

CRL Global Resources STE Partnership – Collection Assessment

October 2013

Summary

In 2012 the Center for Research Libraries (CRL) [formed a strategic partnership](#) with the Linda Hall Library of Science, Engineering and Technology (LHL), in order to provide CRL members assured long-term access to an expanded collection of print serials in the fields of Science, Technology and Engineering (STE).¹ CRL's own collection of STE serials numbers close to 10,000 titles. The Linda Hall collection enlarges that pool of content to nearly 50,000 titles.

Benefits of the partnership for CRL libraries:

1. Seamless access to a vast shared collection of STE materials: LHL provides document delivery from its serials collections to all CRL libraries gratis through the RapidILL system, while CRL continues to provide document delivery and ILL from its own print serials holdings.
2. Participation in the further development of the shared LHL-CRL collections: CRL and Linda Hall will work together to actively develop the collection, with guidance from specialists at CRL libraries.
3. Assurance of the long-term archiving of print titles, to enable libraries to withdraw or discontinue service of corresponding local holdings. Detailed records of the CRL-LHL holdings are included in CRL's [Print Archives Preservation Registry \(PAPR\)](#).

The Collection: Strengths and Gaps

Serials

To inform strategic priorities for collection development, Stephen Bosch, CRL's Senior Collections Advisor for STE, performed a detailed analysis of the combined holdings of CRL and LHL in serials and monographs using the OCLC Collections Analysis Tool. The holdings were compared to those of other institutions in two categories:

- a) Universities with the top STE programs²
- b) The top 20 ARL libraries.³

Bosch also brought together other data elements to inform his assessment, such as impact factor, indexing from Ulrich's Knowledgebase, and information about where the journal title might be archived.

¹ The STE field, and thus the partnership, covers the broad subject areas of the Biological Sciences, Chemistry, Computer Science, Engineering and Technology, Geography and Earth Sciences, Mathematics, and the Physical Sciences.

² Based on rankings from *US News and World Report*, the universities include Cornell, MIT, Stanford, University of California-Berkeley, University of Chicago, University of Illinois at Urbana-Champaign, University of Michigan, and University of Washington.

³ Top 20 ARL are based on 2012 Association of Research Libraries rankings.

The results of the analysis (Excel spreadsheets and accompanying charts) are appended to CRL's [web page for the CRL-Linda Hall partnership](#) and on the event page for CRL's 2013 [Collections Forum](#)).

Bosch found that the CRL and LHL holdings together comprise "a pre-eminent STE print collection." His analysis revealed several subject areas of exceptional strength within the CRL-LHL collection, including:

- Biological Sciences (Botany in particular)
- Chemistry (all areas)
- Engineering & Technology (most subclasses)
- Geography & Earth Sciences (Geology and Geophysics)
- Mathematics (general and analysis)
- Physical Sciences (Physics especially)

The charts below indicate the relative strengths of these areas in the CRL-LHL combined collections.

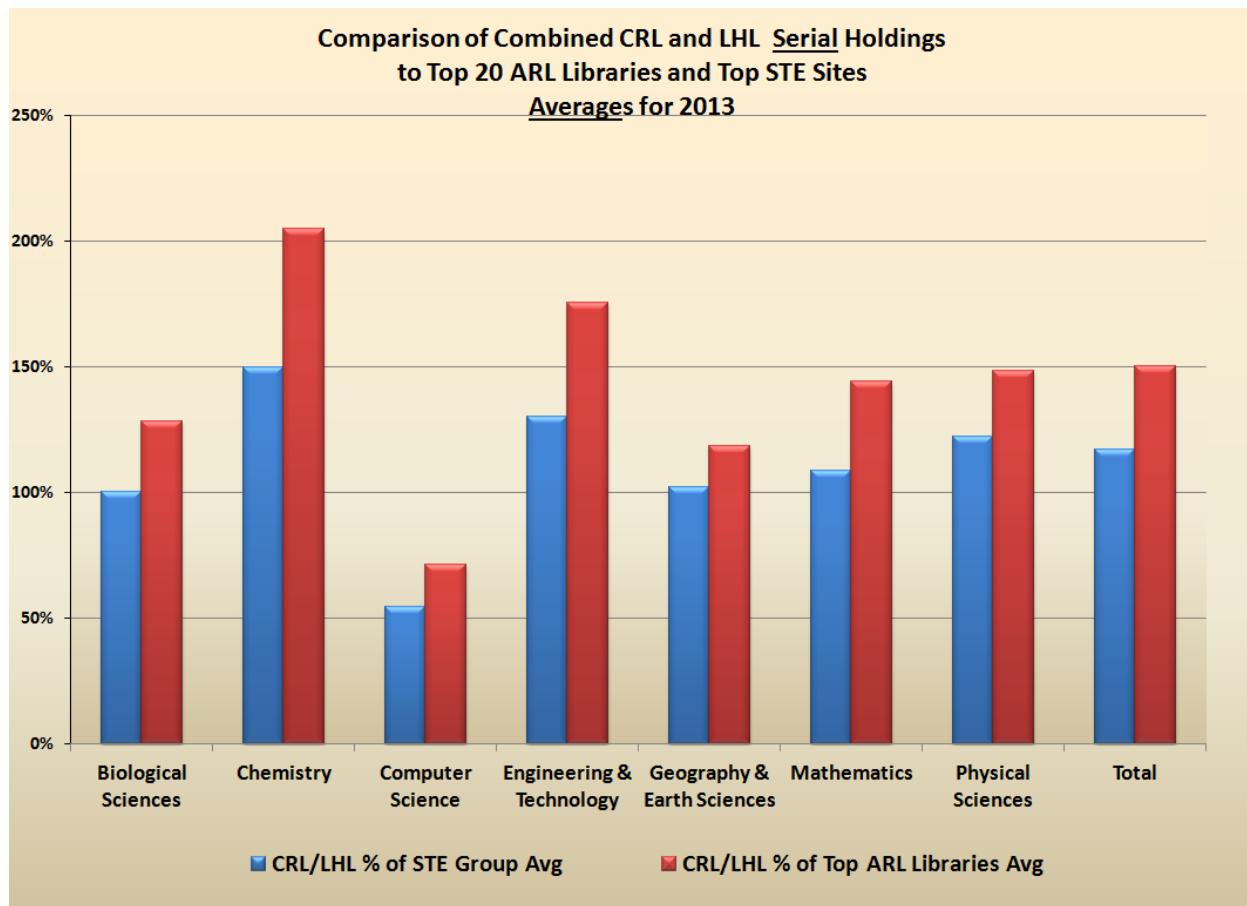
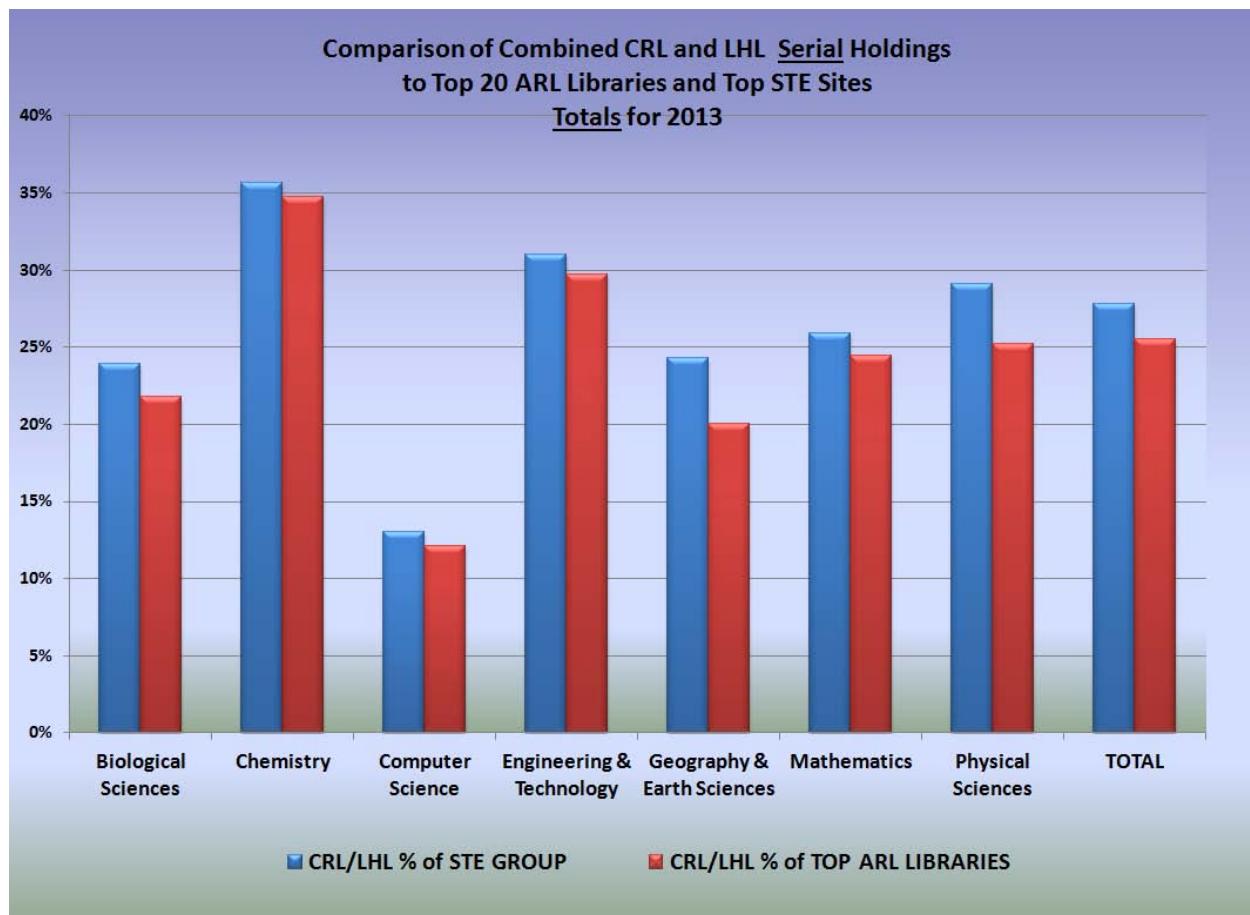


Chart 1: Comparison of Combined CRL-LHL Serial Holdings to Top 20 ARL Libraries and Top STE Sites - Averages for 2013

Comparing the number of STE serial titles held by CRL and Linda Hall to the average number held by ARL and STE libraries (Chart 1), Bosch found that the CRL-LHL serials collection significantly exceeds those collections in most STE areas. In Chemistry, for example, the CRL-LHL collection exceeds the average

number of titles held by top STE libraries by 50%, while a similar comparison to the average holdings of the top ARL libraries showed the CRL-LHL collection to be nearly twice the size.⁴ In general, except in the fields of computer science, the CRL-LHL collection meets or exceeds the average collection size of the top ARL and STE libraries.

In the major STE subject areas, comparison of the CRL-LHL serials collection with the combined holdings of the top ARL libraries and the premier STE universities also reflects favorably on the CRL-LHL collection. For example, CRL-LHL holds around 35% of the Chemistry serial titles held by all libraries in each of these groups combined.



*Chart 2: Comparison of Combined CRL-LHL Serial Holdings to Top 20 ARL Libraries and Top STE Sites -
Totals for 2013*

⁴ Average holdings were calculated by determining the total aggregate holdings in a given subject across all compared institutions and dividing by the number of libraries included in the study.

Monographs

Generally speaking, the subject strengths in serials described above apply to the **monographic** holdings of the CRL-LHL collection as well. While the monographic holdings are not as strong as the serial collections, the collection analysis revealed that the monographic holdings still represent a deep collection overall, with outstanding strengths in certain areas. Compared to the average holdings of ARL and STE libraries, monographs in the area of Chemistry again rise to the top, with monographs in the physical sciences and engineering also maintaining a respectable level of collection, as shown in Chart 3 below.

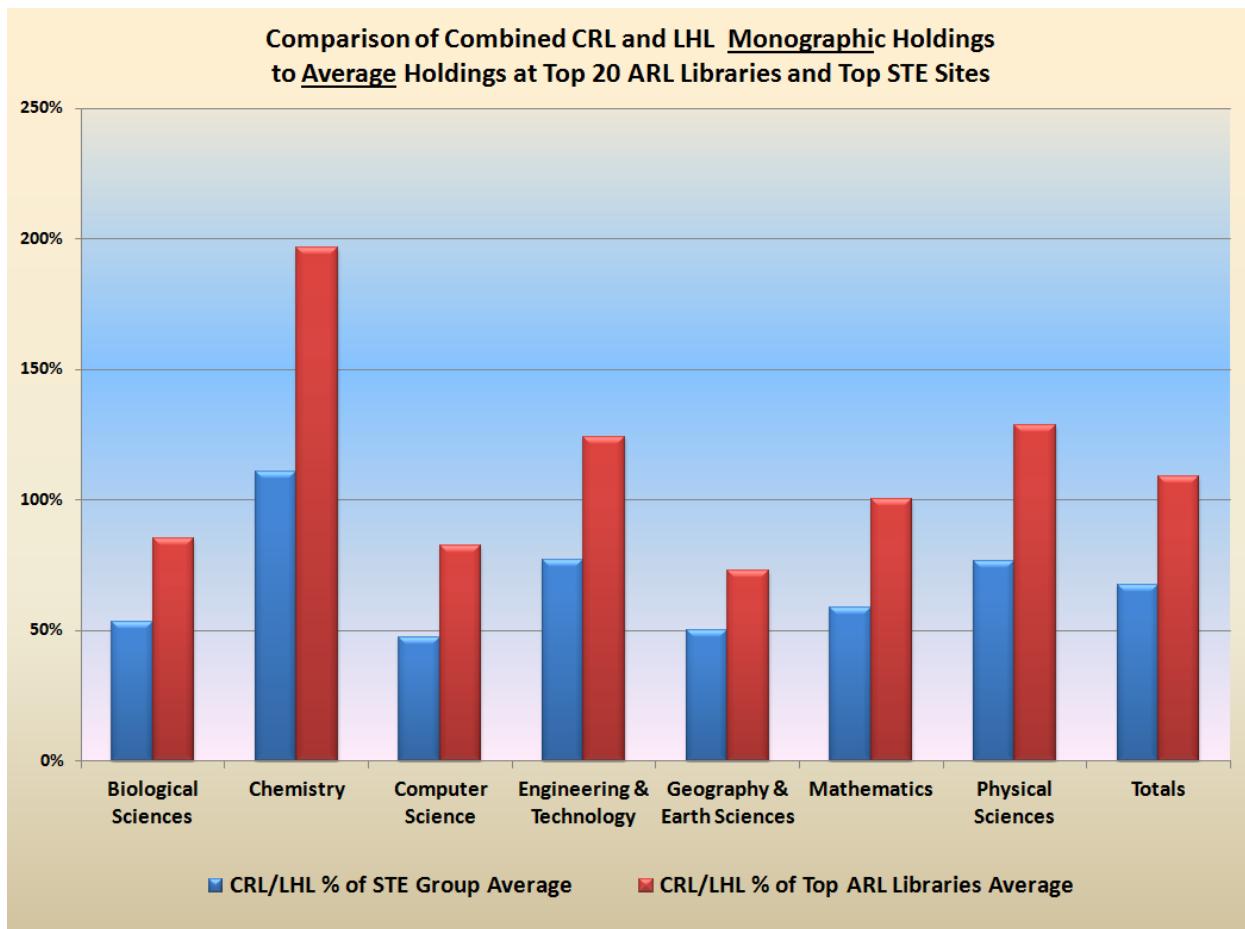


Chart 3: Comparison of Combined CRL and LHL Monographic holdings to Average Holdings at Top 20 ARL and Top STE sites

Foreign Language STE Materials

A particular “area of excellence” of the CRL-LHL collection is **foreign language titles**. The analysis of holdings revealed exceptional strength in materials in several languages, which suggest priority areas in which to focus continued development of the collection. Particularly strong are materials in Eastern European languages (Bulgarian, Russian, Polish, Romanian, Czechoslovakian, Ukrainian, Hungarian, Slovak, and Croatian) as well as to a lesser extent languages from East Asia, Japanese in particular. West

European languages are also well-represented, German and Dutch especially, but also Italian, French, Danish and others.

These language strengths represent, at least to some degree, early collecting decisions that drove acquisitions in these language areas for one or both institutions. For instance, CRL's historical exchange with the Russian Academy of Sciences built an exceptional collection of Russian science materials from the 1960's through the 1990s. By comparing the CRL holdings of Russian serials to those held by ARL libraries, CRL's Russian-language science holdings represent 76% of the combined holdings of the top 20 ARL libraries.

Further examination of rare and uniquely-held content shows, for example, that the CRL-LHL Russian Chemistry journal holdings represent the largest percentage (37%) of all uniquely-held titles among libraries contributing data to OCLC. (The next largest, the Northern California Regional Repository, holds 32%, with other collections falling off sharply from there.) Overall, Bosch estimated that less than 20-30% of the foreign-language STE serial titles are widely held by ARL libraries (the average holdings of Russian journals was around four institutions), which points to the need for some assurance that these titles are being appropriately archived for future use.

Further Development of the LHL-CRL Collections:

CRL and LHL are working closely to shape and develop the collection further. Bosch's 2013 analysis identified several criteria that will be considered priorities for the building and maintaining these shared print collections, including subject areas of excellence, language areas, uniquely-held content, and titles not held in other print archives. Additional criteria that will inform collection policies will include external indicators of quality and standing relationships between the partners and the professional societies and publishers.

General priorities for joint CRL-LHL collection development are:

1. Filling gaps in back runs through the merging of CRL and LHL holdings, and soliciting of missing materials from CRL libraries;
2. Continuation of foreign titles not widely held, where appropriate and possible;
3. The needs and priorities identified by the respective user communities (including post-doctoral fellows and scholars-in-residence at Linda Hall Library and researchers at CRL institutions);
4. Obtaining new serials from societies with which LHL has established relationships.

Preservation of the Collection

The CRL - Linda Hall partnership also provides assurance of the long-term archiving of the print titles held, permitting CRL libraries to withdraw or discontinue service of their local holdings of those titles. The CRL-LHL collection is the largest existing STE shared print archive: it contains more than 50,000 journal titles. By comparison, the Western Regional Storage Trust (WEST) had archived approximately 7,000 titles at the time of study.

Through a cooperative agreement with CRL, the Linda Hall Library has committed to retain its serial print holdings indefinitely under appropriate security and environmental conditions at the Library's facility in

Kansas City. Linda Hall also agreed to grant CRL the right of first refusal for the transfer of any materials the Library should decide to no longer maintain.

Detailed records of the CRL-LHL holdings are included in the [Print Archives Preservation Registry \(PAPR\)](#). The PAPR registry provides reliable, granular data to support library decision-making on the service, retention, relocation, and/or development of local collections in these fields.