

IMPLEMENTING THE E-GRANTHALAYA (A Library software) IN CES LIBRARY@IISc

A Digital Agenda for Library Automation and Networking

A Digital AYASHWANT GIKANADE Vetworking

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CES TECHNICAL REPORT - 121

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PREAMBLE

Centre for Ecological Sciences library collection and services have manifold stories since its initiation in 1983 along with the department. Initially the library had a register system in which, all documents were taken stock assigning a number. During 1990s the initiation of it was by computerizing the bibliographical data using FoxPro2.5. In 1996 after advanced training from The Documentation Research and Training Centre, Indian Statistical Institute, Bangalore an internet search was introduced and the home page was updated with latest changes. Other commercially available library software was also tried for the same. All of them were either expensive or did not meet the needs. A number of free software available on internet were also tried, but were not effective. Neither proper trouble shooting nor people were available to solve problems. Finally in 2008, The National Informatics Centre, New Delhi was consulted to adopt the E-Granthalaya.

The main motto of CES library is to enhance the quality of services in the digital environment. The electronic era has impacted lot of changes on the behavior of the user of present day library. Since last two decade there has been enormous change in library and information services and electronic era has helped to facilitate rapid development. Such changes continuous in future too. Libraries required large amount of money on library management systems and on manpower to maintain them. Systems and technical issues are major challenges. The fundamental challenges being integrated and bring the different components of the library together. In this stage the E-

Granthalaya has solved such problem without much investment.

As a result of library computerization, a number of bibliographic databases are in existences, which are accessible by users with their desktop on the web. In CES Library the e-Granthalaya software has the Book Database which contains more than 11,000 records, monographs, manuals, etc and is available online as OPAC/web OPAC. The Article Database consists of more than 5000 metadata of Articles and theme issues published in national and international journals. This database is also available online through the web. Besides, the current attempt has created "Membership Database" in Library to issue and return / renewal of the books / journals by using e-Granthalaya software.

The e-Granthalaya software is used in CES Library for both library resources and users. The display is a Flash application of information and locates the documents. User can login to update their profile for further information.

WHY E-GRANTHALAYA?

It is a reliable and all time access for search and manages databases on a simple computer configuration. The services are free and quality oriented alternative. All that the site requires are computers with Internet browsers enabled. National Informatics Centre (NIC), New Delhi will provide absolutely free database.

One can make the best use of E-Granthalaya, the world-class bibliographic search & retrieval software that provides access to databases through Internet search service, that presents sophisticated online searching like auto-indexes, varied record display, automatic searching of singular/plural forms, and compound words.

It will help in housekeeping databases by handling error free format. Data errors, missing fields and null records are rectified immediately after receiving the messages from user end.

CES LIBRARY ON WEB

The Library collection is on Web, for the time being it is accessible only inside the campus. The web site provides links to OPAC (Books Catalog), Articles Database, Journals Database and other in-house designed databases.

THE E-GRANTHALAYA SOFTWARE

It is a digital agenda for library automation and networking developed by National Informatics Centre, New Delhi. The software is running on the platform of Windows Server 2000 or higher and MY SQL Server 2005.



REQUIREMENTS

Client/Server Implementation

Client side

- P IV with Min. 256 MB RAM
- Windows XP (with SP2)
- MS Office
- LAN/Internet Connectivity

Server side

- P IV with Min. 512 MB RAM
- CD Writer
- Windows Server 2000/2003
- SQL Server 2000/2005 (Standard Ed)
- LAN/Internet Connectivity

Stand-Alone Implementation

- P IV with 512 MB RAM
- Backup Device (CD Writer)
- Windows XP (with SP2)
- MS Office
- MS SQL Server 2000 (Personal Ed) or MS SQL Server 2005 (Express Ed)
- LAN/Internet Connectivity

IMPORTANT LINKS

- http://mcitconsortium.nic.in
- http://lsmgr.nic.in/mailman/listinfo/egrant_halaya_forum
- http://library.nic.in
- http://10.132.20.11/granth2/welcome.asp

FEATURES AT GLANCE

LAN / WAN based data entry solution

- Automate In-house Activities
- Automate User Services
- Duplicate Checking
- Automate purchasing process with Indian workflow
- Member registration with specific entitlement due days and fine system
- Well integrated database
- Output in user firendly style
- Complaint with international standards

INSTALLATION INFORMATION

To use the **e-Granthalaya** Software for automation of the library, one needs to install the database management program i.e. "Microsoft SQL Server". One has to use the latest version of the MS SQL Server is "Microsoft SQL Server 2005".

e-Granthalaya can be implemented in two modes:

- Stand-Alone Mode (One PC)
- Client/Server Mode (One Server PC and many clients PCs)

Components to be installed before installation of the MS SQL Server 2005

These Components will be installed in Server PC:-

- Windows Installer 3.1
- .NET Framework 2.0
- MS SQL Server 2005

Installation of "e-Granthalaya2" Software

NOTE: Before installation of the e-Granthalaya software, one must install the following components:

- Windows Installer 3.1
- .NET Framework 2.0

To Install the "e-Granthalaya2" software, following steps are required Insert the CD in CD Drive, it is an Auto Run CD.(In case it is not auto-run, browse the cd and press "setup.exe" from e-Granth folder of the CD) or

• Double click "Setup.exe" from exploring the e-Granth folder of CD

E-GRANTHALAYA CONSISTS OF VARIOUS MODULES SUCH AS:

ADMIN MODULE

Admin module is used for making users, setting their permissions, making entry of the default values in the master tables and then using such values in the subsequent modules.

This module contains the following menu and sub menu

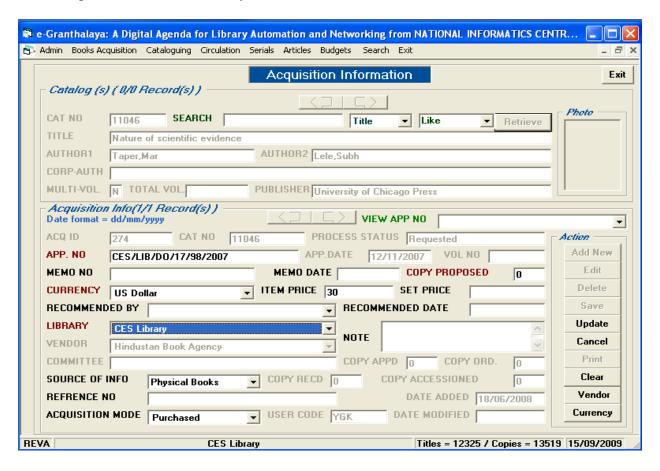
- System data
- Master data

It Provides space for adding/editing/deleting

- Users who will operate software
- Bibliographic level/document type
- Acquisition modes / Copy Status
- Countries / Types of binding
- Courncy Codes
- Publishers Details / Vendor Details
- Journal Frequencies / Languages
- Messages and Text for reports/letter
- Sections/Subjects/Library committees

ACQUISITION MODULE

This module is used for acquiring / purchasing documents (books and monographs, standards, manuals, patents, etc.) in the library.



The process of purchasing starts from checking the Duplicate documents (if any) to the following steps

- Checking duplicate
- Author Directory
- Adding New Title
- Generating Acquisition Record
- Generating Approval List (Sending the list of books to approval authority)
- Updating the Approval List (Selected / Rejected)

Add Order Info

• Generating Order

Receive Documents

• Accessioning of the received documents

Adding Billing Information

Adding Payment Information

Then the documents so acquired become available for the CATALOGING process. During the Acquisition process, the STATUS (Called as PROCESS STATUS) of the acquisition gets changed automatically in the following order:

Requested

• Sent for Approval

• Approved / Rejected

Ordered

• Received / Partially Received

Accessioned / Partially Accessioned

Billed

Paid

Similarly, there are three Catalog Status (called as CAT LEVEL) of any document namely:

New: When new book details exist but no acquisition process (acquisition Record) started and no copy exist

Initiate: When at least one Acquisition Record exist (i.e. process of acquisition started), but no copy exist

Full: When at least one copy of the book exist

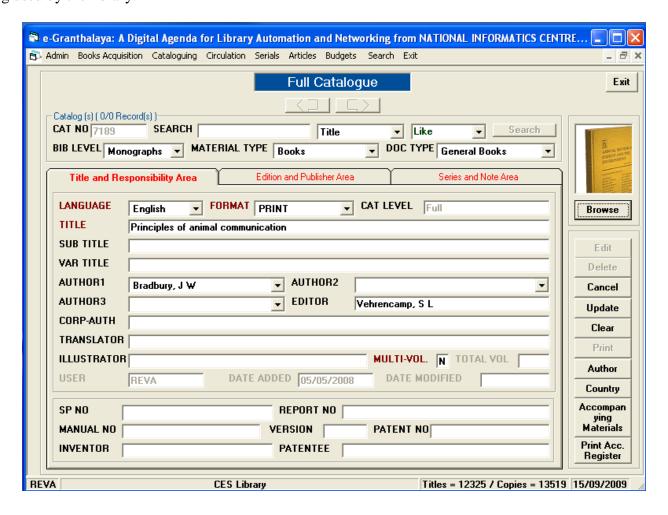
CATALOGUING MODULE

This module consists of the following menu:

- Full Catalog Used to add additional data elements in the records
- Change Status Used to change the status of the Copy of a title
- Update Holding Info- Used to update/modify the Holding Records
- Retro Conversion Used to enter the data of existing collection of the library
- Status Wise Collection- Used to view the status wise collection of the library

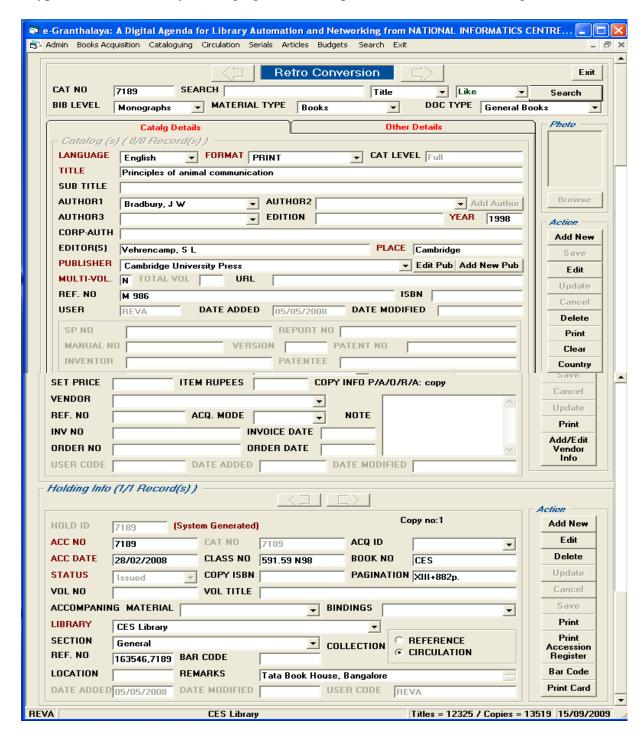
Full Catalog

This module is used to add rest of the data elements in the cataloging records to generate full catalog records. The additional data elements constitute the foundation of the Cataloging Code being used by the library.



Retro Conversion

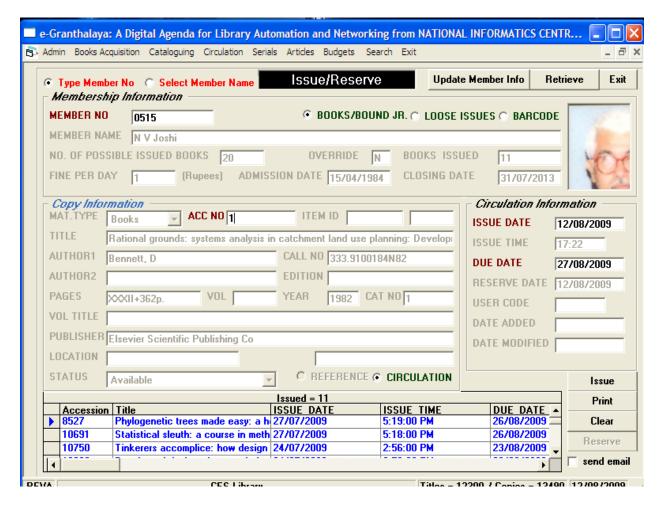
In this module many other utilities have been provided to update / refine / complete the three main types of records namely Cataloging Record, Acquisition Record and Holding Record



CIRCULATION MODULE

This module is used to automate the Circulation Desk activities and services such as making membership, issue and return of the documents, generating overdue reminders, etc. The module permission can be set using the USER form under ADMIN module.

Issue

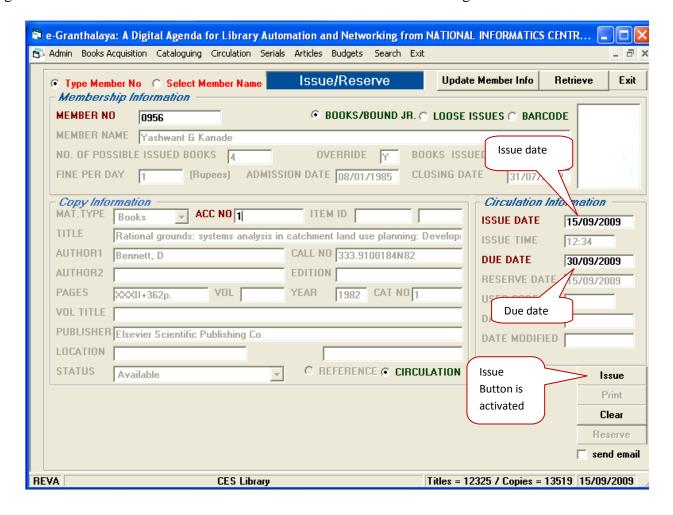


There are various menus under this module which are given below:

- Add Groups/Faculties/Division of the Parent organization
- Add Designations / Categories
- Add Membership

- Issue / Reserve
- Return / Renew
- View Circulation Transactions
- Generate Overdue notice

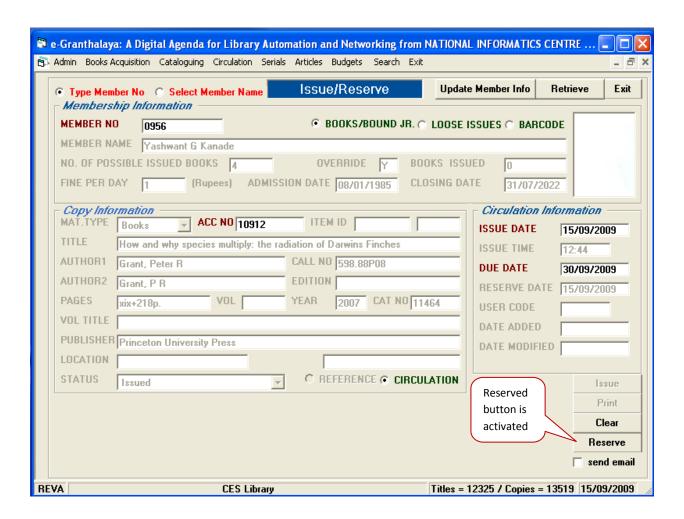
Issue of books can be done by just scanning the user ID card and then scanning the Acc. No. of the book. once the acc. No is scanned the Issue date and the Due date field will be activated along with the activation of the Issue Button which is shown in the following screen:



Reserve

A book can be reserved by the user only when the book is issued out to someother user.

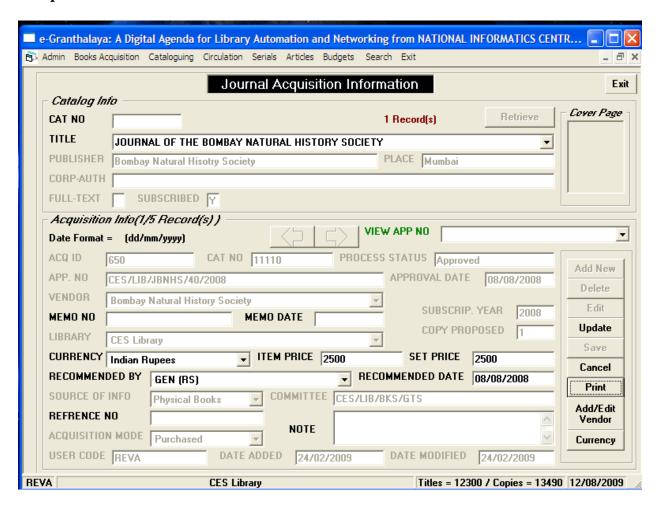
In this case the reserve button will be activated. Once the reserved book is returned a message will be popped out giving the information about the user who has reserved that particular book.



SERIALS MODULES

This module is used for managing the "Subscription to the Journals and Magazines" in the Library. The process of subscribing is slightly different from purchasing the books in the Library.

Journal Acquisition Information



While using this module, users are advised to follow the step by step process to complete the subscription, no menu should be skipped. The module contains the following steps and menu:

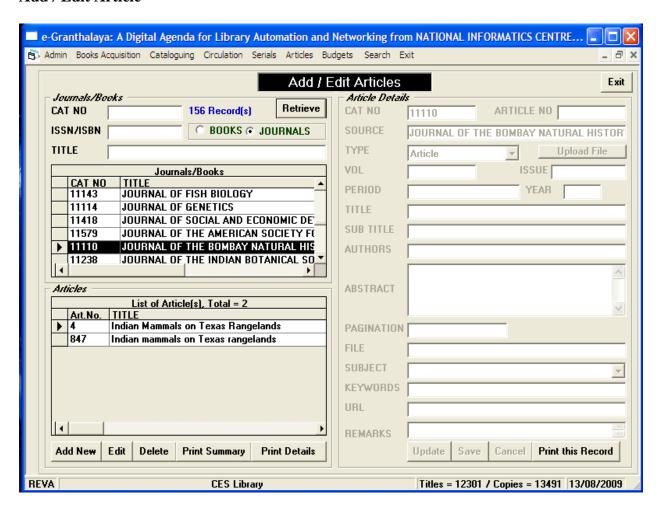
- Check Duplicate Title
- Add New Journal

- Update Journal Details
- Add Acquisition Info
- Generate Approval
- Update Approval
- Add Order Info
- Generate Order form
- Subscription maintenance
- Schedule maintenance
- Receive Loose Issues
- Generate Reminder
- Add Billing Info
- Add Payment Info
- Update Journal History
- Add Journal Holding

ARTICLE INDEXING

This module is used to manage the Articles Indexing Bibliographic service provided by the libraries. Under this service, the important articles from journals and chapters from books are indexed (bibliographic details only) in the database and provided through Web OPAC of the e-GranthalayaTM software.

Add / Edit Article

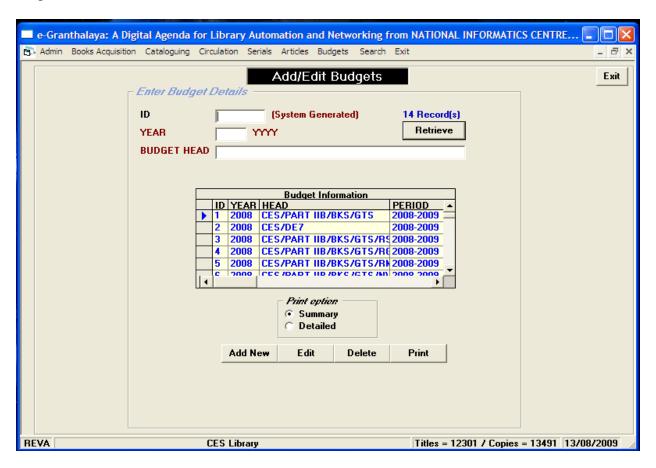


The module contains two menus only:

- Add Articles Details
- Search Articles indexed

BUDGET MODULE

The department has sanctioned separate budget for the library under various debit head. Further it has been allocated faculty and general Faculty, students and staff are recommending the title for purchase.



NOTE: Before working with this module or processing the Invoice, First the invoice in question must be entered with the Acquisition Record concerned using the "Billing Information" menu of the BOOKS ACQUISITION and SERIALS modules

- Library budgets
- Invoice details
- Payment drequest
- Cheque delivery

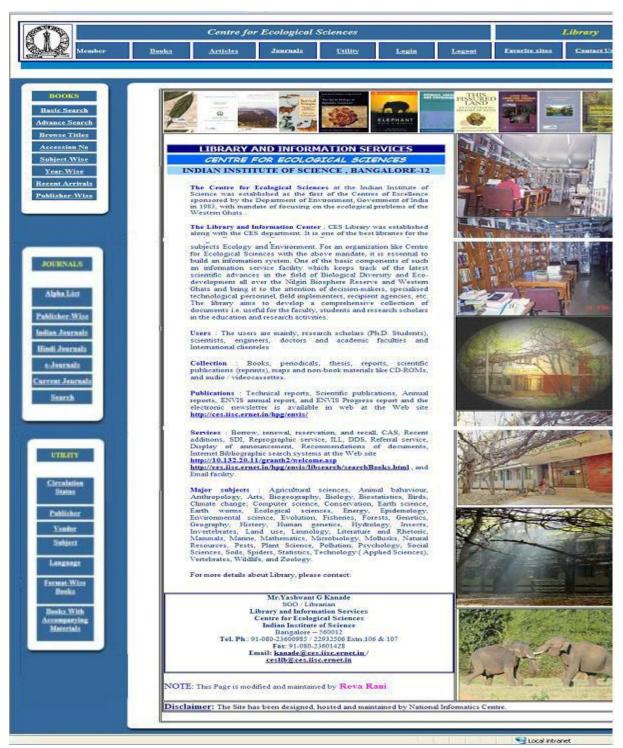
WEB OPAC SEARCH INTERFACE

The powerful Web OPAC search provides internet search services, which involves full text, audio, video and given links to various e-journals. The reports, research articles and technical reports are made available in the search. The transaction information will retrieves with full address and photo of the borrower.

- Internet / Intranet Based Interface
- Search Library Catalog
- Basic / Advance Search
- Use Boolean Operators
- Search Member Dues

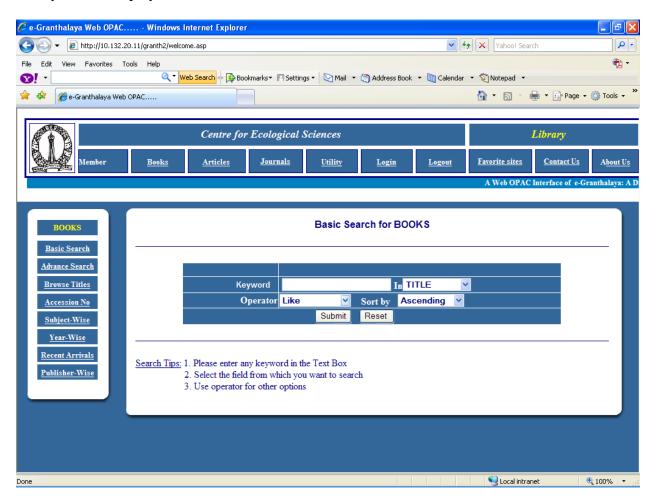
CES Library Homepage (http://10.132.20.11/granth2/welcome.asp)

This page introduce information about the CES Department and Library along with the search mechanizims and modules.



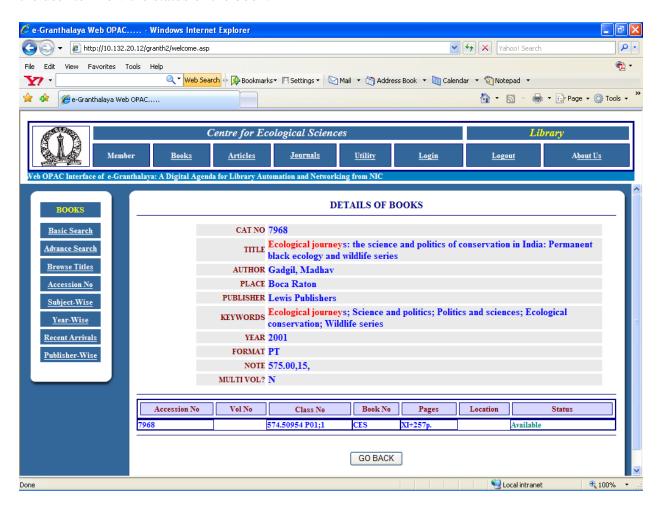
Basic Book search

OPAC search is a Boolean search. User can search by Author, Title, Publisher, Keywords etc. We have an Advanced serach in which complex search can be done. The books can also be searched by browsing the Titles, Subject-wise, Accession No., Year-Wise, Publisher-Wise. There is another option of "Recent Arrivals" where the list of the recently added books to the library will be displayed.



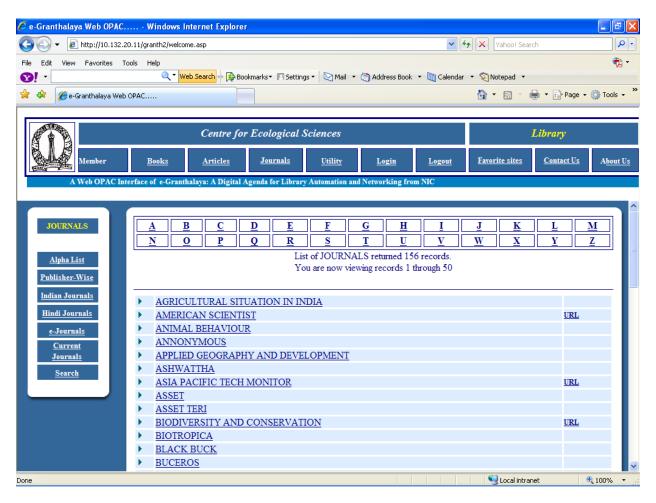
Result of Book search

Once the required book is selected it displays all the details of the book as shown in the screenshot above. The user can check the Status, location and Call No. of the book which helps the user to know the status of the book.



Journal Search

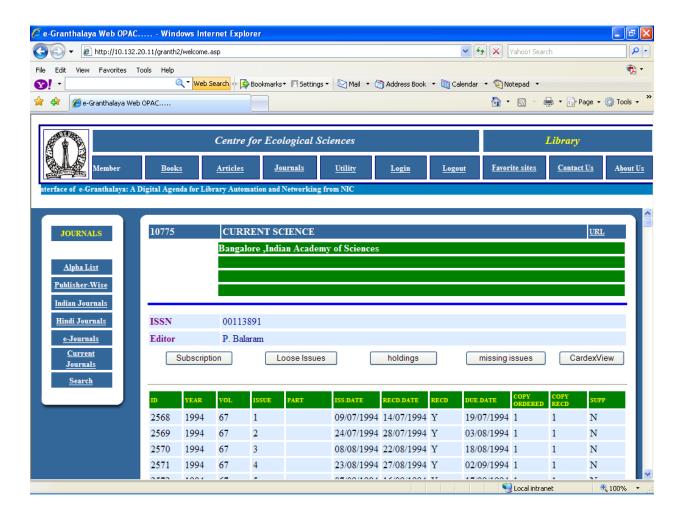
The journals can be searched Alphabatically as shown in the screenshot



The other option for Journal search are Publisher-Wise, Indian journals, e-Journals and Current Journals. We have given links to the e-Journals in which we can access full text.

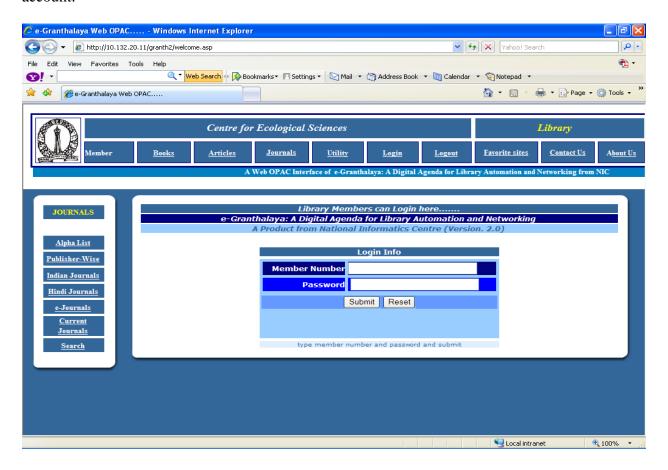
Result of the Journal search

Each title of the journal will have the information about the Current Issue, Non-received Issues and the Bounded volumes (Holdings). The subscription details of the journal can also be viewed in the Journal search.



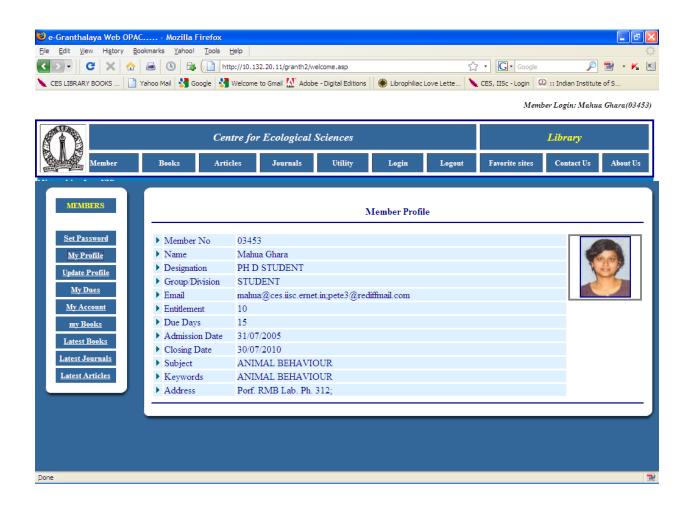
User Login

The login facility will provide the information about the entire transaction of the user. One can know how many books borrowed by him/her and the Due Date and the fine Due details. Authenticated user can know the latest titles on their interested subjects by loging into their account.



Members Details

The Library members can set their password, view their profile, update the profile timely, check the due books, check the total number of transaction that are done. The books related to their subject/interest will be listed by clicking the mybook menu and know the latest books, journals and articles.



ACCESSIBILITY AND TRAINING

The National Informatics Centre, New Delhi is giving free training and providing software free of cost. There are several training centers in district and state level.

COMPARATIVE SOFTWARE

- Sanjay, CDS/ISIS, NewGenLib etc are available in the open access, but one requires
 proper training for installation and customization
- A big barrier to evaluation and use of Koha has been the difficult installation process and the need for some Linux expertise.
- E-Granthalaya is free software and provides free training and specialized technical support through email and telephone

SPECIAL FEATURE

- e-Granthalaya Software is free
- Support / Training free to Government and Public Libraries
- Hosting on Web (Web OPAC) free to Ministries/Departmental libraries
- Training conducted at various centers of NIC in India
- Support provided by the NIC State and Districts centers
- Up-gradation is free
- May be implemented for group of libraries

CONTENT DEVELOPMENT

- E-Granthalaya is maintainable as a top quality database with metadata and bibliographic services in various Indian reputed libraries.
- The service in E-Granthalaya helps to manage databases & online resources better to its user.
- It performs search for resources on the web to construct accurate title, author, publishers, and vendor profile, electronic journals etc.

CONCLUSION

In the past CES had a search database maintained in MS FoxPro 2.5 which was a simple search interface where as now the library adopted advanced search system using e-Granthalaya which is more powerful and user friendly. The e-Granthalya software runs on Microsoft SQL Server 2000 (& above) as backend and Visual Basic 6 as frontend. The WebOPAC is LAN connected. The user can search their transaction at their desktop. They can check the status of the book issued to him/her. The user can also know the recent arrivals in their interested subject. The document can be entered in different modules of the e-granthalaya software. This software is basically divided into two section Monographs and Serials. Monograph is used to enter books, reports, reprints etc. and the Serials section is used to enter the journal details.

Many institutions might spend lot of money on computer hardware and software but even the most expensive system is totally dependent on the quality of the database/catalog. If the catalogue entries are substandard or improperly made, users will have to face several problems in the retrieval system.

A service oriented professional's life of librarianship to understand service quality better and its linkages to user satisfaction and evolve organization predispositions that strive for service excellence.

IISc has, limited its staff and all other resources, and trained and retrained to adapt to new challenges. If that strength can now be added in facing issues and creativity in resolving them, it will be an encouraging record with which to face the future.

If whole network of activities related to automation of all departmental libraries in IISc it will be a great task (We have trained a few individuals to installation and customization of the e-Granthalaya software in IISc), which requires the cooperation of all concerned, but with all eyes focused on the same goal and high spirit of service, success will not be that far.

FUTURE PLAN

- To adopt multimedia system and more audio/video clippings for the library users
- Recorded lectures from the class should be included
- To be add student interaction matters
- To adopt higher end Server for maintain large Database
- To adopt higher version of e-granthalaya

REFERENCE

- 1. Matoria, Ramkumar, 2005 E-Granthalaya-2 User manual, NIC, New Delhi
- 2. CES, IISc. E-Granthalaya user manual
- 3. http://library.nic.in
- 4. http://mcitconsortium.nic.in
- 5. http://10.132.20.11/granth2/welcome.asp
- 6. http://egranthalaya.nic.in

Centre for Ecological Sciences

Library

Member

ember I

Books Articles

Journals

Utility

Login

Logout

Favorite sites

Contact Us A

About Us

A Web OPAC Interface of e-Granthalaya: A Digital Agenda for Library Automation and Networking from NIC

BOOKS

Basic Search

Advance Search

Browse Titles

Accession No

Subject-Wise

Year-Wise

Recent Arrivals

<u>Publisher-Wise</u>

JOURNALS

Alpha List

Publisher-Wise

<u>Indian Journals</u>

<u>Hindi Journals</u>

Current Journals

e-Journals

Search

UTILITY

Circulation Status

Publisher

Vendor

Subject

<u>Language</u>

Format-Wise Books

Books With
Accompanying
Materials

LIBRARY AND INFORMATION SERVICES

CENTRE FOR ECOLOGICAL SCIENCES

INDIAN INSTITUTE OF SCIENCE , BANGALORE-12

The Centre for Ecological Sciences at the Indian Institute of Science was established as the first of the Centres of Excellence sponsored by the Department of Environment, Government of India in 1983, with mandate of focusing on the ecological problems of the Western Ghats.

The Library and Information Center, CES Library was established along with the CES department. It is one of the best libraries for the subjects Ecology and Environment. For an organization like Centre for Ecological Sciences with the above mandate, it is essential to build an information system. One of the basic components of such an information service facility which keeps track of the latest scientific advances in the field of Biological Diversity and Eco-development all over the Nilgiri Biosphere Reserve and Western Ghats and bring it to the attention of decision-makers, specialised technological personnel, field implementers, recipient agencies, etc. The library aims to develop a comprehensive collection of documents i.e. useful for the faculty, students and research scholars in the education and research activities.

Users: The users are mainly, research scholars (Ph.D. Students), scientists, engineers, doctors and academic faculties and International clienteles

Collection: Books, periodicals, thesis, reports, scientific publications (reprints), maps and non-book materials like CD-ROMs, and audio / videocassettes.

Publications: Technical reports, Scientific publications, Annual reports, ENVIS annual report, and ENVIS Progress report and the electronic newsletter is available in web at the Web site http://ces.iisc.ernet.in/hpg/envis/

Services: Borrow, renewal, reservation, and recall, CAS, Recent additions, SDI, Reprographic service, ILL, DDS, Referral service, Display of announcement, Recommendations of documents, Internet Bibliographic search systems at the Web site

http://10.132.20.11/granth2/welcome.asp http://ces.iisc.ernet.in/hpg/envis/libsearch/searchBooks.html, and Email facility.

Major subjects: Agricultural sciences, Animal bahaviour, Anthropology, Arts, Biogeography, Biology, Biostatistics, Birds, Climate change; Computer science, Conservation, Earth science, Earth worms, Ecological sciences, Energy, Epidemology, Environmental science, Evolution, Fisheries, Forests, Genetics, Geography, History, Human genetics, Hydrology, Insects, Invertebrates, Land use, Limnology, Literature and Rhetoric, Mammals, Marine, Mathematics, Microbiology, Mollusks, Natural Resources, Pests, Plant Science, Pollution, Psychology, Social Sciences, Soils, Spiders, Statistics, Technology (Applied Sciences), Vertebrates, Wildlife, and Zoology.

For more details about Library, please contact:

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Centre for Ecological Sciences
Indian Institute of Science

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