

1. Background

The UGC-Infonet Digital Library Consortium was formally launched December, 2003 by Honourable Dr. A P J Abdul Kalam, the then President of India, soon after providing the Internet connectivity to the universities in the year 2003 under the UGC-Infonet programme. The Consortium proved to be a recipe to university libraries, which have been discontinuing subscription of scholarly journals because of "Serials Crisis" that refers to exponential and continuing increase in subscription cost of scholarly journals. The crisis is a result of rise in cost of journals much faster than the rate of inflation, increase in number of journals and the paucity of funds available to the libraries.

The universities were given benefit of access to e-resources under the UGC-Infonet Digital Library Consortium in a phased manner. In the first phase that began in 2004, access to e-resources was provided to 50 universities who had Internet connectivity under the UGC-Infonet Connectivity programme of the UGC. In the second phase, 50 more universities were added to the programme in the year 2005. So far, 150 universities out of 171 that come under the purview of UGC, have been provided differential access to e-resources subscribed under the Consortium. These e-resources covers almost all subject disciplines including arts, humanities, social sciences, physical sciences, chemical sciences, life sciences, computer sciences, mathematics and statistics, etc. The programme is wholly funded by the UGC and executed by the INFLIBNET (Information and Library Network) Centre, Ahmedabad.

The UGC-INFONET Digital Library Consortium, on the basis of sheer strength of present and prospective numbers of universities, has attracted the best possible price and terms of agreement from the publishers. The Consortium provides current as well as archival access to more than 5,000 core and peer-reviewed journals and a number of bibliographic databases from 23 publishers and aggregators in different disciplines. The INFLIBNET Web Site (<http://www.inflibnet.ac.in>) hosts a search interface to search these journals, their URLs and member institutions.

The benefit of subscription to e-resources will also be extended to the colleges, to begin with the College for Potential with Excellence (CPE). The Consortium also plans to launch its "Associate Membership Programme" wherein private universities and other research organizations would be welcomed to join the Consortium for selected e-resources.

2. Current Status

The Consortium provides differential access to more than 5,000 scholarly journals and ten bibliographic databases from 23 major publishers (including scholarly societies, university presses and aggregators) to more than 125 universities. Besides access to their current issues, most journals are available with their archives from 1997 onwards. Some of the publishers like American Chemical Society, Institute of Physics, and JSTOR provide access to their contents from Vol. 1 onwards.

The access to e-resources is IP-enabled for the universities covered under the consortium. Users in the universities can browse, search, download and print full-text articles relevant to their research and academic work without any restrictions in terms of number of articles that they can download or number of simultaneous users. Multiple users can access the databases and e-journal platforms simultaneously. The INFLIBNET Web Site (<http://www.inflibnet.ac.in>) hosts a search interface to search these journals, their URLs and member institutions.

The INFLIBNET Centre, Ahmedabad also maintains one print copy of the journals from several publishers as a national print archive. The research and academic community can refer the print journals at the INFLIBNET Centre.

3. Objectives

The major aims and objectives of the UGC-Infonet Digital Library Consortium are as follows:

- To subscribe electronic resources for the universities at a highly discounted rates of subscription and at the best terms and conditions;
- To extend the benefit of consortium-based subscription to all Indian universities and colleges;
- To extend the benefit of consortium to associate members of this Consortium;
- To impart training to the users, librarians, research scholars and faculty members of the institutions on the electronic resources with an aim to optimize their usage;
- To have increase interaction amongst the member libraries;
- To increase the research productivity of the institutions both in terms of quality and quantity of publications;
- To evaluate the usage of the resources subscribed; and
- To identify new resources that are required to be subscribed under the programme based on the availability of resources and funds.

4. Major Activities of the UGC-INFONET Digital Library Consortium

Major activities of the Consortium are as follows:

- i) To arrange subscription to electronic resources identified and negotiated by the members of its National Steering Committee;
- ii) To measure usage of existing e-resources and its impact of research output in terms of number of research publications;
- iii) To identify new resources relevant to the user community in universities;
- iv) Interaction with member libraries to ensure optimal utilization of subscribed electronic resources;
- v) Ensure access to subscribed electronic resources to member universities as per their subscription;
- vi) Organize training programmes for the member institutions on use of electronic resources;
- vii) Interact with the officials in UGC for continuation and promotion of the programme;
- viii) Interact with ERNET India for providing uninterrupted Internet bandwidth in the member universities;
- ix) Initiate additional activities complementary to the present activities of the Consortium; and;
- x) Encourage interactions amongst member libraries.

5. Membership

The UGC-INFONET Digital Library Consortium has the following two types of members:

5.1. Universities under Purview of UGC

171 universities, Inter-University Centres of the UGC and deemed universities that are under direct purview of UGC, are entitled for getting e-resources through the UGC-INFONET Digital Library Consortium. Of 171 universities, 150 universities that have been given Internet connectivity under the UGC-INFONET Connectivity Programme, are being provided differential access to e-resources as per the decision of the National Steering Committee of the Consortium. Some of the universities of the remaining 21 universities will be covered in subsequent years. However, quite a few of these universities are highly specialized dealing with subjects like Urdu, Sanskrit, Hindi and Law, etc. As such, these universities do not have much use for e-resources that are being offer through the Consortium.

The UGC provides funds required for providing differential access to electronic resources as well as Internet connectivity to universities directly under the purview of the UGC.

5.2. Associate Membership Programme

It is proposed to launch "Associate Membership Programme" of the UGC-INFONET Digital Library Consortium with an aim to enroll private universities and other institutions as members with an aim to provide them access to e-resources at lower rates of subscription that is being offered to the Consortium. The Consortium has invited quotations from the publishers for its "Associate Members". The Associate Members will be required to pay a fixed annual fee to the Consortium in addition to subscription fee for e-resource that they wish to subscribe.

6. Governance

The UGC-INFONET Digital Library Consortium is being operated by the INFLIBNET Centre. A National Steering Committee, consisting of members from universities and other experts under the Chairmanship of Prof. Ajit Kembhavi, IUCAA, has been constituted to guide and steer the activities of the Consortium.

A National Review Committee has also been constituted under the Chairmanship of Prof. S.K. Thorat, Chairman, UGC with an overall responsibility for making policies, monitoring the progress, coordinating with other Consortium in the country and for promoting the activities of the Consortium. Composition of existing National Steering Committee of the Consortium is given in Appendix I.

7. Electronic Resources Subscribed by the Consortium

Electronic resources subscribed by the consortium can broadly be divided into the following two categories:

7.1. Full-text Electronic Resources

Full-text electronic resources contain complete articles along with their bibliographic details. The consortium subscribes to full-text e-resources from academic societies, commercial publishers and aggregators like American Chemical Society, American Institute of Physics, Oxford University Press, Cambridge University Press, Cell Press, Springer Link, Jstor, Project Muse, etc. All full-text resources subscribed by the Consortium contain electronic journals.

7.2. Bibliographic Databases

Bibliographic databases contain references to articles published in journals, conference proceedings or chapters in books. Most bibliographic databases contain abstracts of the articles along with links to their full-text.

The Consortium subscribes to 19 full-text e-resources and 10 bibliographic databases. The member institutions are provided differential access to these resources based on their needs and activity profile as per the recommendation of the National Steering Committee.

Electronic Resources Subscribed by the UGC-Infonet Digital Library Consortium			
Full-Text E-Resources			
1.	American Chemical Society (ACS)	17.	Royal Society of Chemistry (RSC)
2.	American Institute of Physics (AIP)	18.	SIAM Journals
3.	American Physical Society (APS)	19.	Springer Link
4.	Annual Reviews	20.	Taylor & Francis
5.	Blackwell Publishing (Wiley InterScience)	Bibliographic Databases	
6.	Cambridge Univ. Press–STM		
7.	Cambridge Univ. Press–HSS	1.	J-Gate Custom Content for Consortia (JCCC)
8.	Cell Press (Elsevier)	2.	MathSciNet
9.	Emerald - Library Science Collection	3.	SciFinder Scholar
10.	Institute of Physics (IoP)	4.	ISID
11.	Jstor	5.	Analytical Abstracts
12.	Nature	6.	Catalysts & Catalysed Reactions
13.	Oxford University Press (OUP)	7.	Methods in Organic Synthesis
14.	Portland Press	8.	Natural Product Updates
15.	Project Euclid	9.	Chemical Hazards in Industry
16.	Project Muse	10.	Laboratory Hazards Bulletin

For coverage of the latest techniques and applications. The premier current awareness and information retrieval service tailored to analytical scientists.

7.3. Resources Accessible to the Member Institutions

Resources accessible to the universities under the UGC-INFONET Digital Library Consortium are mentioned in the table given below.

Electronic Resources Subscribed by the UGC-INFONET Digital Library Consortium					
SI. No.	Electronic Resources	URL	No. of Jrnls.	No. of Univ.	Phase
Full-text Resources					
1.	ACS	http://www.pubs.acs.org/	37	100	I & II
2.	AIP	http://www.scitation.org/	18	100	I & II
3.	APS	http://www.scitation.org/	10	100	I & II
4.	Annual Reviews	http://arjournals.annualreviews.org/	33	100	I & II
5.	Blackwell Publishing (Wiley InterScience)	http://www3.interscience.wiley.com	497	60	I & II
6.	CUP-STM	http://journals.cambridge.org/	223	100	I & II
	CUP-HSS	http://journals.cambridge.org/		50	I & II
7.	Cell Press (Elsevier)	http://www.sciencedirect.com/	34	50	I
8.	Emerald – Lib. Sci.	http://iris.emeraldinsight.com/	29	60	I & II
9.	Institute of Physics	http://www.iop.org/EJ/	46	100	I & II
10.	Jstor	http://www.jstor.org/	1048	64	I & II
11.	Nature	http://www.nature.com/	1	50	I & II
12.	OUP	http://www.oxfordjournals.org	198	75	I & II
13.	Portland Press	http://www.portlandpress.com/pp/default.htm	8	50	I
14.	Project Euclid	http://projecteuclid.org/	36	50	I
15.	Project Muse	http://muse.jhu.edu/journals	297	100	I & II
16.	RSC	http://www.rsc.org/	29	100	I & II
17.	SIAM Journals	http://epubs.siam.org/	14	50	I
18.	Springer Link	http://www.springerlink.com/	1950	125	I – III
19.	Taylor & Francis	http://journalsonline.tandf.co.uk/	1076	80	I & II
Bibliographic Databases					
20.	JCCC	http://jccc-infonet.informindia.co.in/		150	I - III
21.	MathSciNet	http://www.ams.org/mathscinet		50	I
22.	SciFinderScholar	http://www.cas.org/SCIFINDER/SCHOLAR/index.html		20	I
23.	Analytical Abstracts	http://www.rsc.org/Publishing/CurrentAwareness/AA/index.asp		100	I & II
	Catalysts & Catalysed Reactions	http://www.rsc.org/Publishing/CurrentAwareness/CCR/About.asp		100	I & II
	Methods in Organic Synthesis	http://www.rsc.org/Publishing/CurrentAwareness/MOS/index.asp		100	I & II
	Natural Product Updates	http://www.rsc.org/Publishing/CurrentAwareness/npu/About.asp		100	I & II
	Chemical Hazards in Industry	http://www.rsc.org/Publishing/CurrentAwareness/CHI/index.asp		100	I & II
	Laboratory Hazards Bulletin	http://www.rsc.org/Publishing/CurrentAwareness/LHB/index.asp		100	I & II
24.	ISID	http://isid.org.in		150	I - III

8. Using E-Resources

8.1. Advantages

Some of the advantages to using electronic journals are as follows:

- i) Several journals, like Nature and Science, publish supplementary material online. Such material may include experimental details, video clips or voluminous tables;
- ii) Several publishers, like American Chemical Society (ACS), have policies to make their articles available on the Web "As Soon As Publishable (ASAP)". Online First (Springer), Article in Press (Elsevier Science) and Online Early Link (Blackwell) are other similar examples;
- iii) Electronic journals generally offer their articles in PDF (Portable Document Format) which is a highly compressed format. A modest-size hard disk can store hundreds of articles;
- iv) Most electronic journals in their "HTML" versions provide a lot of linking facilities wherein citations are linked to their full-text or abstracts in databases like MEDLINE or INSPEC, keywords are linked to other articles in the database on hyperlinked keywords, author's name(s) are linked to other articles by the same author in journals published by the same publisher. The electronic journals, therefore, facilitate going backwards and forwards in the scientific literature;
- v) Several journals send the table of contents for their new issues by e-mail. Similarly, several web-based databases conduct search on subject profile defined by a user and mail the search results to users periodically; and
- vi) Most publishers of e-resources provides personalized services to its users, such as "My Profile", RSS Feeds, "Ask-an-Expert" or "Ask-a-Librarian".

8.2. How to Access Electronic Resources?

The access to electronic resources are IP-enabled for the member universities. As such a user does not require "Login ID and Password" to access resources available to his / her university, instead, the resources are accessible to them anywhere on their Campus network. Most universities provide links to such resources through their website. The Consortium also maintains a website (<http://inflibnet.ac.in/econ/>). Users are encouraged to use the Consortium websites for correct URLs.

While, the IP addresses provide by the ERNET India to the universities under the UGC-INFONET Programme are already registered with the publishers for access to e-resources, universities may obtain additional bandwidth either from the ERNET or any other Internet Service Provider. However, IP addresses associated with the additional bandwidth should be communicated to the Consortium as well as to the publishers for getting access to e-resource on additional IPs. A brief write-up on Internet.

8.3. Creating Awareness

The INFLIBNET Centre organizes "One Day User Awareness Programme" at universities beneficiary of access to e-resources through the Consortium. The INFLIBNET Centre deposes a team consisting of one officer with an assistant to execute these programmes in collaboration with the hosting universities and publishers. 62 "One-Day Awareness Programmes" have been organized in past four years so far. Contact INFLIBNET Centre for conducting "Awareness Programme" in your university.

8.4. Finding E-Journals

The UGC-INFONET Digital Library Consortium subscribes to more than 5,000 electronic journals including journals available in aggregated databases like JStor, Project Muse, Project Euclid, etc. There are following ways to find out journals available to the universities covered under the Consortium:

- ☞ The Consortium website (<http://inflibnet.ac.in/econ/>) provides an interface for searching e-journals along with their URLs. Click at "Search";
- ☞ Alphabetical list of journals is also available from the Consortium website (<http://inflibnet.ac.in/econ/>). Click at "Search";
- ☞ Some of the universities may also have Web sites with their own interfaces for e-journals accessible to them; and
- ☞ The JCCC interface (<http://jccc-infonet.informindia.co.in>) provides content level access to e-journals accessible to members of the Consortium either through the Consortium subscription or through individual library subscription.

8.5 Using E-Journals

Electronic journals from different publishers are generally available in standard formats like HTML or PDF, and are made accessible in the same or similar ways. The web sites of publishers provides user interfaces that facilitates browsing of journals through table of contents and conduct searches on subject terms, words in title, authors, etc. Articles in e-journals are available in either HTML, PDF or PostScript formats. To view a document in PDF format, you need Adobe Acrobat Reader installed on your computer. The Adobe Acrobat Reader can be downloaded free from <http://www.adobe.com/products/acrobat/readstep2.html>. A tutorial of Acrobat Reader is given in this compilation (See). Follow the steps given below to use an electronic journal:

- ☞ Find the Web site for the e-journal you require (See "Finding e-journals");
- ☞ Look for link to the volumes / issues available for that journal, click at the required volume and issue;
- ☞ This will take you to the Table of Contents (ToC) of selected volume / issue. Scroll through the table of contents (arranged according to page numbers) and find the article you require;
- ☞ Click on the full-text / PDF / HTML / Post-Script link to view the article;
- ☞ Print the article or save it to your disk.

While separate tutorials / guides are available for each resource subscribed by the Consortium, features and facilities generally offered by every electronic journal are as follows:

8.5.1. Navigation

All e-journals provide tools to navigate within a journal; from one volume to another volume; from one issue to another issue and from one journal to another journal published by the same publisher. Basic navigation icons like Home page, Online Help, Recent issues, Archives, etc. are mostly available on each page.

Most Internet browsers (like Internet Explorer and Netscape Navigator) have a back button for returning to previous page. Most browsers are capable of searching a word or a phrase on a single page being displayed. Press "Control" and "F" simultaneously to invoke this facility. A separate tutorial is provided for navigating articles in PDF format.

8.5.2. Browse

You can browse an e-journal just as you browse a print journal using electronic browsing features offered by most e-journals that are more convenient than conventional print journals. All e-journals provide Table of Contents (ToC) in HTML format for their current as well as for old issues. The ToC is a listing of articles in an issue in order of their appearance in the printed journals. Select a volume / issue for browsing its Table of Contents. Each article in a ToC contains link to its abstract and full-text (in PDF and / or HTML and / or PostScript formats). Click at either of them to view it. Adobe Acrobat Reader is required to open a PDF version of an article. An HTML document can be opened directly in a browser. Each entry of an article in a Table of Contents (ToC) appears in the format given below:

- 5. Identification of a mitochondrial ATP synthase-adenine nucleotide translocator complex in Leishmania
Pages 16-20
Siegfried Detke and Rania Elsabrouty
SummaryPlus | Full Text + Links | PDF (236 K) | View Related Articles

The above entry is from the Table of Contents of a journal entitled "Acta Tropica", Volume 105, Issue 1, January 2008 (Science Direct). The Box on the left hand can be clicked for further processing. The last link of the article provides link to different versions of article (i.e. SummaryPlus / Full-Text / PDF).

➤ Browsing through JCCC

You can also browse e-journals using the JCCC. See the tutorials for JCCC for further details.

➤ E-mail Alerts

Most electronic journals facilitate setting-up of an email alert for the table of contents from a specific journal or group of journals. A user is generally required to create a personal profile or personal login where user may specify journal(s), subject area, frequency of email alert, etc. A user may set-up e-mail alerts for browsing. See Section 9 in this unit to learn more about setting-up e-mail alerts.

8.5.3 Search

Most of the journals provides two types of search namely i) Simple Search ii) Advanced search. Some journals also provides other searches like CrossRef Search, Quick search, Citation Search etc.

8.5.3.1 Simple Search

The users are presented with one or two search query boxes with pull-down menu to use logical operators (AND, OR, NOT) or to restrict the search to chosen fields (i.e. author, title, abstract, etc.) or to expand it to all fields. The typical simple search interface is given below:



Simple Search Interface for Taylor and Francis

8.5.3.2 Advanced Search

The Advanced Search can be used to search for specific terms in certain fields such as abstract, journal title, article title, keywords, authors, references, publication year, volume number etc including searching across all fields at once. The advanced search allows a user to perform wide range of advanced searches. A user can use the normal Boolean operators to define complex search criteria, with the Advanced Search. A user can also choose how to view the results of a performed search. He/she is required to be thorough with techniques of conducting a search query. A user is responsible for correct syntax and use of valid combinations of query words and operators for getting the best results. There are options at the bottom of the page to view results by relevancy or date and in summary form or full information and also how many results you wish to have displayed on a page. Use the **Search** button to activate search query.

Search Techniques

The following search techniques can be used on any of the Advanced search screens.

➤ Boolean Searching

Boolean logic defines relationships between search terms. The Boolean search operators, **AND**, **OR** and **NOT**, allow a user to broaden or narrow the search results.

Operator	Description
AND	Finds documents containing both words it joins.
OR	Finds documents containing either of the words it joins.
NOT	Finds documents containing the word preceding it and excludes documents containing the word that follows it.
<NEAR>	Finds documents containing words that are in the same general area, but may or may not be adjacent.
<PHRASE>	Finds documents containing phrases, words that are adjacent to each other.
, (comma)	Finds documents containing at least one of the words specified, ranking them using "the more, the better" approach, so documents with the most evidence of the words searched for are given the highest rank.

➤ **The Wildcard (?) and Truncation (*) Symbols**

Use the wildcard and truncation symbols to create searches where there are unknown characters, multiple spellings or various endings. Please note that neither the wildcard nor the truncation symbol can be used as the first character in a search term.

Symbol	Description
?	<p>➤ Use a question mark (?) to replace exactly one character in a search word. Use one question mark for each character you want to replace.</p> <p>For example: gro?t would find grout, or goat, but it would not find groundnut or grommet.</p>
	<p>➤ If you use question marks to replace letters, make sure the number of question marks in the search term corresponds to the number of letters that you want to replace exactly.</p> <p>For example: transplant?? would find "transplanted" and "transplanter".</p> <p>Note: transplant?? would not find "transplantation", "transplanting", or "transplant". Two wildcard characters were used, so only words with two extra characters would be found. To find all variations of "transplant", use the asterisk (*) wildcard character.</p>
	<p>➤ Use a question mark to hold a space for certain variations in spelling at any point in a word.</p> <p>For example: bernst??n would find both the "ei" and the "ie" spelling of the name.</p> <p>Note: For some words, it is better to use the asterisk to account for spelling variations. For example, searching for behavio?r would not return results that included "behavior"; however, searching for behavio*r would return results that included both "behavior" and "behaviour".</p>
*	<p>➤ Use an asterisk (*) to replace zero or more characters in a search word. For example, you could use * to find a root word plus all the words made by adding letters to the end of it.</p> <p>For example : h*r*t will find heart, harvest, homograft, or hypervalent,</p>

➤ Proximity Search

A Proximity Search produces results that contain two or more terms that appear a specified number of words (or fewer) apart in the database(s). The proximity operator is placed between the terms that are to be searched.

"HTML" <NEAR> publishing

Will find documents that contain the word "HTML" and "publishing" within close proximity of each other (either before or after), i.e. it might fetch terms like "HTML and Electronic Publishing", "Electronic Publishing Using HTML", or "Publishing Electronic Text with HTML".

➤ Grouping Terms Together Using Parentheses

Parentheses can be used to control a search query. Without parentheses, a search is executed from left to right. However, words enclosed in parentheses are searched first. Parentheses allow you to define the way the search will be executed. The left phrase in parentheses is searched first; then, based upon those results, the second phrase in parentheses is searched. For example:

Generalized Search: heart or lung and blood or oxygen

Focused Search: (heart or lung) and (blood or oxygen)

In the first example, the search will retrieve everything on **heart**, as well as references to the terms **lung** and **blood**, and everything on **oxygen**. In the second example, parentheses control the query to *only* find articles about **heart** or **lung** that reference **blood** or **oxygen**.

The screenshot displays the 'Advanced Search' interface for Taylor and Francis. The search criteria are defined as follows:

- Search articles and chapters for: [] ALL words in [Article/Chapter Title]
- [AND] [] ALL words in [Author(s)]
- [AND] [] ALL words in [Publication Name]

Use stemming? [?]

Search Within:

- All
- eBooks
- Journals
- Reference Works
- Educational Research Abstracts Online
- My subscriptions only

Subject: [?] [hide]

Limit to the following subjects [add subject to list]

There are no selected subjects.

Educational Research Abstracts Options: [?] no limits [show]

Date Published:

- All
- In the last 1 Week
- Between 1 / January / 1923 and 31 / December / 2008

Order Results by:

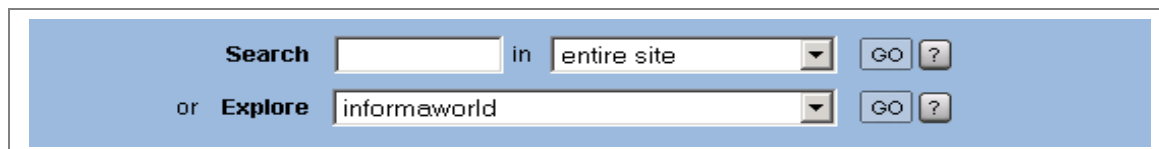
- Relevance
- Oldest

The interface also includes a 'Search' button, a 'hide' button for the search criteria, and a 'show' button for the Educational Research Abstracts Options. A sidebar on the right provides additional information about the advanced search form.

Advanced Search Interface for Taylor and Francis

8.5.3.3 Quick Search

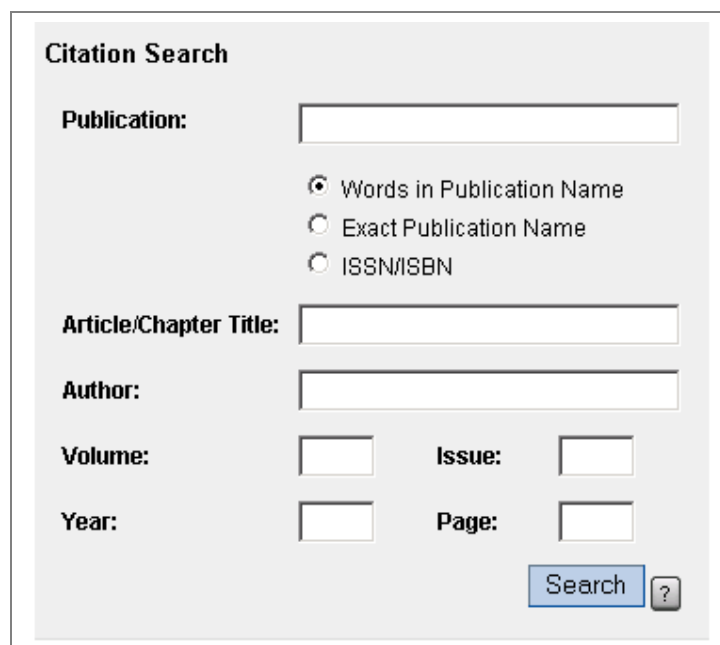
A quick search box is available on most pages. To use the Quick Search facility, enter search terms into the box and click on **Search**. This will run a search across the full text of all articles on the site and their associated metadata fields (title, author names, keywords, etc). Quick Search interface is given below.



Quick Search Interface for Taylor and Francis

8.5.3.4 Cite Search

Cite Search provides you with a quick way of searching for content if you have an article citation to hand, or if you know some or all of the bibliographic details of the content you are looking for. In other words, it is a more precise search tool than 'Quick Search' because you can use more search criteria. At the same time, because you already know what you are looking for you don't need the powerful search capabilities provided by 'Advanced Search'.



Cite Search Interface for Taylor and Francis

8.5.3.5 CrossRef Search

CrossRef Search enables full-text interpublisher searching of scholarly research content.

9. Deriving Maximum Benefits from E-resources

The user's interface for most of the web sites of e-resources offers features and facilities like setting-up e-mail alerts and favourite journals, saving search strategies and search results, RSS feeds, etc. Use of such features and facilities help users to derive maximum benefits from the bibliographic databases and full-text resources online and offline. A user is required to create a personal profile or personal login to use these features and facilities.

9.1. E-mail Alerts

Most bibliographic and full-text databases offer the ability to set up an e-mail alert for the table of contents from a specific journal or group of journals. A user can subscribe to e-mail alerts to get periodic emails with links to new content automatically that are added to the publisher's web site.

9.1.1. Types of E-mail Alerts

Different publishers provide different types of e-mail alerts. Types of e-mail alerts offered by different publishers are mentioned below:

- **Table of Contents (ToC) Alerts:** Most publishers offer Table of Content (ToC) e-mail alerts. The ToC Alerts are sent to subscribing user as soon as a new issue of a journal is published online.
- **Enhanced Alerts:** Enhanced Alerts allow a user to design his / her alerts on selected subject categories or keywords. A user is alerted as soon as article(s) matching his / her criteria are published.
- **New Issue Alerts:** A user gets e-mail alerts with link to new issues of chosen journals as soon as it is published.
- **Citation Alerts:** A user receives emails when selected article(s) are cited by new article(s). such alerts include full citation details (title, author, journal, volume, issue, page number) of the citing article.
- **Publication Alerts:** A user gets mail when there are new publications in selected subject areas.
- **eBook Series Alerts:** A user gets mail when new eBooks in selected series is published.
- **iFirst Alerts:** A user gets mail when new iFirst articles (articles that are accepted for publication) are available.
- **Database Alerts:** A user gets an e-mail alert as and when the selected database is updated with new records.
- **Reference Work Alerts:** A user gets mail as and when the selected Reference Works is updated.
- **Search Alerts:** A user gets e-mail alert when new content matching his / her saved search expression are added to the publisher's site.

9.1.2. How to Get E-mail Alerts?

A user is generally required to create a personal profile or personal login where user may specify journal(s), subject area, frequency of email alert, etc. Follow the steps given below to create e-mail alerts:

- ☞ Go to the e-journal publisher's web site;
- ☞ On the e-journal publishers web site, look for wording like: Email Alert, Table of Contents Alert, Alert or Personal Profile, My Profile, User Profile, etc. All major e-journal publishers offer some sort of email alert service;
- ☞ The first time when a user requests an email alert or table of contents alert, he or she will be required to create a personal user profile / user login. A user will be prompted to provide details such as name, email address, postal address, field of interest, user name, password, etc. Follow the steps given on the screen;
- ☞ Once these details are filled-in and a login ID and password is assigned to the user, he / she is required to login on to the publisher's web site and then from there he / she can start creating his / her user profile. A user may select journal titles or subject areas that he / she would like to receive regular email alerts for, follow the steps on screen;
- ☞ All e-journal publishers that provide an email alerting service, provide some kind of on-line help and /or FAQs.

Examples of creating e-mail alert for two full-text resources, i.e. Science Direct and Cambridge University Press is given below.

9.1.3. Creating an Email Alert in Science Direct

9.1.3.1. Email Alerts from Science Direct

The Science Direct from the Elsevier Publishers acts more like a database than an e-journal website because of enormous number of e-journals it hosts. Science Direct contains the full text of more than 2,000 journals on life, physical, medical, technical, and social sciences (including graphics and tables). Besides providing access to the full text journals, the Science Direct also provides abstracting and indexing databases covering over 12.5 million records. The UGC-Infonet Consortium subscribes to 34 journals published by the Elsevier Science under "Cell Press" hosted on Science Direct platform

A user is required to create personal login before he / she is allowed to create an email alert. To create login follow the steps given below:

- ☞ Click on the Personal Login button and follow the steps;
- ☞ Login using Personal Login assigned in the step 1;
- ☞ Create a new search using the Basic search form, click on the Search button;
- ☞ From the results screen, save the search as an Email Alert;
- ☞ The user is then prompted to enter in a name for his / her alert;
- ☞ Select the frequency of the alerts; and

- ☞ Click on the Save Alert button

How to Modify an E-mail Alerts in Science Direct

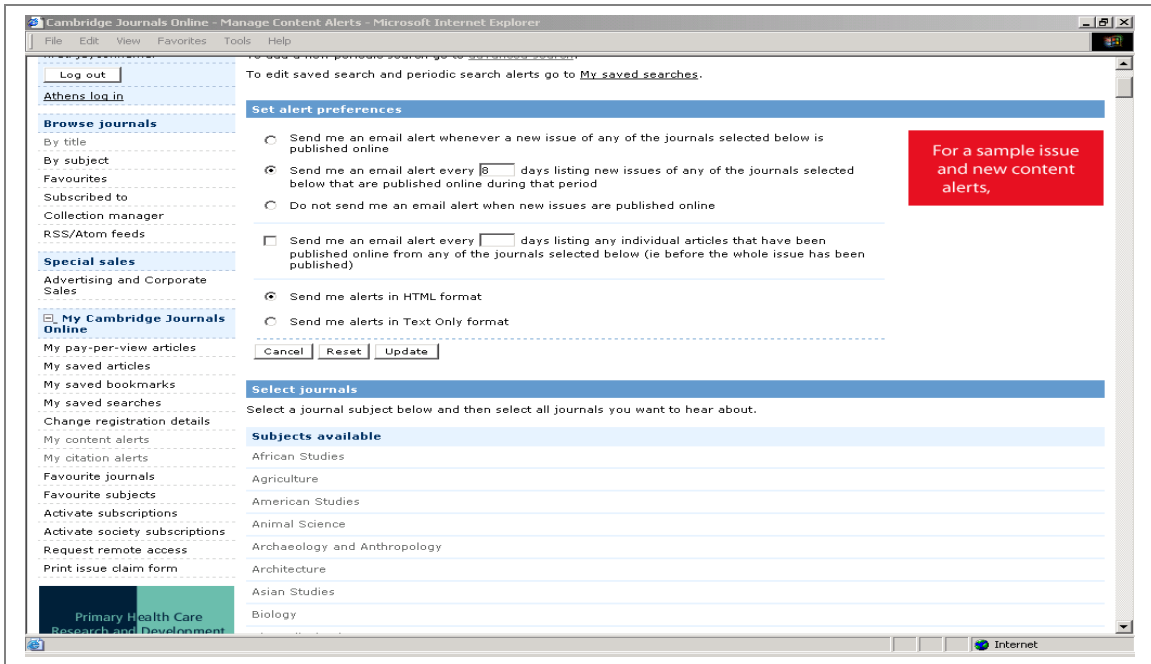
If the email alert gives you no results or too many results, go back into the alert and modify or change any of the options and / or search terms. Follow the steps given below:

- ☞ Login to Science Direct using personal login;
- ☞ From the menu bar across the top of the screen, click on the Search button;
- ☞ On the search screen, click on the Recall a Search button at the bottom of the page;
- ☞ Select the search you want to modify and then click on the Modify Search option;
- ☞ Make changes to the original search and click on the Search button; and
- ☞ From the results screen of the modified search save the search as an Email Alert and give it a new name.

9.1.4. Creating E-Mail Alerts for Journals Published by the Cambridge University Press (CUP)

A user is required to create personal login before he / she is allowed to create an e-mail alert. To create login follow the steps given below:

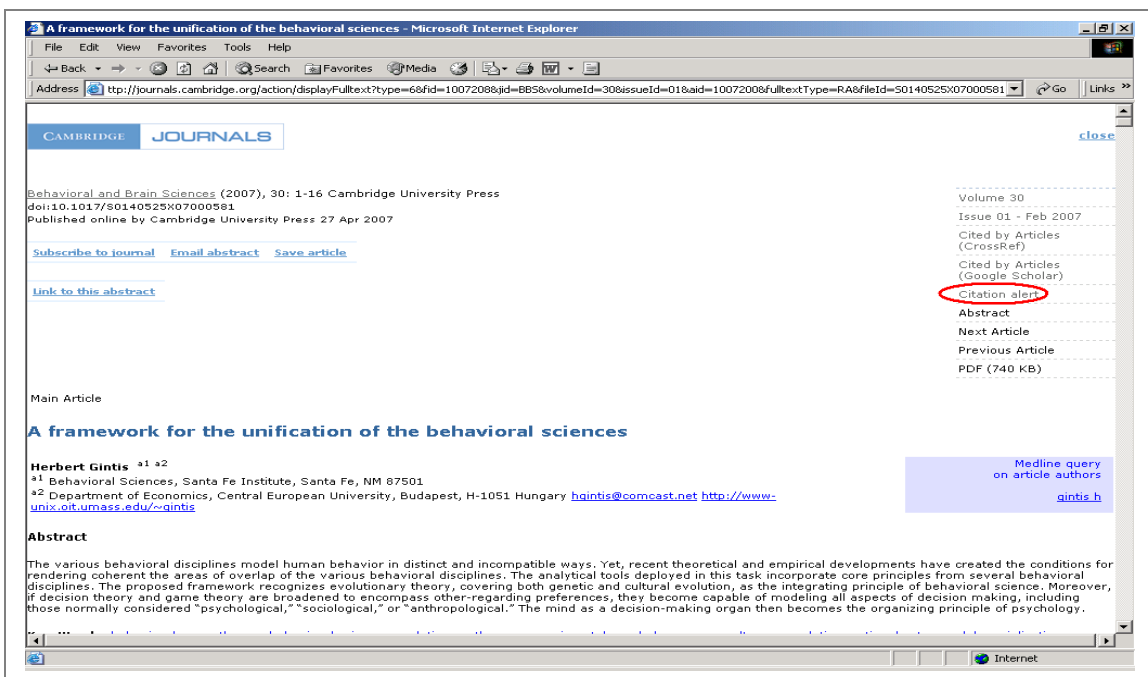
- Creating Login in Cambridge University Press
 - ◆ Click on Register Now, a user will be asked to complete a registration form, which contains details such as name, e-mail address, postal address, user name, password, etc.
 - ◆ After filling-up the form click on Submit, the message "Registration Successful!" is displayed.
- **Creating Content Alerts for Journals Published by the CUP**
 - ◆ Type the user name and password in log-in form then click at Log-in
 - ◆ Click at My Content Alert, will be displayed under My Cambridge Journal Online. It will take to the set alert preference page as shown below:



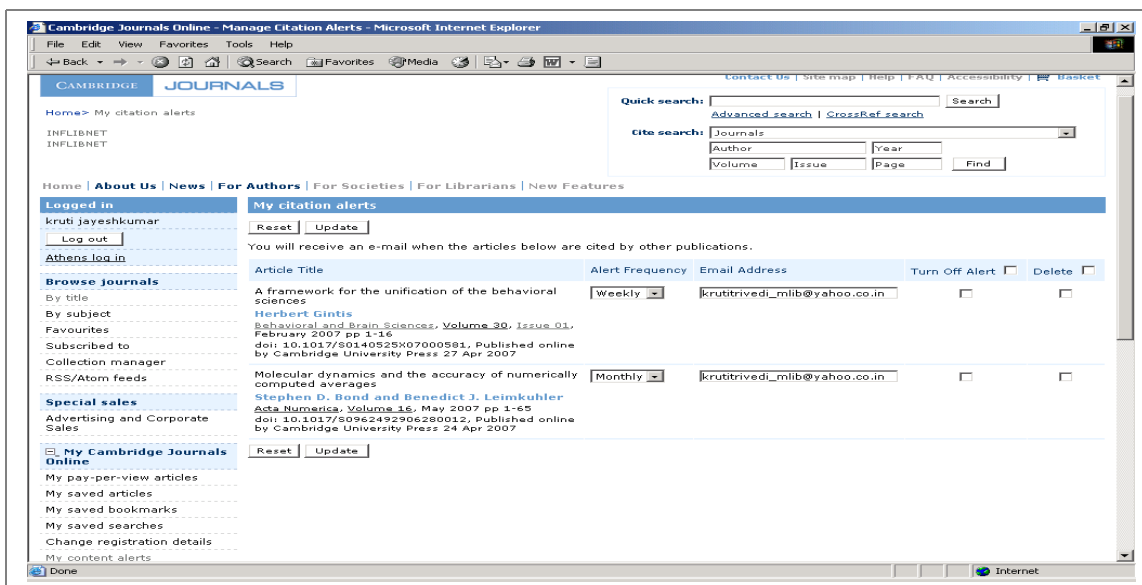
A user may select journal titles or subject areas on which he / she would like to receive regular e-mail alerts and then set preference by selecting radio button. Click on Update to activate e-mail alert.

➤ **Creating Citation Alerts in Cambridge University Press**

Go to the journal's homepage and click on the issue of interest to browse the table of contents in HTML format for that issue. It will display the volume number followed by a number of links at the top right-hand side of the page. Click on Citation Alert that will lead you to "My Citation Alerts".



The selected article will be displayed. Next to the article, a drop-down menu contains option to set the frequency. Enter email address into the Email Address Text Box and click at Update button at the top or bottom of the page. A user has an option to turn-off or re-instate or delete the alert.



9.2. RSS Feeds

RSS stands for Real Simple Syndication or Rich Site Summary. The technology, on one hand allows a web site to list the newest published updates (like table of contents of journals, new articles) through a technology called XML, on the other hand, it facilitates a web users to keep track new updates on chosen website(s). Like a personal search assistant, RSS feed readers visit pre-defined web sites, look for updated information and fetch it automatically on to the user's desktop.

In order to use RSS Feed, users are required to download RSS feed reader and then subscribe to the RSS feeds from sites of their choice. There are following two types of RSS feed reader:

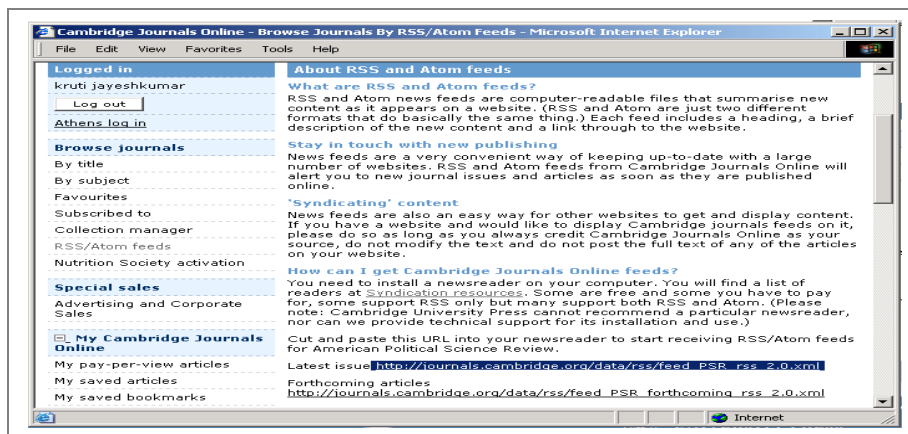
- i) Stand-alone Desktop Reader (Mozilla Thunderbirds 2.0.0.9 / Free Reader 3.11, MS Office Outlook (2007 Version): These feed readers manage feed subscriptions and display subscribed content in a manner similar to most e-mail programs.
- ii) Plug-in or Extension Desktop Reader or On Line Aggregators (for example RSS feeds toolbar for Microsoft Internet Explorer 1.2.0.1): The plug-in works with the user's web browser or e-mail client to display feeds available for viewing as a webpage and do not require additional software. The desktop readers and online aggregators offer a variety of features to help readers manage their feed subscriptions. Such features may include filtering feeds to highlight or delete entries matching specific keywords combining several feeds into a single view and hiding entries that have already been viewed.

9.2.1. Steps Involved in Using RSS Feeds

There are three steps involved in using RSS Feeds, i.e. i) Download and install an RSS feed reader; ii) pick-up the RSS feeds from web sites of your interest; iii); Add RSS feeds in the feed reader; and iv) Click at RSS feeds added to the feed readers to get content from for feeds picked in step ii. Four steps mentioned above are described below briefly.

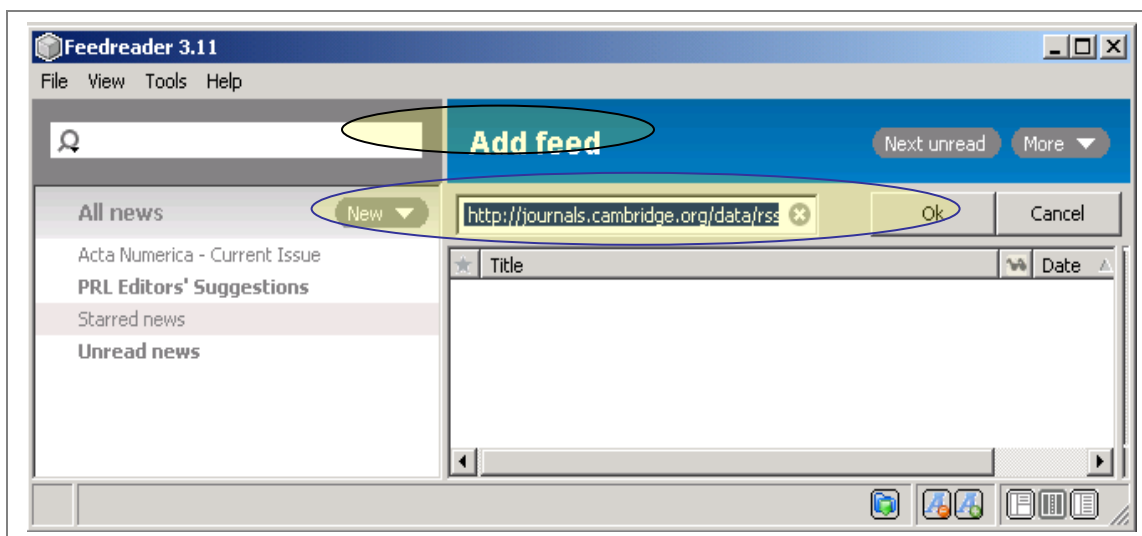
i) Download RSS Reader

second URL, if it is displayed, provides a feed for forthcoming articles. Select and copy these URLs.



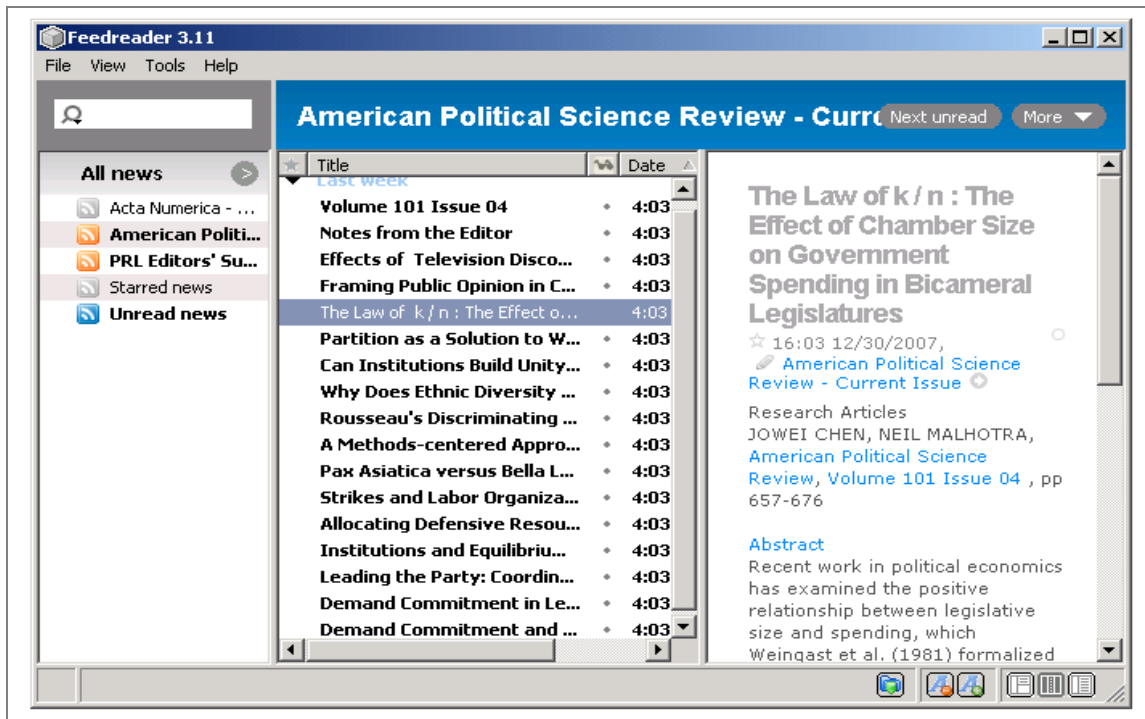
iii) Add RSS Feeds in the Feed Reader

Open RSS Feed Reader and Click at "New" button to add RSS feeds to your feed reader. Paste the URL for RSS feed to the reader and click on OK button. A user is required to repeat this process for every feed, he / she wants to get feeds from.



iv) Get Content for Selected Feeds

Click at the RSS feed (given in the left-hand side navigation bar) added to the RSS feed reader in the step given above. On clicking at the feed for "American Political Science Review", the screenshot given below display content for the recent issue of the journal in the mid-section of the feed reader. Clicking at one of the article, details of the articles with its abstracts, DOI and link to full-text appears in right-hand corner of the feed.



9.3. Other Important Features

Besides E-mail alerts and RSS feeds, some e-journals and databases provides features like Favourite journals, Save search strategies and search results, etc. Some of these features are described below:

9.3.1. Favourite Journal List

This feature facilitates identification and selection of favourite journals so that a user can easily locate and track the content published in these journals. Journals selected as favourite journals automatically appears in the Browse Favourites Journals page. A user gets new content alerts for favourite journals by clicking at Enable Email Alert checkbox at the bottom of the page. Alternatively, click at More Email Alert Preferences to refine email alert preferences.

9.3.2. My Saved Searches

This feature facilitates a user to retrieve previously saved search strategies.

9.3.3. My Saved Articles

"My Saved Articles" facilitates a user to view all the articles that have been saved in previously session. To delete an article from the list, click the corresponding checkbox and then click 'Delete articles'. Click the "Select all" checkbox to select all articles in the list.

10. License Agreements and Guidelines for Fair Use

The UGC-INFONET Digital Library Consortium subscribes to thousands of electronic resources including full-text electronic resources and bibliographic databases for its member universities. All electronic resources available through the Consortium are governed by license agreements. The terms and conditions for using these resources are spelled out in license agreements that are signed with each publisher by the Consortium on behalf of its member universities. The licenses for electronic resources impose two types of restrictions

on its usage, namely i) who can use these resources; and ii) how the resources can be used. The first restriction defines authorized users for e-resources, which generally includes students, faculty, staff and onsite visitors of a subscribing institution. The second restriction deals with how these resources can be used. It is the responsibility of individual users to ensure that e-resources are used for personal, educational and research purposes only. Most of the agreements entered into by the Consortium and publishers specify items that users are prohibited to do. Some of them are as follows:

- Systematic or programmatic downloading, retention, and printing are prohibited. For example, you cannot download entire issue of a journal or print out several copies of the same article.
- Electronic distribution of content is also restricted although the specific restrictions vary from publisher to publisher. It may be permissible to forward an article to another colleague in your own institution by email, however, transmitting an article to someone outside of the institution, or to a large group of recipients, a mailing list, or an electronic bulletin board, is not allowed.
- If you are teaching a class, you can print out a copy of an article from an electronic journal and include it in your course pack. However, do not make multiple copies for circulation. Copyright laws protect published material in any format so that it cannot be copied except in accordance with fair use. Providing access to material for educational purposes falls within the realm of fair use.
- Please ensure that the resource is used for educational and research purposes and not for commercial purposes.
- Providing electronic links on your course web pages to the Library's licensed resources is permitted but you cannot post the PDF of an article on your website. The publishers' main concern is that people outside of your campus network should not be able to access resources licensed by your institution. However, a researcher can post a pre-print of an article written by himself.
- As with any kind of scholarly communication, a researcher can use phrases or quotes from other articles and cite the source of information. However, a researcher is prohibited from using large chunk of information (paras and chapters) from an article or from a chapter in a book.

10.1. What Happens if the License is Violated?

Publishers track the use of their electronic resources in terms of number of downloads made by subscribing institution. Misuse, if any, is notified to the subscribing institution with details of kinds of violations and institution is expected to take action. The publisher also suspends the access to e-resource pending suitable action by subscribing institution. The access is stopped not only for journals where license agreement was violated but for all journals by the same publisher. Moreover, the access is suspended not only for the individual violator but for the entire institution.

10.2. Conditions of Use and Licensing Restrictions for Electronic Resources

It is the responsibility of individual users to ensure that the use of electronic resources does not breach the terms and conditions specified in the license agreements. Licenses vary from publisher to publisher; however, the general principles are as follows:

Permitted	Not Permitted
<ul style="list-style-type: none"> ➤ Viewing, downloading, copying, printing and saving a copy of search results ➤ Viewing, downloading, copying, printing and saving individual articles ➤ Using e-resources for scholarly, educational or scientific research, teaching, private study and clinical purposes ➤ Sending a copy of an article to another authorized user (i.e. current faculty, students or staff) ➤ Posting the URL to the publisher's version of the article on a class website (publisher links will allow only authorized users access) 	<ul style="list-style-type: none"> ➤ Use of robots or intelligent agents to do systematic, bulk or automatic downloading is not permitted ➤ Systematic downloading or printing of entire journal issues or volumes, or large portions of other e-resources is not permitted ➤ Using e-resources for commercial gain is not permitted (i.e. reselling, redistributing or republishing licensed content) ➤ Transmitting, disseminating or otherwise making online content available to unauthorized users (i.e. sending to mailing lists or electronic bulletin boards) is not permitted ➤ Posting the publisher's version or PDF of an article to an open class website is not permitted (instead, post the URL to the article which will allow only authorized users access)

Breaches of the license agreement with publishers could result in the suspension of access to the resources for the member institutions. Generic license agreements for several publishers, specifying all the terms and conditions are available on the Centre's website (license agreements).

11. ICT Requirement for Accessing Electronic Resources

A minimum level of hardware and software infrastructure is a pre-requisite for a user or subscribing institution desirous of subscribing e-resources so as to achieve efficient and effective interaction with subscribed resources. Basic hardware and software requirement for accessing electronic resources is given below:

11.1 Minimum Hardware Requirement

Since all e-resources subscribed by the Consortium are web-based, subscribing institutions should have full-featured and configured system with high speed Internet connectivity to get better access to e-resources.

Most publishers prefer to make their e-resources accessible on campus network of subscribing institutions on dedicated IP addresses / range of IP addresses. Subscribing institutions should have campus network (preferably fibre optics back bone) spread over their entire campus including residences and hostels so as to maximize the usage of e-resources. Moreover, institutions subscribing to e-resources should have adequate number of PCs on the campus LAN available to faculty, researchers and students. The minimum configuration of PCs available on the campus network should be as follows:

- Windows PC with P-4 CPU @3.0 GHz (HT) or above
- 512 MB DDR 400 MHz RAM
- HDD: 40 GB
- CDROM Drive (optional)
- Monitor: 15" /17"
- Windows OS

Any UNIX workstation capable of running a graphical Web browser with Internet connection can also be used.

Laser Printer: For greyscale printing for most of the articles. Colour printer may be required to print coloured figures.

11.2. Internet Connectivity

Subscribing institutions should have minimum of 528 kbps (preferably 2 Mbps) or more connectivity to Internet for improved access depending upon the total population of users. Moreover, most publishers prefer providing access to their e-resources on IP addresses assigned to institutions by Internet Service provider. Several publishers do not even offer password-based access to their resources. As such, institutions desirous of subscribing to e-resources should have static IP address / range of IP addresses with leased line, VSAT or other available options through a standard ISP.

11.3. Minimum Software Requirement

11.3.1. Web Browser

Most e-resources offered through the Consortium require an Internet-enabled multimedia PC equipped with an Internet Browser like Internet Explorer or Netscape Navigator as their clients. Most digital collections are accessible without any problem with the web browsers mentioned below:

- IE: 5.x or later
- Firefox Mozilla
- Netscape: 4.79 or later (no lower)
- Opera (Java version required): 6.0 or later

Browser Configuration

The web browser being used to access e-resources should be enabled for:

- JavaScript/Java
- Acceptance of cookies
- Cascading Style Sheets
- Secure Sockets Layer (SSL) Security (128-bit encryption minimum)

Most browsers are generally configured for the above-mentioned features.

11.4. Viewing and Printing Documents

E- resources are offered in different file formats. The client-side PCs may, therefore, require the following software packages to download format-specific deliverables from a digital collection:

PDF Documents: Adobe's Acrobat Reader (5.x or later): for viewing and printing pdf documents.

PostScript Documents: AFPL Ghostscript Package 8.00 or GNU Ghostscript Package 7.05 or later

TIFF Documents: TIFF Viewer to view and print TIFF Images

12. A Tutorial on Acrobat Reader

Paging Through A Document



The forward and back buttons move the user from page to page -- in the desired "direction" -- within a PDF document. An important feature of document navigation is threading, which is discussed in detail further below.



The pagination indicator shows your location within a document relative to the total number of pages, i.e., 3 of 8 indicates that you are on page 3 of an eight-page article.



The beginning and end buttons move the user to the first page or last page of a PDF document respectively.



The backward in viewing order and forward in viewing order buttons move the user backward or forward within a PDF document, depending on the order of viewing.

The Various Document "Views"



The page view button allows the user to view a single page of a PDF document on a screen.



The bookmark view button allows the user to navigate a document via a clickable "Table of Contents" that is displayed in a separate window.



The thumbnail view button allows the user to navigate a document via smaller versions of the pages that are displayed in a separate window. Engaging thumbnail view from the first page of a document will display up to four thumbnails (in which users are able to distinguish equations, tables, and figures). Users can select a thumbnail and "jump" to the page selected.



The page-sizing buttons allows the user (from left to right) to view the page's actual size (100%), page in "fit page" mode (scales the page to fit within the window), and the page in "fit width" mode [scales the page to fit the width of the window; selecting this button and the Control key fills the window with only the visible text and graphics on the page].

Basic Acrobat Toolbox



The open folder button allows the user to open any PDF file that has been saved to disk for printing or viewing.



The print button allows the user to print any PDF file.



The hand button allows the user to scroll horizontally (left-right) or vertically (up-down) within a document. The "hand" changes in appearance when documents are "threaded" (from plain "open" to a open with a downward-pointing arrow) or when **weblinks** (from "open" to "open with a W on the palm") are present.



The zoom in and zoom out buttons allow the user to enlarge or reduce the size of the document page being displayed.



The copy text button allows the user to copy text from the page currently displayed.



The find button allows the user to search for a keyword within the entire document currently displayed.

13. Expectations from the Member Institutions

All member institutions beneficiary of consortium initiatives are expected to do the followings:

➤ IP Addresses

All member institutions should provide the range of IP addresses used by your institutions. Changes in IP addresses should be intimated to the Consortium Headquarters immediately. The publishers of electronic resources enable their resources to be accessed by range of IP addresses used by your Institute. In case your Institution does not have dedicated IP addresses assigned to it, please inform the Consortium Headquarters so that the publisher can enable password-based access.

Each institution is also requested to provide name of two contact persons, one administrative contact and other technical contact.

➤ ICT Infrastructure

A minimum level of hardware and software infrastructure is a pre-requisite for a user or subscribing institution desirous of subscribing e-resources so as to achieve efficient and effective interaction with subscribed resources. Basic ICT infrastructure requirement for accessing electronic resources has already been described in section 10 of this Compendium.

➤ **Drop Subscriptions to Print, CD or Web Equivalents**

The National Steering Committee of the UGC-INFONET Digital Library Consortium has recommended gradual decrease in print resources that the member institutions are currently subscribing. All electronic content subscribed by the Consortium are print-independent, i.e. beneficiary universities are not required to maintain their print subscription to journals that are accessible online through the Consortium.

➤ **Sign Terms of Agreement with the Consortium**

All member institutions are required to sign an agreement with the INFLIBNET Centre which coordinates and monitor all activities of the Consortium. The member institutions of the Consortium are required to abide by the terms of agreement that are being signed between various electronic publishers and the consortium on behalf of all member universities. Please go through section 9 for further details in the Compendium on license agreements and guidelines for fair use.

➤ **Meetings of the User's Group at each Institution**

With an aim to optimize usage of electronic resources made available through the Consortium, each member university is required to constitute a Users Group Committee, which may be a sub-committee of the existing Library Committee. The Consortium User Groups are required to meet once in a month to review the usage and associated problems.

➤ **Users Convention at each University**

It is obligatory for each university to organize a Users Convention in their respective universities for electronic resources accessible to them through the Consortium for the benefit of their user community. Several member universities have already organized User Conventions for electronic resources accessible to them through the Consortium.

➤ **Feedback and Suggestions**

The initial selection of e-resources were made by the National Steering Committee based on the scenario that existing in 2004 / 2005. The beneficiary members have a responsibility to improve and enrich the Consortium with their inputs and feedback.

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**Tutorials on E-Resources
Subscribed by the UGC-Infonet
Digital Library Consortium**