
Open Access Journal and Open Access Initiatives In India

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Abstract

Open Access (OA) initiative emerged as a revolutionary movement that promotes free access to scholarly publications over the Internet, removes the price and permission barriers and ensures the widest possible dissemination of research. OA exists where there is free, immediate and unrestricted availability of digital content. In India poor access to international journals and the low visibility of research papers are the major problems facing Indian researchers. OA is viewed as a solution to remedy this problem. A number of workshops and training events were organized in India during this period, where a few thousand library and computer professionals received training in open source software for building open access repositories. The present paper aims to give the concept of Open Access and highlights some of the Open Access Journal initiatives in India. Open Access to information and knowledge not only enables digital inclusion of common citizens, particularly under privileged communities, but also bridges social divides.

Keywords: Open Access initiatives, Open Access Journal, digital contents, India.

1. Introduction

Today, in this information society, free flow of information is a basic principle for bridging the knowledge gaps between information rich and information poor community. Social inclusion and economic empowerment are also achieved in a society where citizens have universal access to information and knowledge, ranging from public information to specialized or customized information related to one's profession, vocation or culture. Open access to information and knowledge is a key contribution in provisioning universal access to information and knowledge.

With the availability of ICTs, it continues to make changes in every aspect of our society and reshapes scholarly communication in many ways. The exponential growth of scholarly literature has put a severe hindrance on their accessibility, and the libraries, particularly in the developing countries is vexed with the problem of providing access to vast amount of literature. Moreover, the increase in the prices of academic journals by the publishers has posed a major threat to libraries which support academic researcher's research activities. To communicate the fruits of scholarly literature to a world wide community of researchers and scientists, the Open Access (OA) initiative emerged as a revolutionary movement that promotes free access to scholarly publications over the Internet, removes the price and permission barriers and ensures the widest possible dissemination of research. OA journals and literature are now expected to be read more often than those with subscriptions thereby having a higher impact rates.

2. Open Access (OA)

Open Access is simply the free online availability of digital contents, scholarly journal articles, research results which authors publish without expectation of payment and is based on an ethical argument that research funded by the public should be available to the public. OA operates within the legal framework and own the original copyrights to for their work. Authors can transfer the rights to publishers to post the work on the web or else can retain the rights to post their work on the archives.

The Budapest Open Access (2002) Initiative defines open access as “free availability on the internet, permitting users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal or technical barriers other than those inseparable from gaining access to the internet itself.” Bjork (2004) defines OA as that a reader of a scientific publication can read it over the internet, print it out and even further distribute it for non-commercial purposes without any payments or restrictions. According to Suber (2006) Open Access to scientific article means online access without charge to readers or libraries. Committing to open access means dispensing with the financial, technical and legal barriers that are designed to limit access to scientific research articles to paying customers.

In fact, open access is a step ahead of “Free Access” which removes just the price barriers by providing free access to end users. Under OA, the end user not only has free access to the content but also have the right to further distribute the content.

Some of the salient features of OA are

- ◆ Open access literature is digital, free of charge and free of copyright ;
- ◆ OA is compatible with copyright, peer review, revenue, print, preservation, prestige, career advancement, indexing and supportive services associated with conventional scholarly literature;
- ◆ OA campaign focuses on the literature that authors give to the world without expectation of payment;
- ◆ OA is compatible with peer review and all the major AO initiatives for scientific & scholarly literature insist on its importance.

3. Open Access Initiatives in India

OA was initiated in the developed countries and later many developing countries including India have joined the effort. In the wake of the open access movement, some policy frameworks have already been established by member communities to foster inclusive, plural and development oriented

knowledge societies, A number of open access declarations /statement were made during the past decade, where the world leading research institutions agreed on the open access mandates. The United Nations – backed world summit on the Information Society (WSIS) strongly supported open access to information and Knowledge. Thus confirms that number countries of the United Nations will take appropriate strategic decisions to bring scholarly literature, produced from public fund research initiatives or state-supported researchers, under the umbrella of open Access. Some of the major open statements or declarations made during the past decade are given below:

- ◆ ARIIC Open Access Statement (Australian Research Information Infrastructure Committee) [www.caul.edu.au/scholcomm/OpenAccessARIICstatement.doc]
- ◆ Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities [<http://oa.mpg.de/openaccess-berlin/berlindeclaration.html>]
- ◆ Bethesda Statement on Open Access [www.earlham.edu/~peters/fos/bethesda.htm]
- ◆ Budapest Open Access Initiative Statement [www.soros.org/openaccess/]
- ◆ ERCIM Statement on Open Access (European Research Consortium for Informatics and Mathematics) [www.ercim.org/publication/Ercim_News/enw64/ercim-oa.html]
- ◆ IFLA Statement on Open Access to Scholarly Literature and Research Documentation
- ◆ NKC Statements on Open Access (National Knowledge Commission, India) [http://knowledgecommission.gov.in/downloads/documents/wg_lib.pdf & http://knowledgecommission.gov.in/downloads/documents/wg_open_course.pdf]
- ◆ OECD Declaration on Access to Research Data from Public Funding
- ◆ Washington DC Principles for Free Access to Science: A Statement from Not-for-Profit Publishers [www.dcprinciples.org/statement.htm]
- ◆ Wellcome Trust Position Statement in support of open and unrestricted access to published research [www.wellcome.ac.uk/doc_WTD002766.html]
- ◆ WSIS Declaration of Principles and Plan of Action (World Summit on the Information Society) [www.itu.int/wsis/docs/geneva/official/dop.html & <http://www.itu.int/wsis/docs/geneva/official/poa.html>]

India has spearheaded the Open access movement in developing countries since the last decade upscaling print based scholarly journals into open access electronic journals and establishing a number of open access repositories, both at national and institutional levels embracing free end open source software (FOSS). Various Indians R&D organizations, leading scientific research Institutions (such as Indian Institute of Science, IITs, ISI, Institutes under the CSIR and Indian

council of Medical Research etc.) are now taking part in the open access movement by establishing institutional and digital repositories to provide worldwide access to their research literature.

The NKC's Working Group on Open Access and Open Educational Resources and Working Group on Libraries have strongly recommended open access to public-funded research literature and supported establishment of open courseware repositories for countrywide dissemination of quality courseware to many cross-sections of people. If implemented, these recommendations will have far-reaching implications in the knowledge creation and dissemination cycle. The scholarly literature and lifelong learning materials produced by state-sponsored institutions would then be made accessible through open access channels such as national and institutional repositories. This way the NKC's recommendation on peer-reviewed research papers resulting from public-funded research would be validated by subject experts when making these resources available through open access channels.

Today, establishment of open courseware and cross-archive services are new fronts of open access initiatives. Indian information professionals are experimenting with open source software in the establishment of Institutional Repository (IR) systems in local libraries, using Greenstone, DSpace or EPrints software. Once an IR is successfully implemented in the local library set up, it is then upscaled to institution-wide application through campus networks or intranet. Similarly, it may open up to wider audiences once the authorities of the institution are convinced.

4. Open Access Journals

Open Access Journals maintain the traditional values of journals- notably peer review, but also editing and formatting and marketing. According to Velterop there are three criteria for a journal to be open access i.e. free accessibility to all articles, the depositing of all articles in an archive/repository, and a license granted for the right to copy or disseminate.

OA movement has made the Indian Journals reach the target audience of the world's communities and now more than hundred Indian Journals provides provide free access to full text contents. India is placed in the 6th position in the list of open access journals which is well ahead of countries such as the Netherlands, China, Germany, Australia etc. No matter the number or quality of OA journals and repositories in India, it has shown a great commitment amongst the developing world. As far as the journals are concerned some of the open access journals providers in India are listed below:

4.1 Indian National Science Academy (INSA): The Indian National Science Academy (INSA) is a scientific academy funded by the Government of India. It was established in 1935. INSA publishes 4 peer-reviewed journals, organizes scientific discussions and brings out proceedings and monographs. The e-journals@insa is a project of the Indian National Science Academy that was started in July 2002. Initially this was a NISSAT-supported project entitled "Building Digital Resources: Creating Facilities at INSA for hosting S&T Journals on Online", to facilitate conversion of INSA journals from

print to digital format and host these materials online. All INSA journals are open access and full-text is available as PDF files from the common journal gateway. Table 1 provides a list of INSA published open access journal titles.

Table 1: Indian National Science Academy Published Open Access Journals

Sr. No.	Journal Name	Full-Text Availability from Year and Volume No.
1.	Indian Journal of Pure And Applied Mathematics	1970-
2.	Indian Journal of History of Science	1966-
3.	Proceedings of the National Institute of Sciences of India (bifurcated into two parts from 1955 and published as Proceedings of National Institute of Sciences of India - Part A and Part B)	1935-1954
4.	Proceedings of the National Institute of Sciences of India Part A-Physical Sciences (re-christened as Proceedings of the Indian National Science Academy Part A & B)	1955-69
5.	Proceedings of the National Institute of Sciences of India Part B-Biological Sciences (re-christened as Proceedings of the Indian National Science Academy Part A & B)	1955-69
6.	Proceeding of INSA Part A Physical Sciences	1970-
7.	Proceeding of INSA Part B Biological Sciences	1970-

4.2 Indian Academy of Sciences (IAS): The Indian Academy of Sciences (IAS) is a scientific academy funded by the Government of India. It was established in 1934 and publishes 11 journals. All journals are open access and full-text literature is available as PDF files on each journal's website. All of the articles in current issues of these journals are born-digital. The articles of back volumes, which were not born-digital, have been digitized through a government-supported project. IAS has already archived all articles of journals from the first volume. From 2007 onwards, IAS journals are also available through Springer Link, a subscription-based gateway of electronic journals. Table 2 provides a list of IAS published open access journal titles.

Table 2 : Indian Academy of Sciences Published Open Access Journals

Sr.No.	Journal Name	Web Address	Full -text Availability from Year and Volume Number
1.	Current Science	www.ias.ac.in/currsci/	1932 (V.1)
2.	Journal of Chemical Sciences	www.ias.ac.in/chemsci/	1977 (V.86)

3.	Proceedings - Mathematical Sciences	www.ias.ac.in/mathsci/	1978 (V.87)
4.	Journal of Earth System Science	www.ias.ac.in/jess/	1978 (V.87)
5.	Sadhana (Proceedings in Engineering Sciences)	www.ias.ac.in/sadhana/	1978 (V.1)
6.	Pramana - Journal of Physics	www.ias.ac.in/pramana/	1973 (V.1)
7.	Journal of Biosciences	www.ias.ac.in/jbiosci/	1979 (V.1)
8.	Bulletin of Materials Science	www.ias.ac.in/matersci/	1979 (V.1)
9.	Journal of Astrophysics and Astronomy	www.ias.ac.in/jaa/	1980 (V.1)
10.	Journal of Genetics	www.ias.ac.in/jgenet/	1999 (V.78)
11.	Resonance - Journal of Science Education	www.ias.ac.in/resonance/	1996 (V.1)

4.3 IndianJournals.com: It provides single window access to multidisciplinary Indian journals published by different scholarly societies and institutions. It provides access to eleven open access journals and periodicals. This journal gateway also provides access to subscription-based content. These open access scholarly journals mainly belong to the science, technology and medicine (STM) areas. Table 3 provides a list of IndianJournals.com hosted open access journal titles.

Table 3 : IndianJournals.com Hosted Open Access Journals

Sr. No.	Journal Name	Full-text Availability from Year and Vol. No.
1.	Anil Aggrawals Internet Journal of Forensic Medicine and Toxicology	2000 (v.1)
2.	Fire Engineering	2004 (v.29)
3.	Indian Journal of Forensic Medicine & Toxicology	2007 (v.1)
4.	Indian Journal of Physiotherapy and Occupational Therapy	2007 (v.1)
5.	Indian Journal of Sleep Medicine	2007 (v.1)
6.	Journal of Bombay Veterinary College (The)	2004 (v.12)
7.	Journal of Neonatology	2003 (v.17)

8.	Journal of Research, SKUAST-J	2005 (v.4)
9.	Medico-Legal Update	2006 (v.6)
10.	Money and Finance	2004 (v.2)
11.	Vetline	2006 (v.6)

4.4 Kamla-Raj Enterprises is a Delhi-based publisher established in 1933. Kamla-Raj publishes seven print-based peer-review scholarly journals mainly in the areas of social sciences which are also available in electronic format on open access. These journals are OAI-compliant. The publisher maintains an archive of each of these open access journals starting from volume one. Table 4 provides a list of Kamla-Raj published open access journal titles.

Table 4 : Kamla-Raj Enterprises Hosted Open Access Journals

Sr.No.	Journal Name	Full-text Availability from Year and Volume No.
1.	Anthropologist , The	2003 (v.5)
2.	International Journal of Human Genetics	2001 (v.1)
3.	Journal of Human Ecology	2004 (v.15)
4.	Journal of Social Sciences	2004 (v.8)
5.	Studies of Tribes and Tribals	2003 (v.1)
6.	Studies on Ethno -Medicine	2007 (v.1)
7.	Studies on Home and Community Science	2007 (v.1)

4.5 Indian MEDLARS Centre : At the National Informatics Centre has initiated two unique projects with support from the Indian Council of Medical Research. The first one is INDMED@NIC that indexes 70+ prominent biomedical journals of India from 1985 onwards. This INDMED bibliographic database is available online. Another project, MEDIND@NIC is an open access initiative from NIC that provides open access to the full-text content of 38 Indian biomedical journals. MEDIND@NIC aims at providing online access to full-text Indian biomedical periodicals to the users within and outside India. Table 5 provides list of INDMED@NIC hosted open access journal titles.

Table 5 : MEDIND@NIC Hosted Open Access Journals

Sr.No.	Journal Name	Full-text Availability from Year and Volume No.
1.	Annals of Cardiac Anaesthesia	2005 (v.8)
2.	Endodontology	2000 (v.12)
3.	Health Administrator	2000 (v.9)
4.	Indian Journal of Aerospace Medicine	2000 (v.44)
5.	Indian Journal of Allergy Asthma and Immunology	2000 (v.14)
6.	Indian Journal of Anaesthesia	2002 (v.46)
7.	Indian Journal of Chest Diseases and Allied Sciences	2000 (v.42)
8.	Indian Journal of Clinical Biochemistry	2002 (v.17)
9.	Indian Journal of Community Medicine	2000 (v.25)
10.	Indian Journal of Gastroenterology	2004 (v.23)
11.	Indian Journal of Medical and Paediatric Oncology	2001 (v.22)
12.	Indian Journal of Medical Microbiology	2001 (v.19)
13.	Indian Journal of Medical Research	2004 (v.119)
14.	Indian Journal of Nephrology	2001 (v.11)
15.	Indian Journal of Nuclear Medicine	2002 (v.17)
16.	Indian Journal of Occupational and Environmental Medicine	2003 (v.7)
17.	Indian Journal of Occupational Therapy	2002 (v.33)
18.	Indian Journal of Otolaryngology and Head and Neck Surgery	2001 (v.53)
19.	Indian Journal of Pediatrics	2005 (v.72)
20.	Indian Journal of Pharmacology	2000 (v.32)
21.	Indian Journal of Preventive and Social Medicine	2003 (v.34)
22.	Indian Journal of Radiology and Imaging	2004 (v.14)
23.	Indian Journal of Sexually Transmitted Diseases	2004 (v.25)

24.	Indian Journal of Thoracic and Cardiovascular Surgery	2003 (v.19)
25.	Indian Journal of Tuberculosis	2000 (v.47)
26.	Indian Pediatrics	2004 (v.41)
27.	J.K. Practitioner	2001 (v.8)
28.	Journal, Indian Academy of Clinical Medicine	2000 (v.5)
29.	Journal of Family Welfare	2000 (v.46)
30.	Journal of Indian Academy of Forensic Medicine	2004 (v.26)
31.	Journal of Indian Rheumatology Association	2002 (v.10)
32.	Journal of Obstetrics and Gynecology of India	2004 (v.54)
33.	Journal of the Anatomical Society of India	2001 (v.50)
34.	Journal of Indian Association of Pediatrics Surgeons	2001 (v.6)
35.	Journal of Indian Society of Pedodontics and Preventive Dentistry	2000 (v.18)
36.	Medical Journal Armed Forces India	2000 (v.56)
37.	NTI Bulletin	2000 (v.36)
38.	Trends in Biomaterials and Artificial Organs	2001 (v.15)

4.6 Medknow Publications Private Limited is a publisher of high-quality peer-reviewed scholarly open access journals in India. Medknow publishes, maintains and hosts 48+ peer-reviewed scholarly journals, mainly in the biomedical subject areas. Medknow also provides solutions to the scientific societies and scholarly institutions, through Journal-on-Web a web-based manuscript submission and peer review system that handles pre-publication and post publication processes for journal issues. Medknow collaboratively publishes the electronic versions of some existing journals of learned societies and institutions in India. Table 6 provides a list of Medknow hosted open access journal titles.

Table 6 : Medknow Publications Hosted Open Access Journals

Sr.No.	Journal Name	Full-text Availability from Year and Volume No.
1.	African Journal of Paediatric Surgery	2007 (v.4)
2.	Annals of Indian Academy of Neurology	2006 (v.9)

3.	Annals of Thoracic Medicine	2006 (v.1)
4.	Asian Journal of Transfusion Science	2007 (v.1)
5.	Hepatitis B Annual	2004 (v.1)
6.	Indian Journal of Cancer	2003 (v.39)
7.	Indian Journal of Community Medicine	2007 (v.32)
8.	Indian Journal of Critical Care Medicine	2003 (v.7)
9.	Indian Journal of Dental Research	2006 (v.17)
10.	Indian Journal of Dermatology	2005 (v.50)
11.	Indian Journal of Dermatology, Venereology, and Leprology	2001 (v.56)
12.	Indian Journal of Human Genetics	2002 (v.8)
13.	Indian Journal of Medical Microbiology	2001(v.19)
14.	Indian Journal of Medical Sciences	2001 (v.55)
15.	Indian Journal of Nephrology	2007 (v. 17)
16.	Indian Journal of Occupational and Environmental Medicine	2003 (v.7)
17.	Indian Journal of Ophthalmology	1975 (v.23)
18.	Indian Journal of Orthopaedics	2007 (v.41)
19.	Indian Journal of Palliative Care	2004 (v.9)
20.	Indian Journal of Pharmaceutical Sciences	2006 (v.68)
21.	Indian Journal of Pharmacology	1969 (v.1)
22.	Indian Journal of Plastic Surgery	2001 (v.34)
23.	Indian Journal of Psychiatry	2005 (v.47)
24.	Indian Journal of Radiology and Imaging	1999 (v.9)
25.	Indian Journal of Sexually Transmitted Diseases	2007 (v. 28)
26.	Indian Journal of Surgery	2003 (v.65)
27.	Indian Journal of Urology	2005 (v.21)
28.	International Journal of Diabetes in Developing Countries	2001 (v.21)
29.	International Journal of Shoulder Surgery	2007 (v.1)

30.	International Journal of Yoga	2007 (v.1)
31.	Journal of Cancer Research and Therapeutics	2005 (v.1)
32.	Journal of Gynecological Endoscopy and Surgery	2008 (v.1)
33.	Journal of Human Reproductive Sciences	2008 (v.1)
34.	Journal of Indian Association of Pediatric Surgeons	2005 (v.10)
35.	Journal of Indian Society of Pedodontics and Preventive Dentistry	2005 (v.23)
36.	Journal of Medical Physics	2006 (v.31)
37.	Journal of Minimal Access Surgery	2005 (v.1)
38.	Journal of Oral and Maxillofacial Pathology	2007 (v.11)
39.	Journal of Pediatric Neurosciences	2006 (v.1)
40.	Journal of Postgraduate Medicine	1980 (v.26)
41.	Journal of Sexual Medicine, Andrology and Gender	2008 (v.1)
42.	Medical Law Cases for Doctors	2008 (v.1)
43.	Mens Sana Monographs	2003 (v.1)
44.	Neurology India	1999 (v.47)
45.	Noise and Health	1998 (v.1)
46.	Saudi Journal of Gastroenterology	2006 (v.12)
47.	The Journal of Indian Prosthodontic Society	2005 (v.5)

5. Conclusion

Open access is a new trend in scholarly communication which aims at providing free access to scholarly literature over the internet and has gained enormous momentum in the recent years. It is largely achievable in a country where policy frameworks, institutional frameworks, information infrastructure, trained manpower and financial resources are adequately available. The future of the OA movement is to fill up repositories, providing open access to full text and diversification of content where it does not exist. INFLIBNET mandates to improve computer and networking facilities in Indian libraries. Open access to scientific journals is beneficial to scholars and has wide support as a concept, but it needs viable revenue models and great commitment among its promoters. The

emphasis should be primarily on setting up open achieves rather than on persuading journal publishers to make their journal open access. Further DRTC plans to include open access journals in library Science. Several national and international conferences, seminar and symposia were also organized in India, where library professionals discussed methods and techniques of digitization, digital library development, institutional repository development and digital preservation. Today various initiatives are likely to arise in future which is supposed to establish a strong OA scenario in India.

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