## Virtual Reality at the Royal Society of Chemistry: Interview with Nigel Lees

By Svetla Baykoucheva



Nigel Lees

Svetla Baykoucheva: In the past few years the Library and Information Centre of the Royal Society of Chemistry (RSC) has been transformed to a virtual library that now provides online services to the 44,000 members of the organization. And the beautiful old library will soon become a center for chemistry. What's going on in London, when other similar organizations here in the US are either closing or significantly downsizing their libraries? How were you able to convince the leadership of the RSC to support these big projects?

**Nigel Lees:** The RSC is in a unique position in that it was the first national chemistry society to be established and the only one with a major library. The history of the Library is practically that of the RSC, and both have been serving members for over 160 years—a wonderful achievement, by any standard. The Library has never been one to rest on its laurels and has always been at the forefront of the latest technologies and services, even though it still looks like a traditional reading room.





(L) The RSC headquarters at Burlington House (home of Education, Science and Technology, the Library and Information Centre) (R) Inside the RSC Library and Information Centre; Below: Spiral stairs inside the Library



The redevelopment of the Library is the final part of a five-year reconstruction of the RSC's Headquarters in historic Burlington House. This building can trace its origins back to 1664, when it was the house of Sir John Denham. He later sold it to Richard Boyle, the first Earl of Burlington and elder brother of Robert Boyle, the "father of modern chemistry." So you can see why we feel that we have a great responsibility for its care.

As with many other libraries, we have seen a reduction in the number of visiting researchers and the Library, being the largest space within the RSC, has naturally caused some concern.

This has enabled us to re-evaluate what this space can be used for. Senior management and council in the RSC are now very excited about the prospect of re-purposing this space as a chemistry center (not its official name, yet), bringing large-scale events, conferences, and exhibitions to the RSC's headquarters for the first time, as well as improving research services for members.

This center for chemistry will join the efforts of other learned societies based at Burlington House that have formed what we call a "Cultural Campus" in the very heart of London. As the only learned society with significant chemistry collections (the earliest book is from 1505), the RSC is very keen to preserve and promote the best of the past, using the very latest methods of access to chemical research. Key to the Library and RSC strategy was the creation of a virtual library.

Could you tell our readers what this project is about?

The RSC Virtual Library has its origins nearly five years ago when it became evident that the large amounts of money we had been spending on chemistry journals could not be justified by the usage statistics. With fewer researchers visiting the Library and prices constantly increasing, we saw that a break point was rapidly approaching. A survey in 2002 sent to the membership overwhelmingly supported the Library, but members wanted electronic remote-access to be added to its resources. They also wanted us to retain our print collection, as many chemists were (and still are) concerned about continuing archive access to electronic backfiles. Many of them work at large academic institutions or commercial organizations and have good access to information, but a very significant number of them work in poorly resourced smaller organizations. This means that many thousands of members, who live and work outside London and overseas, would like to receive mediated access to licensed material.

Members also change jobs—so now, with the RSC Virtual Library, they can get access to a growing collection of materials, regardless of their employment status. More information about what we are offering is available at <a href="www.rsc.org/virtuallibrary">www.rsc.org/virtuallibrary</a>. It is still a work in progress and hopefully a model for other societies to emulate. I have recently published a paper, which gives more details about how we went about creating this new resource for RSC members (Developing a Virtual Library for 44,000 chemists (*Learned Publishing* 2007, 20(4), 290-297).

What was the most difficult aspect/part of the project?

With the Virtual Library, the most difficult part of the project has been persuading publishers and content suppliers that we were not a threat to their business. Publishers, especially, felt that if access was negotiated through the RSC to our members, there would be mass cancellations of journals from other organizations. We have been able to persuade our partners that this will not happen because our services cannot match the resources a large company or academic institution can provide. Quite often we find that usage goes up in the first few months of a new resource, only to plateau out and, in some cases, start to decline. Marketing and promotion to the members is vital, but as users get bombarded with emails and leaflets everyday from many organizations, it sometimes takes time for the message to get through.

As far as the new chemistry center is concerned, the Library will be losing some space to enable other things to happen; so the RSC has given approval to get journal backfiles to replace much of the print, which is stored off-site. We have started moving out thousands of journal volumes to storage, which is a major operation. When we finally move back into Burlington House, members and other visitors will have more of a virtual library, as far as access to journal content is concerned, while allowing our excellent historical print collection (books, images, journals, archives) to occupy the center stage. It might seem odd to you in the US, with your wonderful Chemical Heritage Foundation, but there is no place here in the UK that focuses on the history of chemistry in quite the same way as does the CHF. Certainly, we are not as well resourced financially, but with the new center for chemistry, we are getting all our older books catalogued. We will also make available, for the first time, many thousands of titles from our basement. This will be invaluable for school teachers and historians and will make it easier for the RSC to collaborate with other centers of excellence in the UK (and hopefully the CHF as well).

Who will the new Center for Chemistry serve? And which parts of the old library will be preserved?

The idea behind the redevelopment of the physical space of the Library and other areas is to open up Burlington House in a way that the founding fathers of the RSC and its predecessor societies would have been proud of. Learned societies, such as the RSC, are primarily knowledge management organizations, though the term was not around 160 years ago. However, this term is implicit in the royal charters, which mention "...the dissemination of chemical knowledge" as one of the Society's objects. What better way to do this than by opening up the home of chemistry in the UK to the public, to schools, for exhibitions, conferences, lectures, meetings, and other events —and by developing a virtual library for chemists? Since the old Library is a listed historic building, we are guided by our architects and English Heritage (a government department) on all aspects of its reconstruction. The large Reading Room will essentially remain the same but with some modern interventions such as glass partitions in the alcoves to create private research or meeting spaces. The idea is to sensitively synthesize the old with the new while making the space a more welcoming experience for visitors. There will be state of the art AV for conferences and meetings, greater display space for historical artifacts, space for smaller meetings, evening lecture series or major receptions—an inviting space where the RSC can carry out and develop its mission to advance the chemical sciences.

How do you see the impact of this new virtual library and the Center for Chemistry on the Society as a whole?

Both of these significant projects represent the RSC's commitment to its charitable status and mission to educate, promote, develop, encourage, and increase access to the chemical sciences. The Virtual Library will have a deep appeal especially to those chemists in our society who have limited resources. The chemistry center is a bold, inspirational project designed to welcome many more groups into the Society and serve as a focus for the chemical sciences in the UK. During 2007, the RSC also made great strides in increasing its membership, especially among students studying chemistry, attracting funds from corporate sponsors for our educational work and for the expansion of the science base in Africa. The RSC Publishing had a very good year with the successful launch of its e-books collection and the development of its award-winning Project Prospect, which enhances journal articles by providing further information on chemical substances and specific terminology mentioned in the articles. The chemistry center, especially, will create a "shop window" for the RSC and chemical sciences in general and will be the first place people will think of when they think of chemistry. We believe that the chemistry center will have a very significant effect and will keep chemistry constantly in the public's and government's eye.

Are there any aspects of the old Library that you are going to miss?

With any major change there will always be services that would have to be done differently, and this can often take time to get used to. The new chemistry center will have less storage space for printed journals, though this will be fully replaced by electronic backfiles; so it will look less like a traditional library. As parts of the chemistry center will be designed as meeting spaces, getting access to any printed material on the shelves will prove problematic; so we will have to find work-around solutions. I think the benefits of such a center will far outweigh any fond memories of the old space. The historical collections will be better displayed, IT and access to electronic information will be easier and more extensive, and members will have a more welcoming and relaxing space to visit. The RSC will have an outstanding home for chemistry right in the very heart of London. Though we have only a few months to go before our dreams are realized (we close at the end of May 2008), I would like to extend a cordial welcome to ACS members visiting London to drop by when we re-open the center some time in 2009.

If you were to advise librarians who are trying to preserve their libraries, what are you going to tell them?

Librarians face many challenges and my particular one over the past five years has been to recognize the changes occurring within the library and information world, and how they relate to our learned society situation. The RSC Library has always played to its strengths and recognized that it was seen in the outside world as a repository for hard-to-find journals and books. I have lost count of other librarians and members who say that they rely on the RSC Library to have material that can't easily be found elsewhere. How then do we match these expectations with others on a wish list? Members wanted remote-access and the RSC Virtual Library is the result. How then do we play our part in maintaining the printed archive of materials on a national and international stage? We have had discussions with the British Library and other learned society librarians about our role in this. The UK is fortunate in having a very robust learned society library sector, and I always like to think of our collections as forming a "hidden British Library," which plays a pivotal role in preserving knowledge for future generations. Working collaboratively with other librarians is absolutely essential these days, and I am pleased to see that librarians are among the most cooperative of all professionals.

You now have a virtual library; you will soon have the old library converted to Center for Chemistry. What's next for the Library and Information Centre of the RSC?

I think we have an excellent future but we have to get there first. I also think the "next best thing" for us will be making sure that the Virtual library is searched easily and also seamlessly. We have a project to develop a federated search engine, which will take some time but will be worth doing. All e-books will be catalogued, so that members can get direct access to over 1400 items. We worked successfully with Springer in 2006-2007 to get remote-access to 127 e-journals for our members. More content will be provided by Elsevier in 2008. In a landmark deal with this publisher we have managed to negotiate remote access to their chemistry back file and current access to 15 important chemistry journals. This may not seem much to you, but in fact it was five years in the making.

Another "what next" has to be the delivery of services and the creation of a space dedicated to the history of chemistry. Here we will collaborate with other organizations in the UK and abroad including, hopefully, the CHF. Through all this we have to continue developing our staff and keep them motivated through this time of great change. We all have to work differently, but this will provide a better platform to continue serving the chemical community for many years to come.

Nigel Lees is manager of the Library and Information Centre of the Royal Society of Chemistry in London (www.rsc.org/library)

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