



SOCIETY OF  
VERTEBRATE  
PALEONTOLOGY



**Adhesives, Choice & Reason**  
**Tuesday the 22<sup>nd</sup> of September**

Preparators and Conservators Workshop  
Society of Vertebrate Paleontology meeting, Bristol

Organised by  
Chris Collins Conservation Unit, Natural History Museum, London  
And Remmert Schouten, Palaeontology laboratory,  
Department of Earth Sciences, University of Bristol

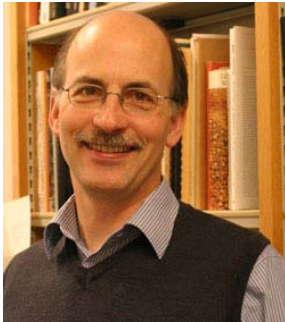
Speakers:  
Amy Davidson, American Museum of Natural History, New York  
Velson Horie, British Library, London  
Dick Mol, Natuur Museum Rotterdam, Netherlands  
Suzanne Henssen, Palaeowerkstatt, Germany  
Nigel Larkin, Natural History Conservation,

Welcome to Bristol and an extraordinary gathering of expertise in conservation and preparation! The SVP meeting is already a fantastic place to meet people in the trade and this workshop aims to improve on this again. Hopefully you can join us in an interactive journey into the latest and most recent developments of conservation of the past.

This will not be a static be-talked-at workshop. You are encouraged to put forward problems and questions and engage. As always with adhesives, there will be more answers than one, and sometimes contradictory. All a great recipe for constructive discourse!

## Velson Horie

Having trained in chemistry and archaeological conservation, I was the archaeological conservator for the north of England for 3 years before moving to The Manchester Museum (primarily natural history and archaeology) as Keeper



of Conservation for 28 years. I carried out: managing conservation and storage developments, including excavating bog bodies from Lindow Moss; research and publication on preserved skin, polymers, cinema film, and environmental control *inter alia*; teaching and publication in chemistry and polymers; professional developments including introducing accreditation to UK conservation and on journal and book series editorial boards; running museum developments including a £21m project and consultancies on developments. Currently at the British

Library managing a UK wide research project on the characterisation of changes of library collections, using established and novel tech

## Amy Davidson, Senior Principal Preparator

Division of Paleontology, American Museum of Natural History  
New York, NY USA



Amy Davidson trained as a fossil preparator with Bill Amaral at Harvard University, and since 1993 has collected and prepared many extraordinary specimens from Ukhaa Tolgod (Gobi Desert, Mongolia). She has also worked closely with AMNH conservators on the subject of adhesives and recently coauthored an “Introduction to Solution and Reaction Adhesives for Fossil Preparation” with Samantha Alderson, an anthropology objects conservator. Here she will focus on the history of one specimen of *Shuvuuia deserti* from its retrieval from the Gobi in 1994, preparation,

discoveries in the lab, analysis, exhibition, accidental damage and recent repairs in 2009. The use of Butvar B-76 (polyvinyl butyral) and cyanoacrylates on this specimen will be reviewed, as well as the use of archival housings as an alternative to adhesives.

<http://paleo.amnh.org/People/PeopleDavidson.htm>

## Chris Collins, Natural History Museum, Conservation Unit



Chris is an all-rounder, with views and experience in almost all conservation experts. He will endeavour to initiate and engage all attendees, bringing the subject(s) closer and in perspective.

His contribution is likely to be as entertaining as it will be informative!

<http://www.nhm.ac.uk/research-curation/facilities/palaeo-conservation-unit/chric4/chric4.html>

## Nigel Larkin, Natural History Conservation

Standford Cottage, Calvington, Newport, Shropshire. TF10 8BG.

[www.natural-history-conservation.com](http://www.natural-history-conservation.com)

### The case for Paraloid B72 as an adhesive, consolidant and gap-filler

Depending on the material requiring remedial conservation, the methacrylate co-polymer Paraloid B72 can be a very good choice. Not just because it has proven stability and great reversibility but because of its versatility. It can be used straight from the tube as an adhesive, or mixed to the exact consistency required for use as an adhesive or consolidant – with a variety of solvents. With the addition of a suitable stable filler it can also be usefully applied as a gap-filler.



Using just one product in these different ways on the same specimen has its advantages. In the immediate term, it bonds very well to itself. It will also remain stable: if you use more than one product on a specimen you really cannot be sure of the long-term stability of the chemical cocktail you are creating.

The West Runton Mammoth Conservation Project will be presented as an example posing particular problems, along with some other palaeontological challenges.

## **Suzanne Henssen** Freelance Fossil Preparator

Henssen PalaeoWerkstatt, Goch, Germany  
[www.palaeowerkstatt.de](http://www.palaeowerkstatt.de)

Susanne Henssen finished her vocational training for Geoscientific Preparators at the Preparator School in Bochum, Germany in 1993. She worked for several museums before she started her own business in 1996. She is specialised in restoration and conservation of sub-fossil material and works mainly for palaeontological and archaeological collections.

In her presentation she gives an overview about the challenge to properly conserve sub-fossil material and the use of polyethylenglycol as a specialised solution. Based on an example of a mammoth tusk which was found 2005 in Switzerland, she explains the correct treatment after discovery, conservation with polyethylenglycol and how it is presented in the exhibition. A review follows of some of the oldest results that have been achieved about 30 years ago by using the polyethylenglycol method.

## **Dick Mol**, Research associate Natural History Museum, Rotterdam, the Netherlands

The consolidation of Pleistocene Mammals from the North Sea between the British Islands and The Netherlands

The southern Bight of the North Sea between the British Islands and the Netherlands is extremely rich in remains of Pleistocene and Early Holocene mammals, both terrestrial and marine mammals. These remains are trawled from the seabed by fishermen trawling for flatfish. Most of these remains, tons and tons have been brought every year ashore by the fishermen, are in good state of preservation. The remains originate from the entire Pleistocene (2.6 million – 11.500 BP) and their state of preservation depends on their geological age. Those from the Early Pleistocene are heavily mineralized and produce a high-pitched sound when tapped on with a hard object. Those from the Late Pleistocene and Early Holocene are barely mineralized. These fossils need a special treatment to keep them in good condition for research and museum purposes.

Dick Mol from the Natural History museum is collecting the by-catches of the fishing trawlers in the harbors of the Netherlands as well as doing his own expeditions on the sea to collect the fossils from well-known localities. The



National Natural History Museum in Leiden, the Rotterdam museum and many private collections possess extensive scientifically important collections. In an overview Dick Mol will discuss the way of accurate collecting the data to the fossils as well as the route of consolidation of the mammal remains from the seabed into the collections towards making them available for study and museum display.