. L. Sangam as text book for PG (LIS) studies. Summarizing the keynotes presentation by Guido and chief guests lead presentations expressed that the deliberations during the conference would be quite educating, interesting and opportunities for knowledge gain. Prof. T.D. Kemparaju rendered the vote of thanks.

Prior to the conference there were two tutorials which gave practical experience to the delegates:

First Day -Tutorial 1: 25th Sept. 2015 9.00 to 10.30 am.

ALTMETRICS by *Prof. S L Sangam, Dr. Shamprasad Pujar and Dr. Satish Munnoli*

Altmetrics or 'alternative-to-metrics' is a hot buzzword in the scholarly world often raising questions such as: What it is? How it is used? How it is different? How it is computed? It is a new method of calculating the impact of research using social media applications by counting the number of times a particular piece of research mentioned or quoted or discussed. This new method has evolved, as scholarly communication is increasingly moving towards online and which has made available new indicators in the form of bookmarks, blog posts and tweets to assess the impact of research as compared to conventional metrics such as counting citations of an article.

To simplify the process of tracking and measuring the impact of research on social media, some of the tools have evolved, notably Altmetric, ImpactStory and PlumAnalytics, which have been increasingly used by individual researchers, institutions and publishers visualizing the current needs.

This tutorial has focused on dissecting the concept of '*Altmetrics*' and analyze the computation methods adopted behind altmetric scores. There was a demo on 'Altmetric Explorer' tool and a demo on how best this can be used for undertaking alternative metric studies by LIS professionals with suitable examples discussed.

Second Day - Tutorial 2: 26th Sept.2015 9.00 to 10.30 am.

DATABASES FOR SCIENTOMETRIC RESEARCH TECHNIQUES AND DATA ANALYSIS by *Dr. I.R.N. Goudar, Ms. Tahseen Afroz Khandey, Elsevier*

A number of bibliometric and non-bibliometric indicators are used for quantification of research output of an individual or an institute. The concept of Scientometircs and its applications for quantification of research have given fairly well accepted indices. In this direction, widely used indices are counts of publications, citations and h-index. h-index invented by Hersh, a physicist. h-index is being used by most of the institutions and grant providing bodies for recruiting, promoting researchers and sanctioning research grants. Web of Science and Scopus serve as tools to derive important scientometric indicators like average

number of citations per paper. These tools serve for authorship, foreign collaboration and research grants studies. Google Scholar and Microsoft Academic Index also facilitate calculating these indices.

While one can easily derive h-index of an individual using Google Scholar, it is difficult to use this tool for research output of an institution. Google scholar also provides an alternative indicator called i-10 index. A number of ready to use to open source tools like Scholar meter facilitate calculation of h-index, which of course uses Google scholar data in the background. Journal Citation Reports provide tool for critically evaluating journals based on citation data. SCImago, an open access portal, gives ranked journals and countries scientific indicators based on Scopus database."InCites" is a customized, citation-based research analytics tool offered by Thomson Reuters for evaluating institutional productivity. Elsevier's "SciVal" offers access to the research performance of 5,500 research institutions and 220 nations worldwide.

Dr. Goudar made a presentation on the theme which emphasis on research evaluation. Bibliometric indications like Publications; Citations; Citations based on indices (research excellence like h-index, g-index); Collaboration; Journal Input factor (ISI/JCR); The Scimago journal ranking; Altmetrics; Non publications indicators and Patents of credit were dealt in detail.

Ms. Tahseen Afroz Khandey from Elsevier highlighted the new features and facilities added and available within Scopus, which helps in measuring scholarly output. Features of scival were highlighted as well.

There were four plenary talks delivered by eminent professioanls from LIS community as well as from IoT discipline are as listed below;

- **Plenary Talk 1:** "Modelling/ Optimization" By Prof. Snehanshu Saha, Professor, Computer Science, PES University
- **Plenary Talk 2:** "Scalable IoT" By Francis daCosta (USA), Founder/CTO, MeshDynamics.
- **Plenary Talk 3: "**'Internet of Things' as socio-technical dimension to 'Scientometrics 3.0'" by Dr. H.S. Siddamallaiah, former Principal LIS officer and visiting professor, Mahasarakham University, Thailand.
- **Plenary Talk 4:** "Usage Metrics and Their Applications" by Tahseen Afroz Khanday, Elsevier Science

The whole SIoT was divided in 5 broad Technical Sessions:

Technical Session 1: Internet of Things

The session was chaired by Dr. Franics Jayakanth and Dr. H. Rajendra Babu was the rapporteur. Twelve papers were presented in this session. The session of Internet of Things (IoT) discussed on Scimaso Journal and country ranking; Internalization of Journals; Source Normalized Impact Factor (SNIP); impersonal citation counts; journals international modeling index (JIMI); journals reference score; smart applications on IoT enabled libraries; smart kitchens and smart library management etc.

Technical Session 2: Scientometrics: Contents, Evolution and Loss

The session was chaired Prof. Prahlad G. Tadsad and Mr. G. Sharanabasava was the rapporteur.

Seventeen papers were presented in this session on "Scientometric concepts, evolution and laws". Interesting presentation made by the authors on applications, mapping S & T Indicators. Zif's law were very well received Fare book, posts, Lotka's law and case studies on Nephorolgy research output in India, Bio-fuel literature robotics, academic librarianship, Architecture thesis and Geroge E. Smith presentations were presented. There was lively discussion.

Technical Session 3: Scientom**etrics Applications: Mapping and S & T indicators**.

Dr. M. S. Sridhar chaired the session and Dr. M. Anjanappa was rapporteur. Eight papers were presented in this session on "Scientometric Applications Mapping and S & T Indicators" use of social media, webology, mapping resource on bamboo research literature; cryogenics and critical analysis of scientific products were dealt. Dr. M.S. Sridhar in his concluding remarks said that the data should be accessible (not proprietary) transparent testifiable, replicable and comprehensive. He said that citation within a document historical influentiality of a journal, peer judgment; online access/use downloads like comments, online rating etc., are not only the metrics and the measures of impact entities (56 measures).

Technical Session 4: Scientometrics Applications: Communications & Collaboration

The session was chaired by Prof. B. S. Biradar and Mr. G. Govindareddy served as rapporteaur. Ten papers were presented in this session. The session was broadly dealt on Scientometric applications, communications and collaborations. Papers on authorship pattern, productivity patterns Scientometric analysis of faculty publications, Webometric analysis of top 10 Asian universities were presented.

Technical Session 5: Scientometrics Portraits and Subjects Studies

The session was chaired by Dr. S. K. Savanur and Dr. B. Nagappa was the rapporteur.Twelve papers were presented in this session. The session broadly dealt on Scientometric portraits and subject studies. Interesting presentations on priority profile of major countries in the field of genetics, Hydraulic power research, Bibliometric study on Girish Kumar and Dr. Gurudev S. Khush and case studies of veterinary science, chemical science, and cardiac anesthesia were made. There were comments, interaction and discussion on the presented of papers.

Panel Discussion was the added attraction of the conference.

Theme: Scientometrics of IoT: Synergies Opportunities and Challenges for LIS. Moderator:N.V. Sathyanarayana, CMD, Informatics India Pvt. Ltd., Bangalore .**Panelists:** 1)Dr. N Paravatamma, Professor, Dept. of Library and Information Science, Gulbarga University.2)Dr. Puneet Vanjan, Executive Officer, IoT Operations, TCS, Bangalore 3)Dr. H.S. Siddamallaiah, former Principal LIS officer (Rtd.) and also visiting professor, Mahasarakham University, Thailand.

There were three product presentations, most useful and informative from the point of view of Library and Information centers and professionals, made by the following publishing companies as part of their support in the form of sponsorship as follows:

1. **Springer – Platinum Sponsor** by Kanak Soni
2. **EBSCO – Silver Sponsor** by Roby Mathew
3. **ACD Labs –** by K K Bagh Chandani

Best paper Award:

In consultation with the chair persons of different sessions have obtained the names and passed on the names to the organizers for finalization best Paper awarded.Prof.Sangam Best Paper awarded to Smt.Gidney et al. citation with Rs.1000/- cash.

Fellow Institute of Scientometrics:

Dr.Ronald Rousse Ph.D (Mathematics) Ph.D (Library and Information Science) Associate Professor KHBO, Ostend Belgium. President International Society for Scientometrics and Informetrics (ISSI).Highly cited researcher in 2014.Awarded "**Fellow Institute of Scientometrics"** for the year 2015 for his lifelong achievement in the field of Scientometrics. He will be given Rs.10, 000/- Cash, Citation, memento and felicitation at next conference BITS Ranchi in 2016.

The SIoT conference has been conducted to mark a difference to the existing system of bringing out a pre-conference volume of all the

papers submitted to the conference. The organizing committee has decided to send all the accepted papers to the SRELS Journal of Information Management, the journal would do the required review process and publish the selected articles.

The organizing committee felicitated CMD, Informatics India Pvt. Ltd., Bangalore and Dr. I R N Goudar at the end of the conference. Prof. Sangam gave concluding remark and Mr. Anand T Byrappa has rendered vote-of-thanks.

"The people who get on in this world are the people who get up and look for the circumstances they want and if they can't find them, make them".

----George Bernard Shaw