

Paul Leonard BSc. (Hons)., CSci., FRPSL

Assisting Expert Committees through the use of Forensic Philately

A Presentation on behalf of FEPA at EuroPhilex
with support from Foster Freeman & their VSC9000.

Friday 9th May 2025

A personal view compiled by Paul Leonard with thanks to funders, Members of the Royal Philatelic Society, Tobias Huylmans and UK university researchers.



Outline of the Presentation:

- *Introduction to the work of an Expert Committee*
- *Adding value through forensic philately*
- *Helping Royal Mail*
- *Helping the Philatelic Traders Society Ltd.*
- *On – going research*



Introduction to the work of the Expert Committee



Visit of Her Majesty The Queen, November 2019



*Her Majesty meeting the members of the Expert Committee:
(left to right) Tomas Bjäringer RDP Hon FRPSL, Charlie Mead FRPSL, Maggie Thompson FRPSL,
Lucy Caulfield, Peter Lister FRPSL and Chris Harman RDP Hon FRPSL*



240 234



Introduction to the
work of the Expert
Committee at the
Royal Philatelic
Society, London

Submitter
provides item +
information



First check



Volunteers



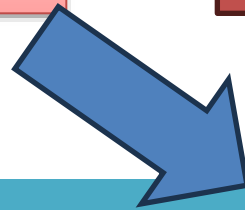
Collate
responses



Consult



2nd
Check



Expert Committee
Conclusion based on
current evidence



April 2025



RPSL LTD.

THE EXPERT COMMITTEE FOR THE
ROYAL PHILATELIC SOCIETY LONDON

19 ABCHURCH LANE
LONDON EC4A 3DF

No: 240234



Meeting of - 5 MAR 2025

Note: One signature indicates that the item is GENUINE.
Multiple signatures indicate that the item is NOT genuine in all respects.

In the OPINION of the **EXPERT COMMITTEE** the item submitted as

Value: 1902

S.G. No: 1

*10 carmine - stamp of New Zealand - handstamped
T1 in bluish green - used - soiled margins -
is Genuine*



[Signature]
On behalf of the Committee

DON'T WORRY !



KEEP SMILING !
We will win the war



DON'T WORRY !



Mr. A. W. Bendig
311. Mt. Royal Blvd
Etna, N.H.
U.S.A.

No. 217180

THE ROYAL PHILATELIC SOCIETY
LONDON

41 Devonshire Place
London W1G 6JY

Meeting of 15 JAN 2014

AFTER CONSULTATION

In the OPINION of The EXPERT COMMITTEE the item described as

Great Britain: 1856 S.G. No. C8(1)
1D red brown - die II - alphabet III - blue
paper - watermark large crown - perf 14 -
plate 35 - block four - used - is Genuine.

CBS: rubbed at bottom right.

217 180

Ben
On behalf of the Committee

Submitted by [redacted]



Completed expertising with 'is Genuine', signed by the RPSL Chairman. A 'Bad Certificate' has multiple signatures.

No. 206932

THE ROYAL PHILATELIC SOCIETY
LONDON

41 Devonshire Place
London W1G 6JY

Meeting of 10 NOV 2010

EXPERT COMMITTEE the item

New South Wales; 1860 S.G. No. 168

*Is rose-carmine - perf 13 - wmk double-lined
"12" - wmk sideways - vanned perfor at left
and right - used - is Genuine.*

Paul
On behalf of the Committee

Submitted by *Paul Leonard*

Introduction to the work of the Expert Committee



Stamps may be worth a small amount of money while some may be worth a lot of money. How do you find out?



Items may be manipulated to enhance their value. An Expert Committee seeks to provide an opinion based on knowledge, reference material and scientific analysis.

How members of the Expert Committee get involved



Members of the 2025 Expert Committee

Christopher Harman RDP, Hon. FRPSL, Chairman

Tomas Bjäringer RDP, Hon. FRPSL

Dr Tim Harrison FRPSL

Ian Harvey FRPSL

Peter Lister FRPSL

Simon Richards RDP, FRPSL



Brief History and Operations of the Expert Committee



- Founded in April 1894 following an instruction to Council “to appoint an Expert Committee who shall adjudicate upon any stamp or stamps submitted to them for their opinion”.
- Original members were M. P. Castle, E. D. Bacon & Major E. B. Evans

The First Experts Committee of The Philatelic Society London

The first Committee of Experts consisted of these three men:



E. D. Bacon.



M. P. Castle



Edw. B. Evans.

Brief History and Operations of the Expert Committee



- Since 1894, the Committee has had a total of about 50 members.
- The Committee seek assistance from many consultants who have specialist knowledge of (often esoteric) subjects.
- The work of the Committee is labour intensive and there are a number of volunteer helpers who prepare paperwork, check photographs and write certificates.
- The day to day work of the Committee is managed by Ms. Lucy Caulfield, our Expertisation Manager.

Read more :Sundberg M (2019) The Centre of the Philatelic World: Daily Life at The Royal Philatelic Society London, 41 Devonshire Place : Stockholmia 2019 Exhibition Catalogue 165 – 204. With pages 185 – 194 ‘Seeking the Truth’ ...



Operations of the Expert Committee : Lucy in Action



[The Royal Philatelic Society London > Experts](https://www.rpsl.org.uk/experts)

The Royal Philatelic Society London (<https://www.rpsl.org.uk/>) Experts (<https://rpsl.org.uk/experts/>)
The Expert Committee for the Royal Philatelic Society London



Next Meeting Dates

- 21st May 2025
- 2nd July 2025
- 13th August 2025
- 24th September 2025
- 29th October 2025
- 3rd December 2025

Tracy + Peter Lister

Operations of the Expert Committee



Material that needs to be assessed may be compared with reference material



Reviewing what is known about the submitted item from Society collections

Reference books

Operations of the Expert Committee



An essential
tool x 10
magnifying
glass



A chemical
+ tray to
help
determine a
watermark

Operations of the Expert Committee: The Process



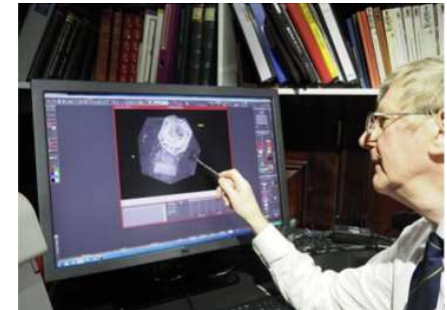
- Receipt of a stamp on or off an envelope is called a 'patient' and the patient submission details & the submitter are recorded.
- Patient is mounted in folder for examination.
- Photographic records (about 240,000) are checked to see if it has been seen before and used for comparison.
- Initial examination and written comments are made – cross-checked by two or three others ahead of a formal Meeting of the Committee.
- The Committee usually sits every six weeks and each member has an opportunity to examine the patient and pass comments.
- After each meeting a number of items will be taken for comparison with collections of known provenance e.g. The British Library or Royal Philatelic Collection. Items may be sent (or scanned) to worldwide consultants for comment **n.b. All expertising is a matter of opinion and experts (and expert committees) do not always agree.**

Operations of the Expert Committee :

The main challenges to the expertiser



- Cleaned used stamps masquerading as unused
- Coloured and distinctive postmarks (for example the Great Britain Maltese Cross)
- Stamps with margins or corners added
- Stamps on cover that did not originate on the cover
- Creation of rare separations – roulette / pin perforations





Expert Committee ~ Contributions to the Archive



Preparing
two
photographs

During 2024
the 200,000
+
worksheets
were
scanned



One
photograph
for the
certificate
and a
second for
our records.

2025
Scanning
on – going
to provide a
digital
archive



Adding value
through
forensic
philately





Determination of diameter



0.51 0.50 0.48 0.49
mm





Genuine

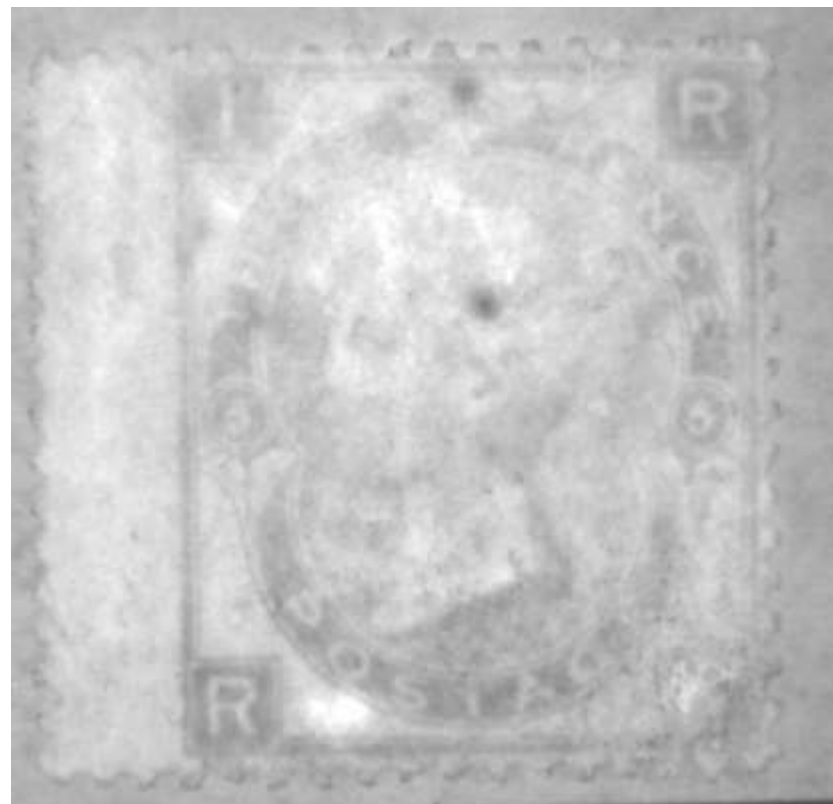


Forged



Comparison of printing methods

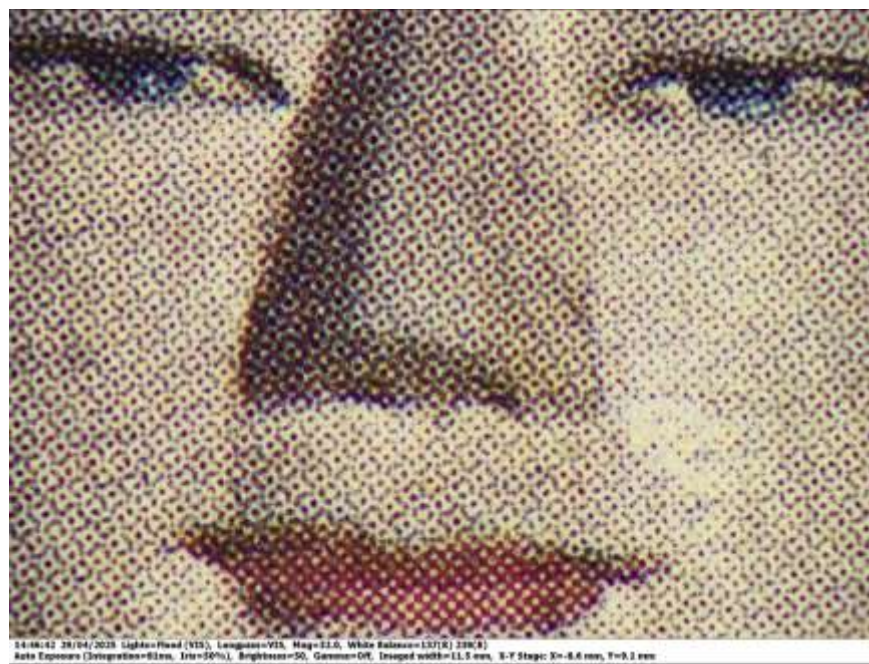
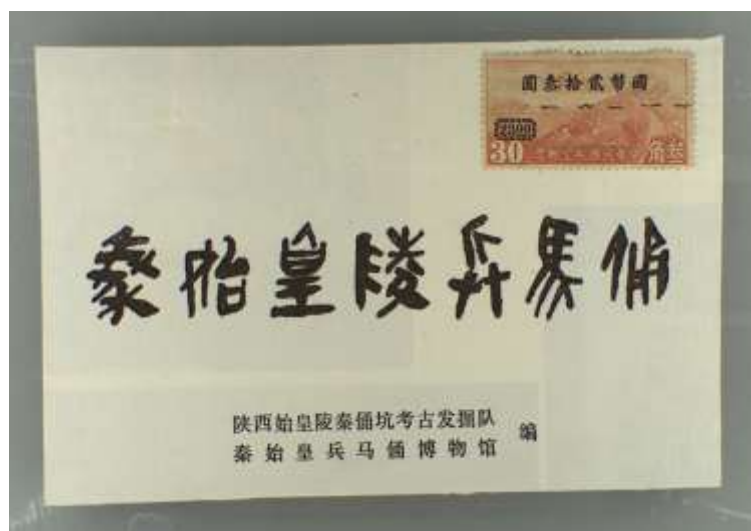




490 - 560 nm

1939 China /
USA
cooperation ..

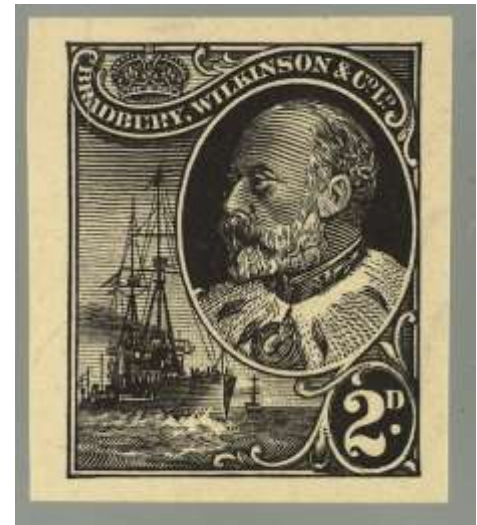






(IS), Longpass=VIS, Mag=7.97, White Balance=137(R) 239(B)

Bradbury Wilkinson publicity





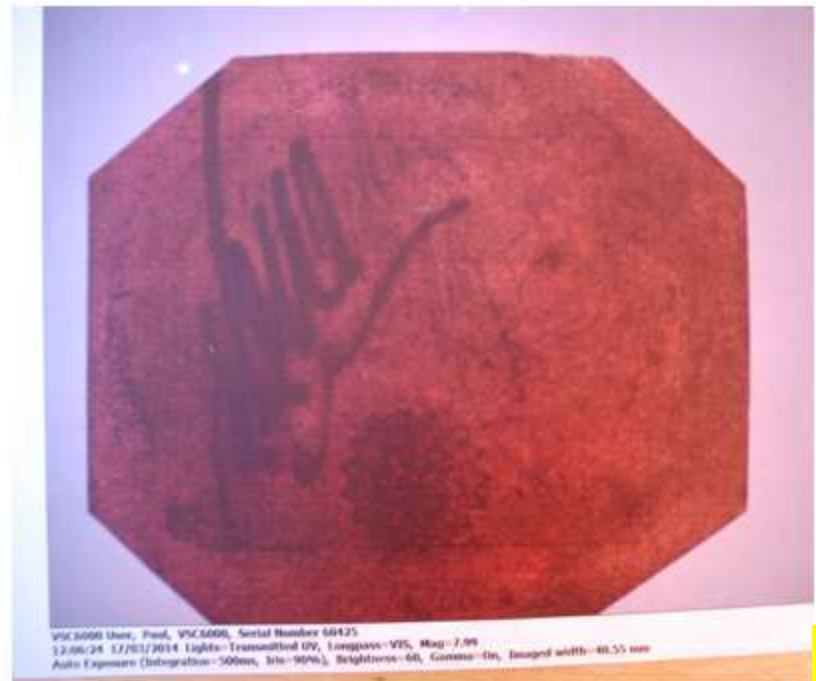
Example
of
regummed
stamp

Use of the Video Spectral Comparator **VSC 6000**

The iconic 1 cent
British Guiana, the
worlds most valuable
stamp, expertised at the
Royal



Seen 2014



Publication of results

The temptation for fraud from a fiscal cancellation



Figure 1.
40 rupee stamp under normal light.



Figure 2.
40 rupee stamp subjected to an orange filter.

SHAW J and LEONARD P (2016) Forensic philately (3) Assessing whether a stamp has been manipulated for fraudulent purposes ~ removing a fiscal cancellation and adding a postal cancellation. London Philatelist **125** (1435) 188 – 189.

BBC Watchdog filming at the Royal Philatelic Society, London 18 March 2024




Photograph by Paul Leonard

Helping
Royal Mail



50x1ST

Valid for items up to:
240mm Long; 165mm Wide;
5mm Thick; 100g Weight.

 03457 950 950  royalmail.com  03456 000 606



To find the correct postcodes
for your mail please visit
royalmail.com/postcodes



Example of the Forged 1st Class Stamp ~ April 2024



Sheet of 50 forged stamps
different bar codes but
same on each sheet

Different printing method



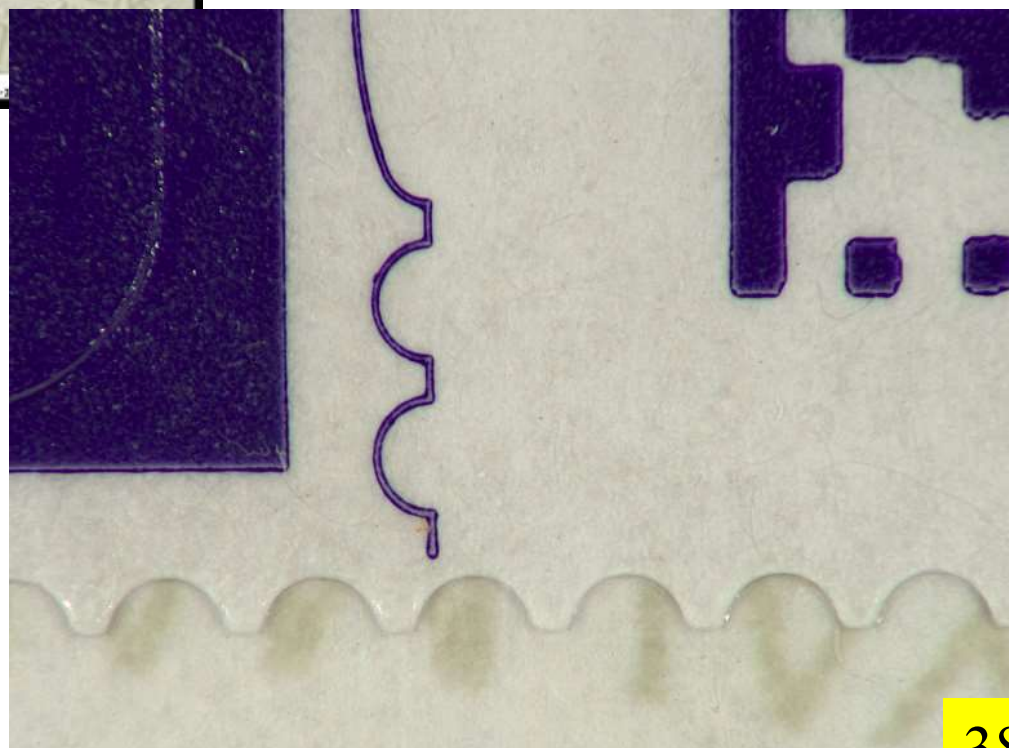


Genuine





Forged





The programme was watched via the BBC One Show with c. 2m viewers. Royal Mail subsequently issued useful advice.

[Stamp fraud - How can you spot counterfeit stamps? | Royal Mail Group Ltd](#)

The Bill Barrell four penny blacks on cover

Helping
the PTS

[Dealer's Insights: Valuing a Stamp
Collection | #philately 47 - YouTube](#)

This video has had
over 75,000 views ~
Well done Bill & Team



Plate 6, penny blacks





The four used stamps taken off the cover.





Use of Postmark Reveal.com .
Could also use Image Sleuth or Photoshop



Use of VSC8000HS ~ 365 nm Ultra violet above & left side light below.



On – Going Research



Using the VSC8000HS



Calibration from Paul White, Foster Freeman

Using the Leica microscope with the VSC8000HS



The microscope helps with very high magnification and can be very useful for looking at over prints, paper fibre orientation and embossed material

Using potential equipment available to the Expert Committee

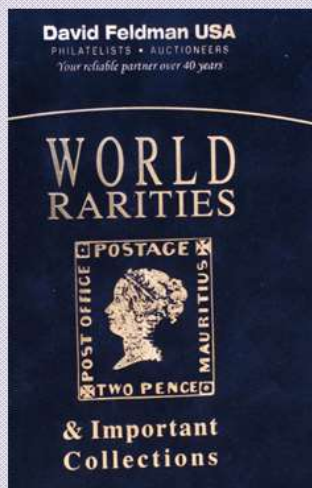


Dr. Mel Bailey at the Ion Beam Centre. Working at the University of Surrey, December 2017



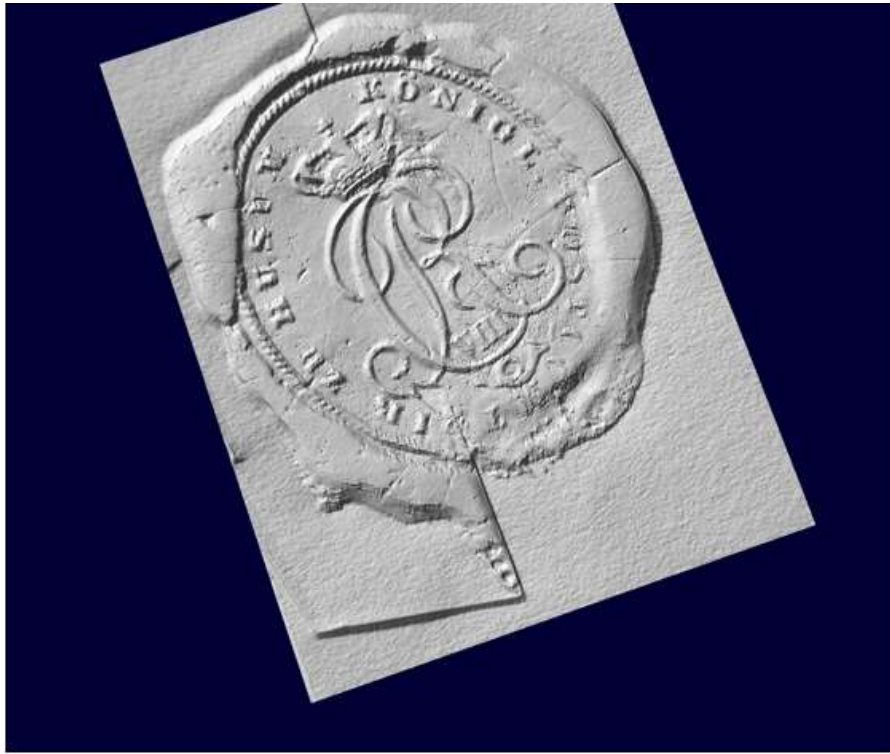
Using potential equipment available to the Expert Committee. The Keyence 3D Microscope

The need for Expertising e.g. The Mauritius Printing Plate



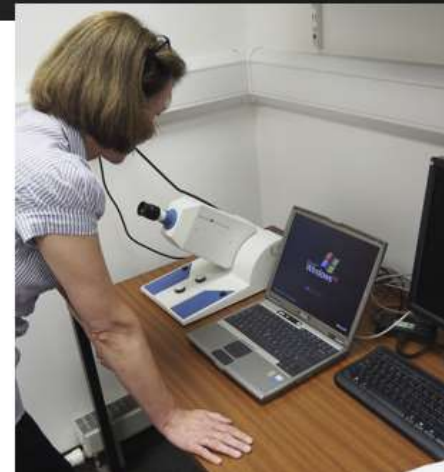
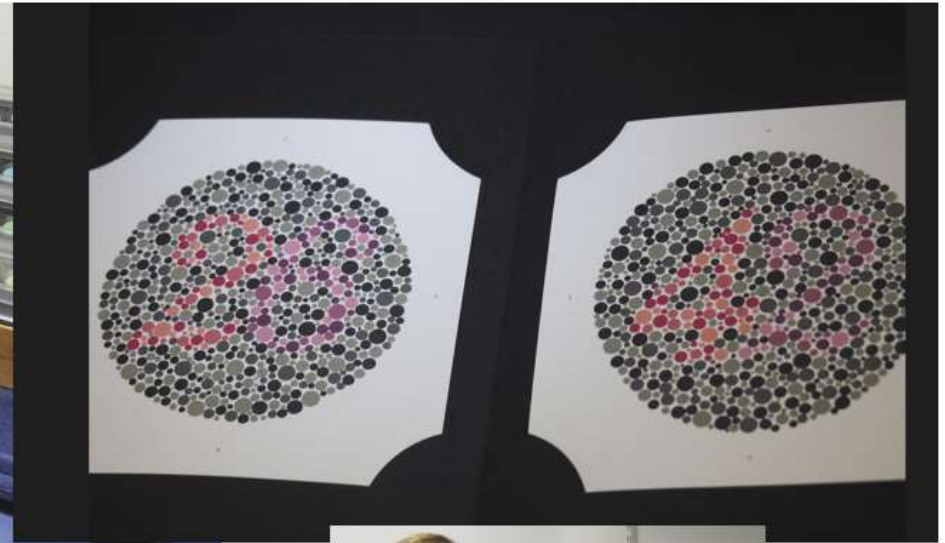
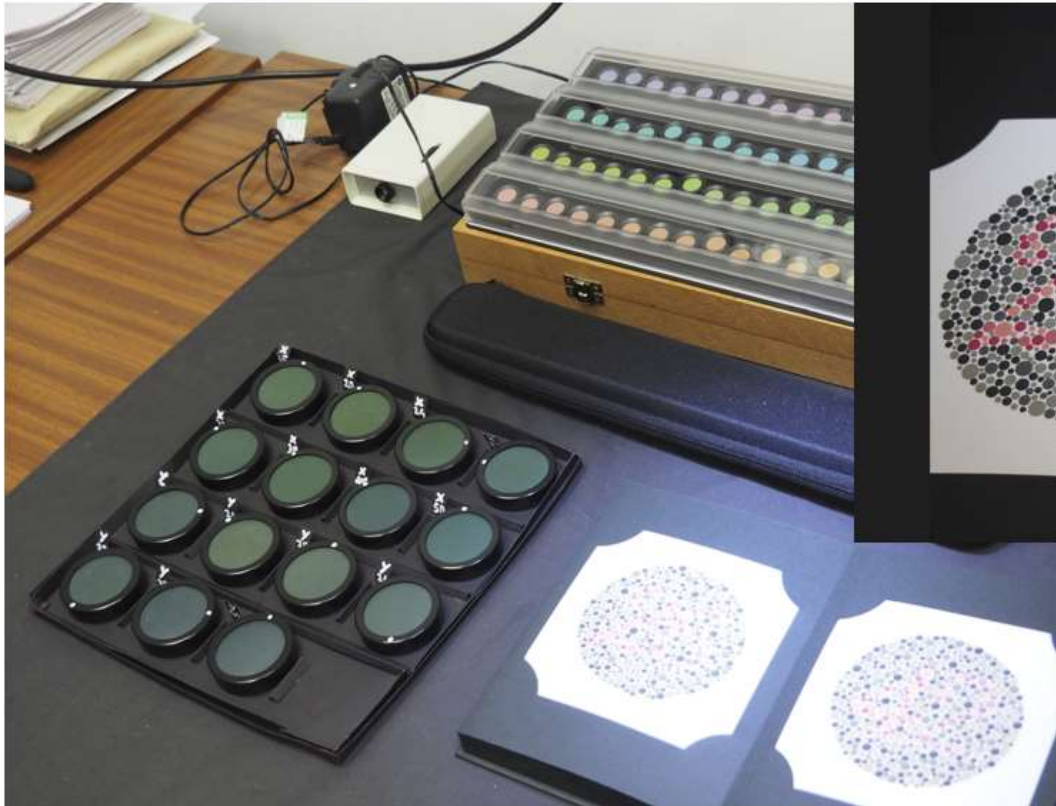
3 - D Image kindly provided by Keyence

Results of using a 3 D microscope to explore how the Mauritius printing plate was made.



Use of the 3D
feature of the
VSC8000HS
in a study of
seals.





Colour shades & tetrochromats
with Newcastle University

Using potential equipment available to the Expert Committee



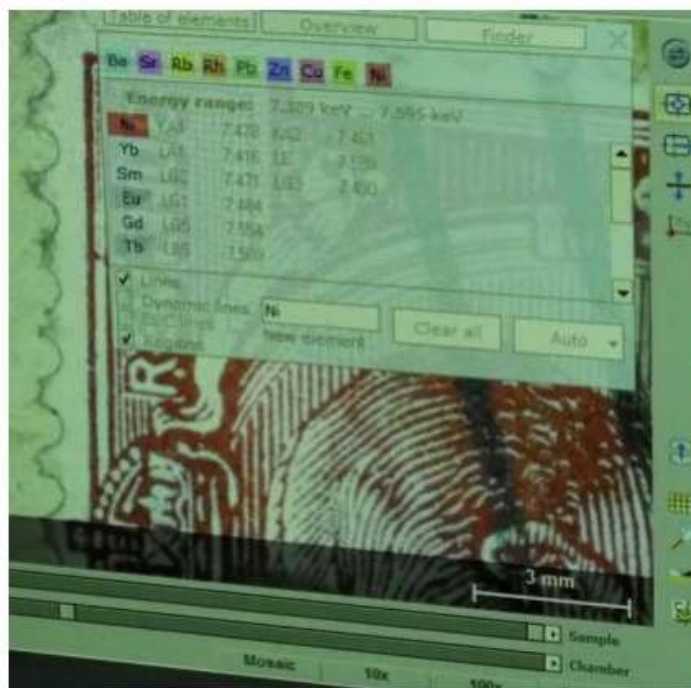
The benefit of such determinations will be considered in terms of cost. Specialist equipment that is suitable for philately may be hired e.g. using the Bruker μ XRF

- Examination of stamps non-destructively using X rays
- Determination of paper constituents & metal contaminants
- Challenge of data interpretation and need for reference standards



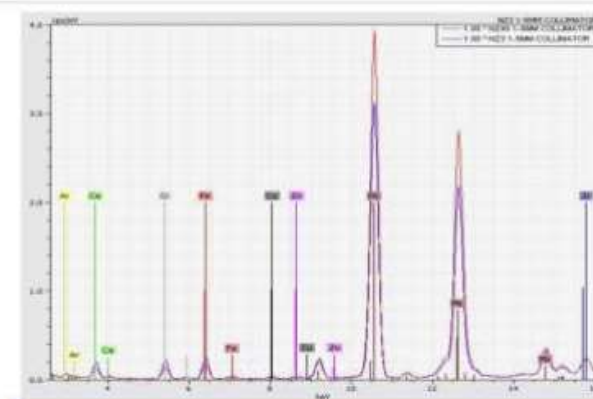
Working at the University of
Warwick, November 2018

Highlights : Philatelic Research: Use of Bruker equipment



Determination of shades through elemental analysis (μ XRF) ?

Comparison of NZ45 and NZ23, 1.5mm Collimator



Determination of forged material using Phase Contrast

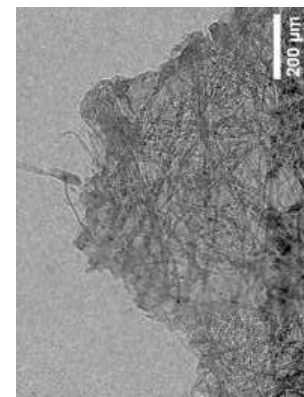
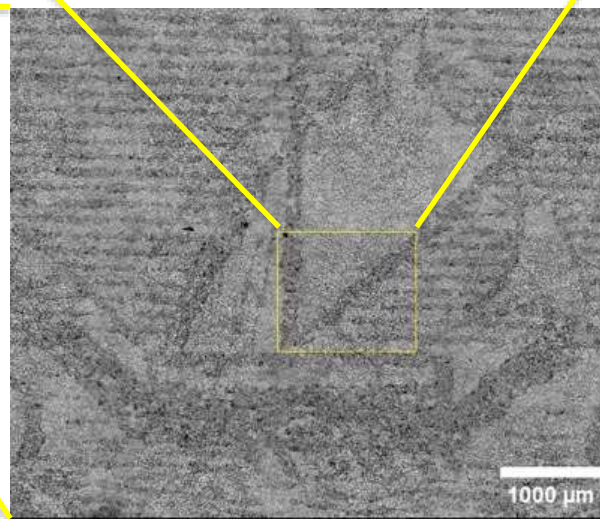
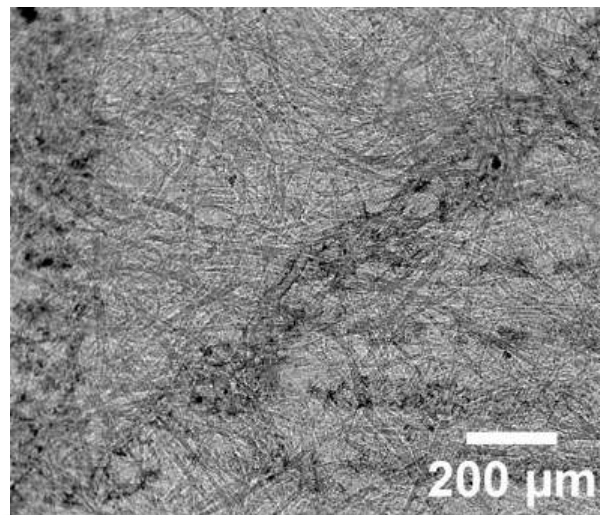
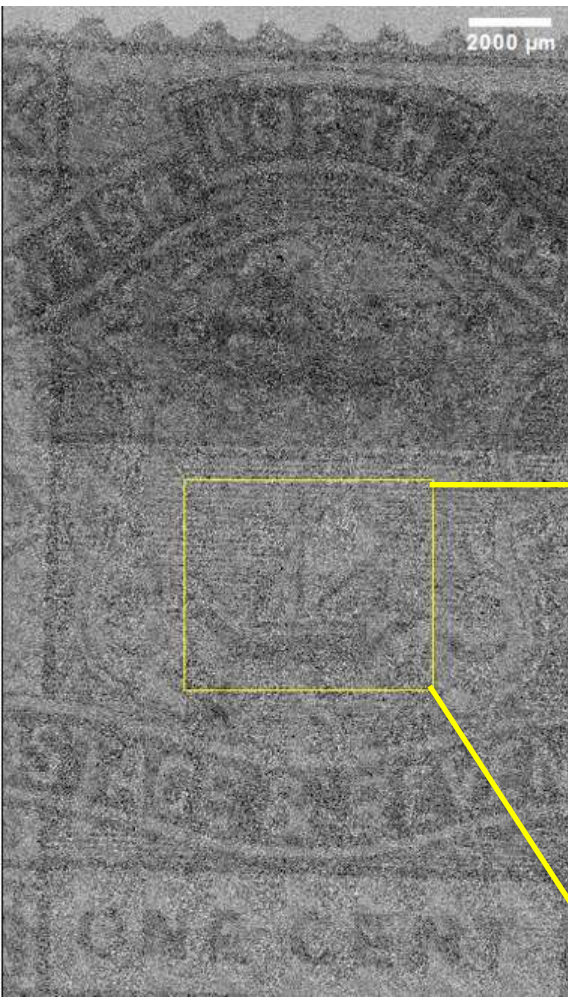
Phase contrast exploits the fact that x-rays are waves that travel with different speeds through different materials, leading to different parts of the wavefront being phase-shifted with respect to each other upon exiting a sample. These phase shifts can lead to interference and/or refraction effects.

Prof Alessandro OLIVO
RAEng Chair in Emerging Technologies
Dept. of Medical Physics & Biomedical
Engineering
University College London

April 2025



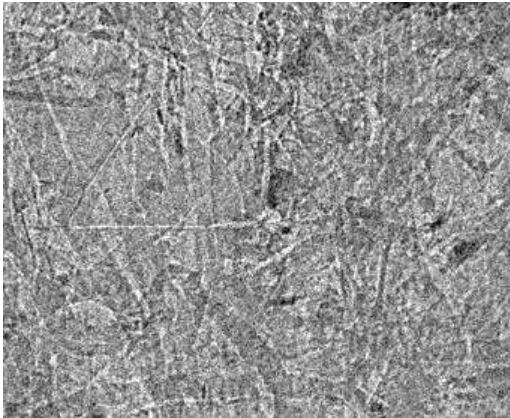
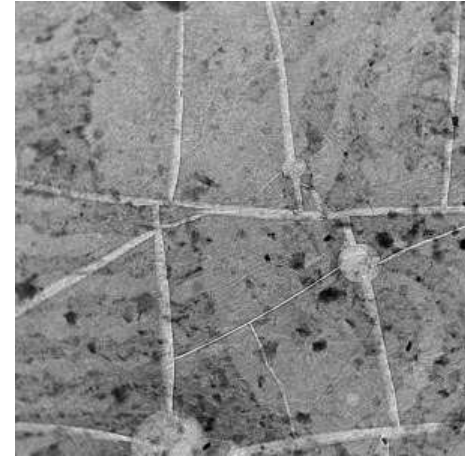
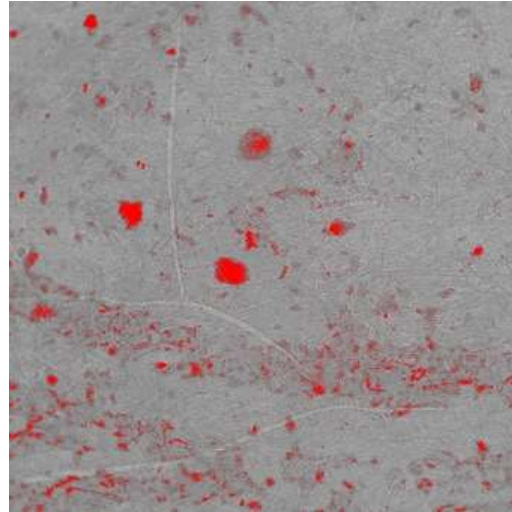
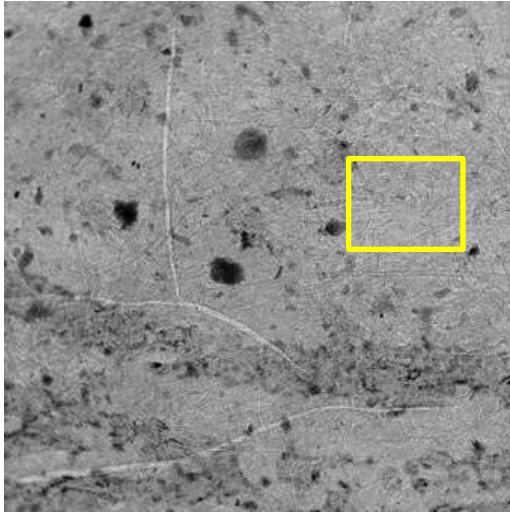
One cent genuine



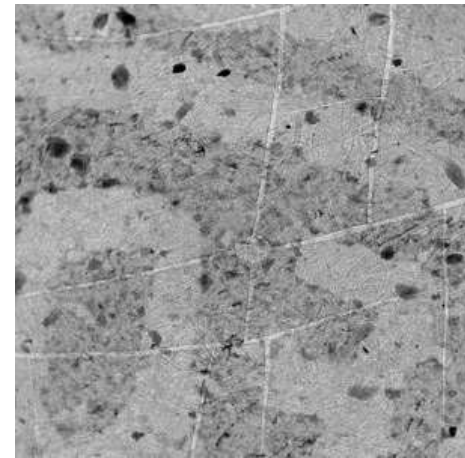
One cent forged – key observations

Absorbing particles are shown in red

Bright areas are thinned down/lower density

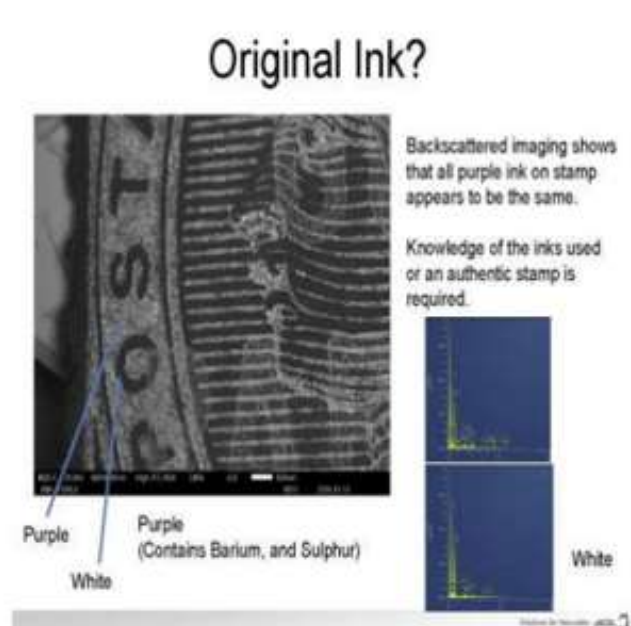


- Ink is detectable
- Large absorbing particles throughout (also in not inked areas)
- Fibrous structure less detectable
- Inked areas have a blurry appearance – possibly due to nanostructure (possibility to further investigate this)
- Thinned down or lower density areas with defined structure (see images on the right)



Highlights : Philatelic Research: Use of Joel equipment

Identifying potentially fraudulently produced overprints using a Scanning Electron Microscope



The Joel Scanning Electron Microscope was used to examine the inks on the stamp to assess integrity & potential manipulation.



Stampex 2023

Come & chat + explore
the Foster Freeman
VSC9000...

Submitting your Material



By post to: Lucy Caulfield, Expert Committee,
RPSL Limited, 15 Abchurch Lane, London
EC4N 7BW.

E – mail : experts@rpsl.limited

Web site: www.rpsl.limited

Members of the RPSL and PTS can receive
discounted certificates.

Other Expertising Committees are also available