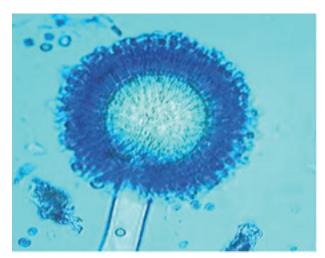
## Preventive preservation, a day-to-day work...

Besides internal factors of deterioration, books can suffer from biological contaminations including insects and moulds in most cases. That is why prevention is so important, even in recent buildings supposed to respond to preservation standards.





Picture 1 and 2: Examples of severe contamination in a library.



Picture 3: View of a contaminant under a microscope X 400.

Insects represent a very important threat for the documentary material: they can penetrate into stocks by the slightest opening and infest them if conditions are favourable.



Picture 4: Mites.



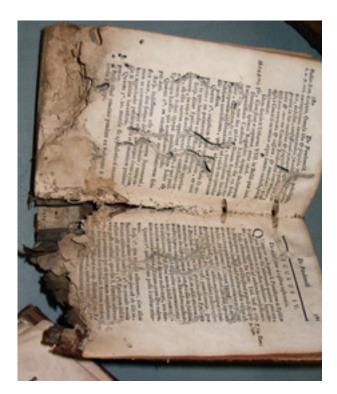
Picture 5: Booklouses.



Picture 6: Dorcus parallelipipedus.



Picture 7: Chrysopa carnea.





Picture 8 and 9: Contamination due to bibliophagist insects.

Those cases of contamination by insects show how important the location of a library is since its environment, such as a garden, a wood or a field favours the development of pests. The Dorigny Library, at the heart of the University of Lausanne, is an interesting example: if nature provides an ideal setting for study, it is not really favourable to the preservation of documents.



Picture 10: the Dorigny Library.

For more details, please read the complete article by Danielle Mincio, from the BCU of Lausanne and IFLA, page 13.

Building maintenance is essential too. Cases, such as pipe breaks, can favour, if mismanaged, a microbiological development, besides the damage caused to collections.



Picture 11: Infiltration in the ceiling.



Picture 12: Excessive dust accumulation on books.

For more details, please read the complete article by Tony Basset, from the Laboratory of the Preservation Department, BnF, page 9.

Indoor air contamination should not be neglected either: it is responsible for the corrosion noticed on the copper pipes. The most surprising is that acidic and sulphur pollutants don't come from outside but are emitted by the collections themselves...

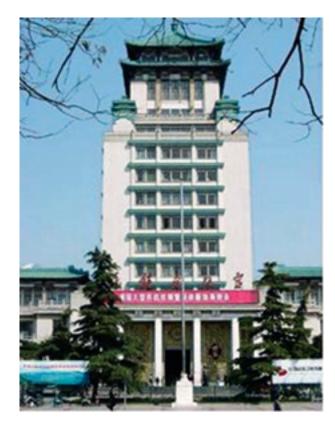
For more details, please read the complete article by Thi-Phuong Nguyen, from the Laboratory of the Preservation Department, BnF, page 14.



Picture 13: Corrosion on the hot copper tubes and the silver-containing brazed joints.

## **Hot Water Damage:** A Case Study of the Library of the Culture Palace for Nationalities

On November 2005, the Library of the Culture Palace for Nationalities of China (LCPN), which houses important collections of national minorities, saw its bookstacks, located on the first basement, seriously damaged because of a broken heating pipe which led to a minor flood. As a rare case of hot water disaster, it should be carefully analyzed and discussed.



Picture 1. View of the Culture Palace for Nationalities<sup>1</sup>.

The following figure can summarize the main causes of the disaster:

- 1. The burst spot of the heating system pipeline.
- 2. The hot water released from the pipeline entering the library basement.
- 3. A 30-cm-deep pool of standing water had accumulated in the basement.
- 4. The hot water overflowed the pump room.
- 5. A hot water pipe went through the basement.
- 6. The cover of the pipeline also released hot water.
- 7. The sprinklers automatically started and wetted the newspapers for a second time.

The moisture reached 90% and the temperature 90°.

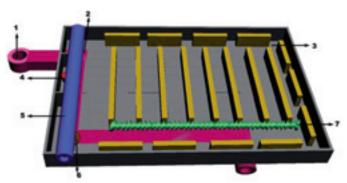


Fig. 1. The illustration of the first basement of the LCPN<sup>2</sup>.

<sup>2.</sup> Revised by the author, original image from http://news.tom.com/1002/3291/20051116-2656198.html

<sup>1.</sup> http://travelguide.sunnychina.com/travel\_intro/858

Picture 2. Water-soaked sutras w

Picture 2. Water-soaked sutras with the Chinese pothi binding<sup>3</sup>.

More than 20,000 volumes of ancient books and newspa-

pers were seriously damaged, such as some precious ancient

Tibetan sutras with Chinese pothi binding.





Picture 3 and 4. Drying the wet sutras, books and papers4.

This event points out that, even in a modern library, the pipes of fire extinguishing installations and drainage system can suffer flood risk.

For more details, please read the complete article written by Zhang Zhiqing and Zhao Daying, from the Department of Rare Books and Special Collections, National Library of China, page 22.

## The British Library Centre for Conservation

The new British Library Centre for Conservation (BLCC) on the St Pancras site in London opens in April 2007. It will focus on being a centre of excellence for book conservation. The centre also houses audio preservation studios. In addition, it will incorporate professional training, public tours of the studios and demonstrations.



External view of the British Library Centre for Conservation<sup>1</sup>.



Internal view of the British Library Centre for Conservation<sup>2</sup>.

The new centre aims to apply scientific research on materials to the conservation of library collections, in UK and internationally. Several projects will be developed in the years to come such as the Identical Book project or the Volatile Organic Compounds Books project.

For more details, please read the complete paper written by Helen Shenton, Head of Collection Care, British Library, page 26.

<sup>3.</sup> http://h.house.sina.com.cn/2005-11-18/08574032.html

<sup>4.</sup> http://news.tom.com/1002/3291/20051116-2656198.html

<sup>1-2.</sup> Images reproduced by kind permission of the British Library.