



RRI Digital Repository as a Tool to Support Scholarly Research

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Abstract

Digital Institutional Repository is a vehicle to showcase the research output of an institution. It becomes important as it is a natural extension of the Academic/Research Libraries responsibility as a promoter of primary research, seeking to preserve and patronage and build up its intellectual assets. This poster illustrates the role of RRI Digital Repository in supporting and enhancing research work in RRI. The Digital Repository of RRI is a place where the library, collects, curates, preserves and provides access to scholarly literature of RRI Academia.

Definition of An Institutional Repository

IR is a digital archive of the intellectual product created by the faculty and students of an institution and accessible to end users both within and outside the Institution. Institutional Repository of RRI is known as the "Raman Research Institute Digital Repository" and its locus on RRI webpage is at <http://dspace.rri.res.in>.

Objectives of IR:

- To provide open access to Institutional Research output by encouraging self archiving
- To create global visibility for an institutional scholarly research
- To assimilate content in a single location
- To preserve other digital assets of the Institute like images, grey literature, technical reports etc.

History of Digital Repository of RRI

The RRI Digital Repository, after considering its importance, significance and advantages, was launched in early 2006. Sir C.V. Raman, the Nobel Laureate and the founder of RRI has published 514 article in various journals. RRI Digital repository bring global visibility to all his intellectual creations and the research work carried out since the institute was established in 1948. This repository was designed using DSpace, an open source software package that provides tools for management of digital assets. Dspace is jointly developed by MIT Libraries and Hewlett-Packard Labs. While building this repository strict adherence to copyright clearance was considered.

Contents of RRI Digital Repository is:

- Institutionally defined
- Scholarly
- Cumulative and perpetual
- Open access
- Interoperable providing access via multiple search engines and discovery tools

RRI Repository is the digital archive of the research output of the institute scientific community. This knowledge base covers journal articles, conference papers, technical reports, patents, preprints and theses. One can browse the documents by communities & collections, date, author, title, subject, and document type. Both simple and advanced search facilities have been provided thus making it user friendly.

Navigation through RRI Digital Repository

The screenshot shows the home page of the RRI Digital Repository. It features a search bar at the top with a 'Go' button. Below the search bar, there is a 'Welcome to the Digital Repository of the Raman Research Institute' message. The page is divided into several sections: 'Search' with a text input field and a 'Go' button; 'Communities in DSpace' listing various research areas like 'Astronomy and Astrophysics' and 'Theoretical Physics'; and 'Information & Help' with links to 'About the Repository', 'Author benefits', 'Copyright Issues', 'Submission Guide', and 'Contact'.

This screenshot shows the '01. Archives' page of the RRI Digital Repository. It displays a search bar with '01. Archives' entered. Below the search bar, there are options to search by 'Subject', 'Title', 'Author', and 'Issue Date'. The page lists 'Recent Submissions' including 'Lady behind the genius', 'New theory of radiation: Prof. Raman's Discovery', and 'Annual Report 2009-2008'. There are also 'RSS Feeds' for '01. Archives' and 'Newspaper Clippings'.

This screenshot shows the 'Newspaper Clippings' page. It features a search bar with 'Newspaper Clippings' entered. Below the search bar, there are options to search by 'Subject', 'Title', 'Author', and 'Issue Date'. A prominent cartoon illustration is displayed with the text 'HE SEES SCIENCE EVERYWHERE'. The page also lists 'Recent Submissions' and 'RSS Feeds'.

This screenshot shows the search results page for 'rman cv'. The search results are displayed in a table with columns for 'Issue Date', 'Title', 'Author(s)', and 'Citation'. The results include items like 'A chat with C.V. Raman', 'Biographical cameos - No. V.: Sir C. V. Raman', and 'Atomic bombs: Dr. C. V. Raman's condemnation'. The page also shows 'Item hits' and a 'Page 10' indicator.

This screenshot shows the 'Biographical cameos - No. V.: Sir C. V. Raman' page. It features a search bar and a 'Go' button. Below the search bar, there is a 'Please use this identifier to cite or link to this item' section with the URL 'http://hdl.handle.net/2289/661'. The page lists 'Title', 'Authors', 'Keywords', 'Issue Date', 'Publisher', and 'Abstract'. There is also a 'Files in This Item' section with a table showing file details like 'RRI-11_1936-06-21.tif'.

Archives Comprises of annual reports; Gandhi memorial lectures and newspaper clippings. Gandhi memorial lecture is an annual event held on October 2nd, the Gandhi Jayanthi. It is a popular lecture series and eminent people from different walks of life are invited to share their thoughts. Audio/Visual format of this lecture series are a part of this institutional repository. All the news items covered in newspapers on Sir C V Raman and RRI are uploaded in the archives. All these are of historical importance and needs to be preserved in digital format and also at the same time show cased to the entire world.

C. V. Raman and his work include the scientific papers published by him; lectures delivered by him in text format; biographical sketches on him and articles published on him and his work by others. C V Raman had published about 514 articles

Science at the Raman Institute: 1948-1970 includes all the articles published by Raman's students working under his guidance from the inception of the institute until his demise.

Community 04 – 07 comprises of the research articles and theses published by the different research groups at RRI namely Astronomy and Astrophysics, Light and Matter Physics, Soft Condensed Matter and Theoretical Physics.

Under the community **Patents**, there are 3 patents to which RRI gets credit. **RRI science news** covers those aspects of RRI research information covered by news items.

Miscellaneous publication includes popular articles submitted by research scholars

Advantages:

- IR Play a major role in evolutionary restructuring of scholarly communication
- IR has the potential of serving as a tangible indicators of the quality of institutional research
- IR brings in greater visibility, status and public value to the research of the institute

RRI Digital Repository - Vision 2015

Since the initiation of digital repository in 2006, a lot of research information has gone into it. However, there is lot more, which may be of interest to science historians that needs to be uploaded. Hand written manuscripts of Sir C V Raman; his correspondences; grey literature; audio and videos of lectures delivered elsewhere by RRI faculty; students in-house meetings; lectures; colloquia; conferences; seminars etc. are the other sources which needs to be digitized and uploaded on the repository. Photo gallery of Raman and photographs of events held at RRI will be the other components of this repository. It is envisaged to digitize these archival materials and make them accessible through RRI digital repository.