

## FIBRE IDENTIFICATION FOR PAINTING CONSERVATORS

November 2009

As conservation science uses increasingly sophisticated instruments to investigate materials, conservators themselves may feel that they are no longer capable of material investigation, or that it has become too expensive. This fibre identification course demonstrates that there are simple, safe and accurate methods that require only readily available instruments and materials, the most essential being the human eye.

### The Programme

The fibre identification workshop trains participants in the examination of the most important natural and synthetic fibres found in painting canvases: cotton, linen, jute, hemp, and polyester. Some attention will also be paid to silk and acrylic.

While the emphasis is on practical work, essential theory will also be given.

Examination methods presented include the use of the human senses as well as the use of the microscope and stain tests, all of which can be easily and safely carried out in a conservation studio. An extensive reader will be supplied. Participants are encouraged to bring their own textile specimens for identification.

Practical sessions include the following:

- use of the senses
- making preparations, including cross sections, for examination under the microscope
- carrying out stain tests using the microscope
- making permanent mounts for a reference collection
- examination of known and unknown fibres, supplied by the trainer and the participants

Theory sessions include the following:

- the description of textiles including basic weaving analysis
- an introduction to fibre properties
- the classification of textile fibres
- the use of context and a systematic approach, record keeping
- the morphology of plant, animal and synthetic fibres
- the morphology of degraded fibres

By the end of the course, participants may expect to understand:

- the main morphological features of the fibres most used in artists' canvases and how to recognise them
- how to carry out tests and prepare samples for microscope examination
- the importance of a systematic approach and accurate record keeping
- the pitfalls that may be encountered.

Participants take home the following:

- a reader that comprises directions for the examination techniques, identification charts, required materials, articles for further reading, SEM and microscopic photographs of fibres.
- samples of the most important fibres in woven form
- their own reference collection of prepared samples.

### Course Leader

After many years as the head tutor of textile conservation at the Netherlands Institute for Cultural Heritage in Amsterdam, Jennifer Barnett now mainly works as a translator (Dutch-English) and editor specializing in cultural heritage.

## **Participants**

Conservators of paintings.

Some experience in using a compound microscope is expected.

Participants are asked to bring a lab coat and their own hand instruments.

## **OUTLINE PROGRAMME**

### **Day 1 Monday morning**

Welcome to the course and introductions

theory: the description of textiles

practical: basic weaving analysis using examples

### **Day 2 Tuesday morning**

An introduction to general fibre properties

Introduction to fibre identification

theory and practical: using the senses; burn and drying twist tests

### **Day 3 Wednesday morning**

theory and practical: making preparations for the microscope

practical: known canvas fibres

### **Day 4 Thursday morning**

theory and practical: stain tests

practical: known canvas fibres

### **Day 5 Friday morning**

theory: degraded fibres

practical: describing and identifying unknown canvases