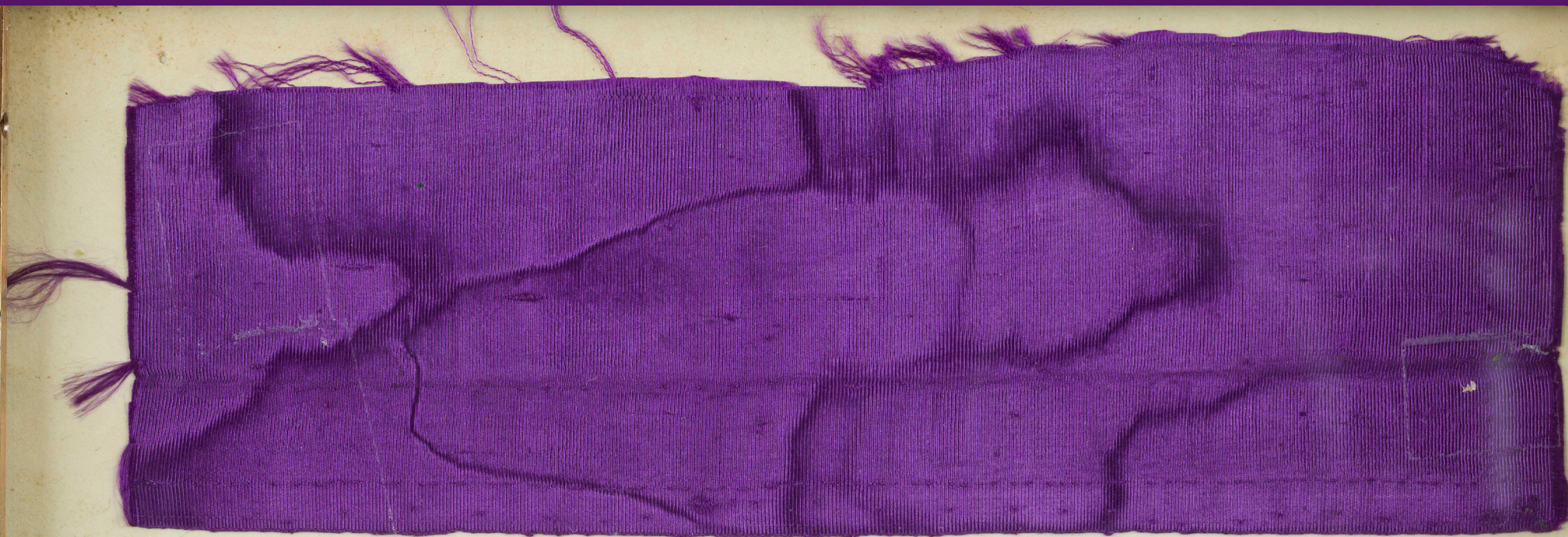


CHEMISTRY FOR CULTURAL HERITAGE

Adriana Iuliano



PERKIN MAUVE

PATENTED AUGUST 26TH, 1856

THIS PIECE OF SILK WAS DYED BY SIR WILLIAM HENRY PERKIN IN 1860
AND PRESENTED TO WM. J. MATHESON OCTOBER 8TH, 1906.

William H. Perkin



WHAT DOES A CHEMIST DO?



WHAT DOES A CHEMIST DO?



WHAT DOES A CHEMIST DO?



WHAT DOES A CHEMIST DO?



...MIST DO?



WHY NOT BOTH?

ART



SCIENCE



CONSERVATION CHEMISTRY

NOT JUST FOR ART LOVERS

A conservation chemist needs to:

- **understand** the artefact

What materials were used? How was it made?

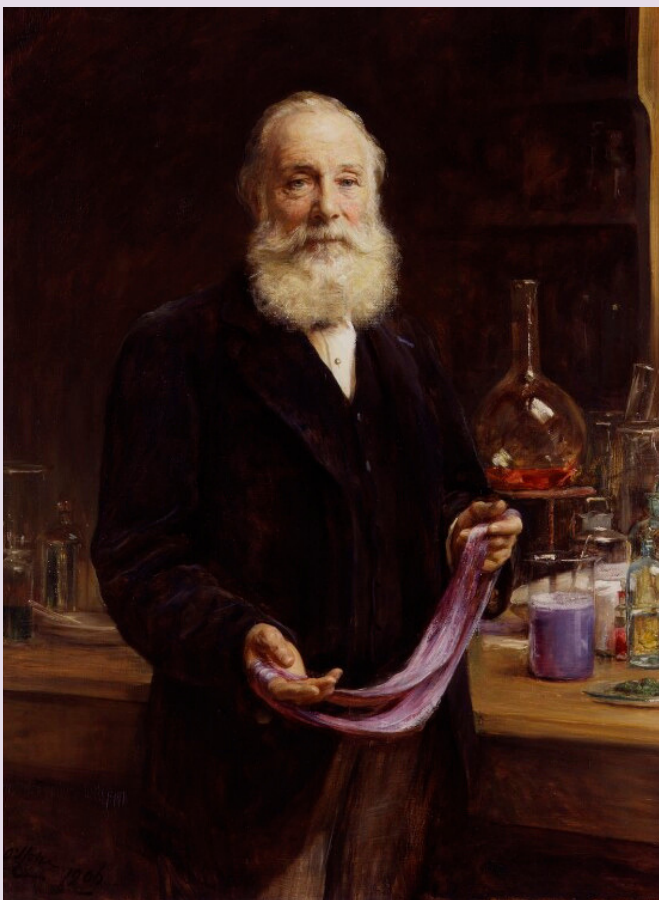
- **preserve** it

How and where should it be stored?

- **restore** it

What can be used to clean it without altering it?





SIR WILLIAM H. PERKIN

AND THE FIRST SYNTHETIC DYE

In 1856, William Perkin discovered the first synthetic dye and called it **mauveine**.

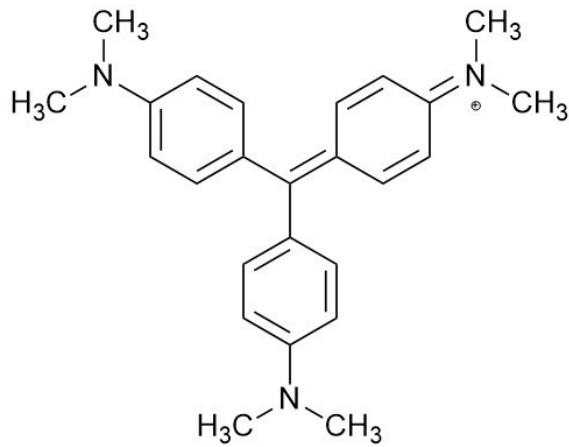
It revolutionised the chemical community.

Mauveine and other derivatives were soon used in fashion, photography and even stamps.

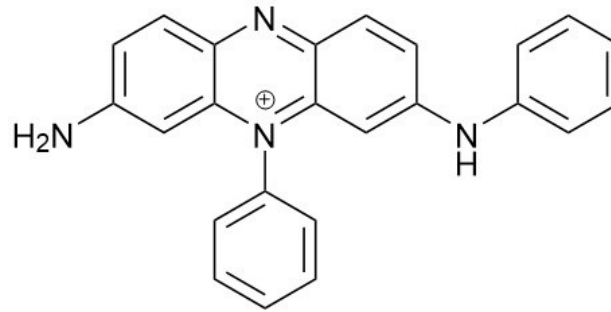




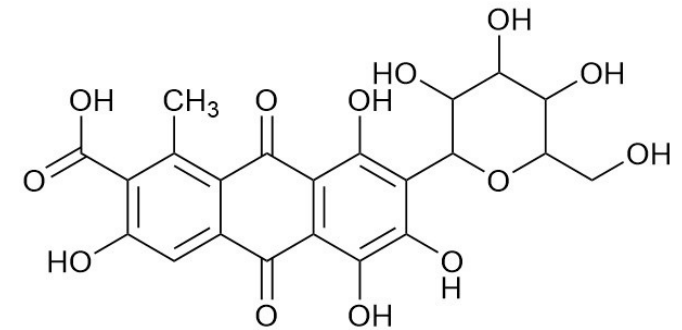
Dye Reveal



A) CRYSTAL VIOLET

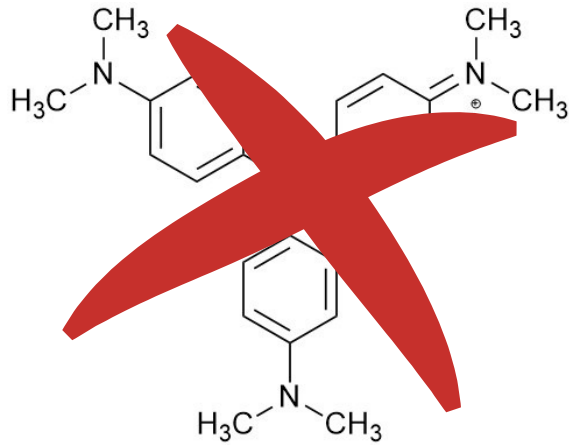


B) PSEUDO-MAUVEINE

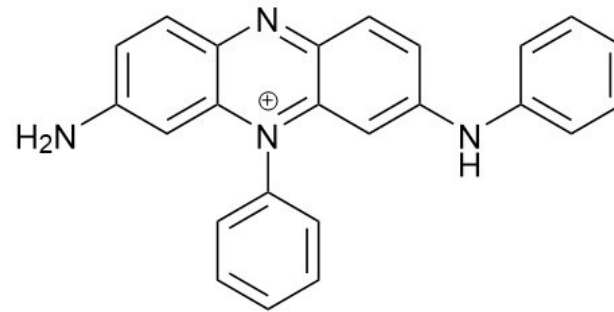


C) CARMINIC ACID

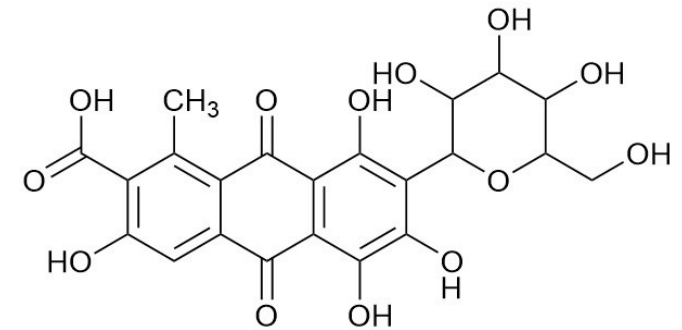
Dye Reveal



A) CRYSTAL VIOLET

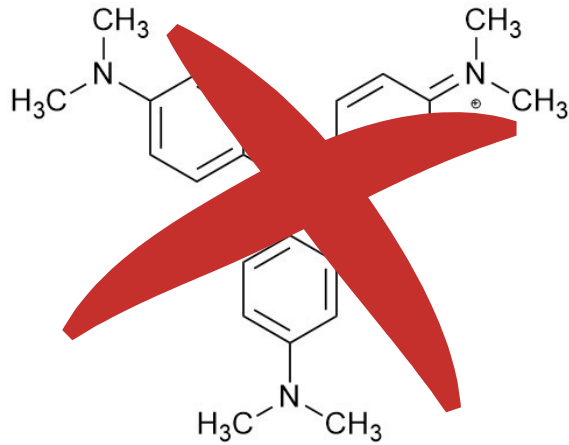


B) PSEUDO-MAUVEINE

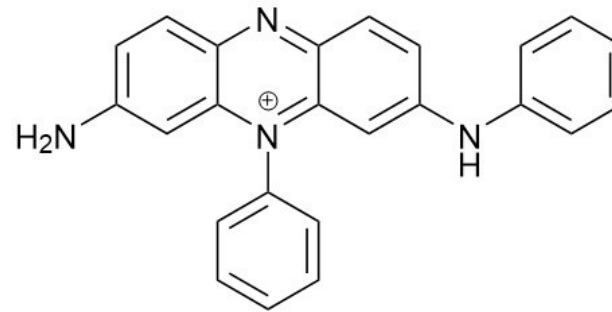


C) CARMINIC ACID

Dye Reveal



A) CRYSTAL VIOLET

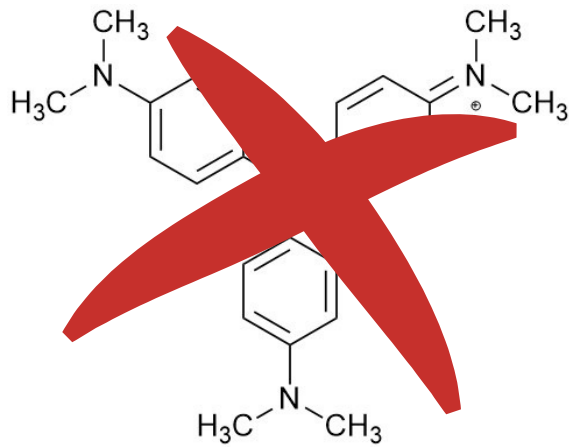


B) PSEUDO-MAUVEINE



C) CARMINIC ACID

Dye Reveal



A) CRYSTAL VIOLET



B) PSEUDO-MAUVEINE



C) CARMINIC ACID

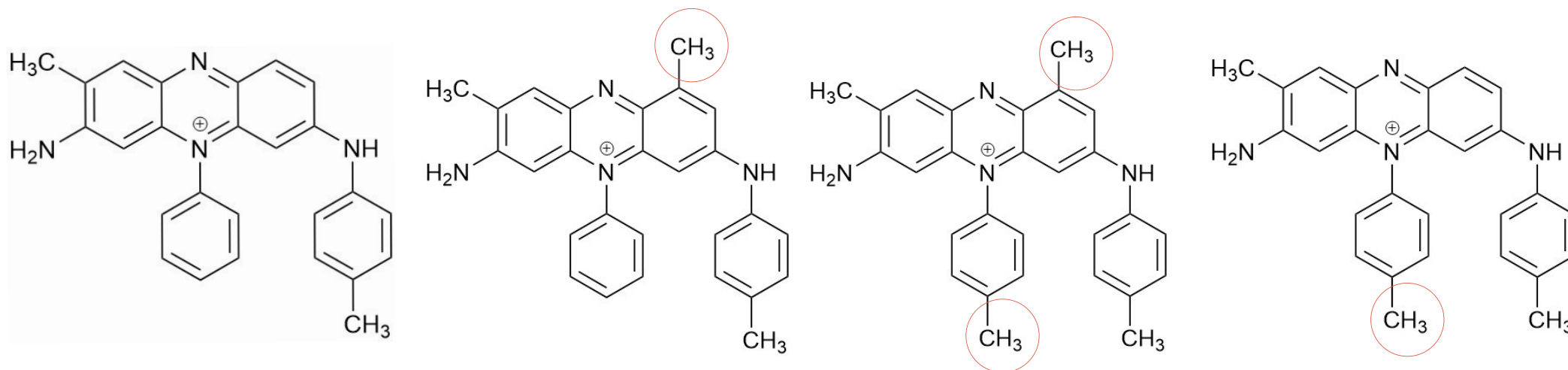
SIX PENCE STAMP



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The six pence stamps (with no hyphen between 'six' and 'pence') were the only ones dyed with Perkin's original mauveine.

...Perkin's Mauveine is actually a mixture!



Chemists only realised this in 1994!

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Research supervisors:

*Dr. Linnea **Soler**, School of Chemistry*

*Dr. Anita **Quye**, Centre for Textile Conservation and Technical Art History*

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