

**Archives and Special
Collections**
Science and Engineering
Research Guide

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Introduction to Archives

The Archives provides convenient access to a wealth of primary sources for conducting original research. We hold the records of Queen Mary University of London and its predecessor bodies, alongside collections of private papers and archives of organisations dating from the 18th century to the present day.

We look after items in a range of formats including letters, manuscripts, photographs, audiovisual, and digital media. The collections also include rare prints and artefacts dating from the 16th century to the 1960s.

The Archives Reading Room, located on the 2nd Floor of the Mile End Library at Queen Mary University of London, provides a dedicated quiet study space for anyone wishing to view items held in the Archives. The Reading Room is open for appointments every Monday-Friday between 9am-4pm.

To search the Archives Catalogue please visit the website **archives-catalogue.library.qmul.ac.uk/CalmView/default.aspx**

Not all of our collections are fully catalogued. Please contact us if you cannot find what you are looking for.

If you have any questions or would like to book an appointment to see an item from a collection please contact the Archives team via email archives@qmul.ac.uk, telephone 020 7882 3873 or visit the website **library.qmul.ac.uk/archives** for more information.

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Introduction to Science and Engineering in the Archives

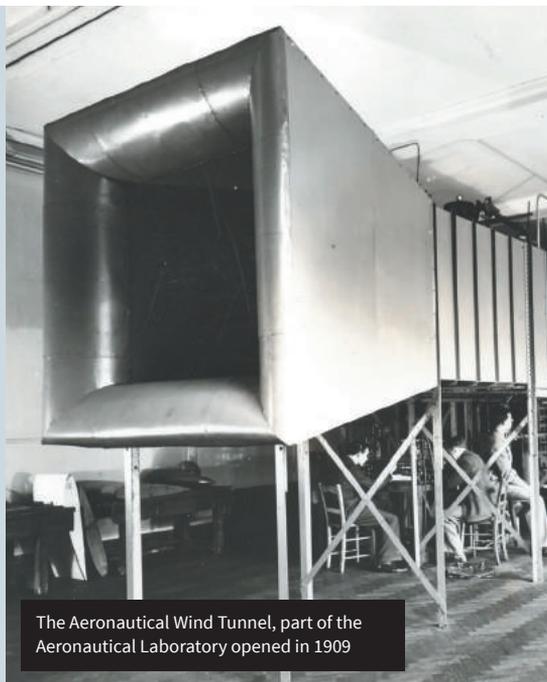
Queen Mary University of London has a distinguished history of science teaching and research stretching back over 130 years. The collections preserved in the Queen Mary Archives provide opportunities to research the history of science and the development of science teaching in universities. Our collections are particularly strong in the areas of Botany, Chemistry and Electrical Engineering.

The origins of scientific teaching and research at Queen Mary can be traced back to 1888, with the official opening of the People's Palace Technical Schools in Mile End. It was here that a range of academic and vocational courses were made available to the local community. The Technical Schools went from strength to strength, changing its name to East London College and joining the University of London. New facilities included an Aeronautical Laboratory (1909) and a High Voltage Engineering Laboratory (1936). In 1934, the college became Queen Mary College.



Meanwhile in Hampstead, Westfield College opened as one of the first higher education colleges for women, focussing on arts, humanities and mathematics. The curriculum expanded in 1906 with the arrival of Ellen Delf-Smith, who helped to establish teaching facilities in science and set up a Botany programme. Development continued throughout the twentieth century, with the construction of a new science building in 1962 and the introduction of new areas of study such as Computing.

Queen Mary and Westfield Colleges merged in 1989, and Barts and The London School of Medicine and Dentistry joined them in 1995, creating what is known today as Queen Mary University of London. Our proud tradition of innovation and expertise in science research and teaching continues to this day. Queen Mary Library and Archives plays an important role in preserving this legacy by ensuring that departmental records, scientific papers and research data are preserved and made available.



The Aeronautical Wind Tunnel, part of the Aeronautical Laboratory opened in 1909



Botany students, 1939

How to use this guide

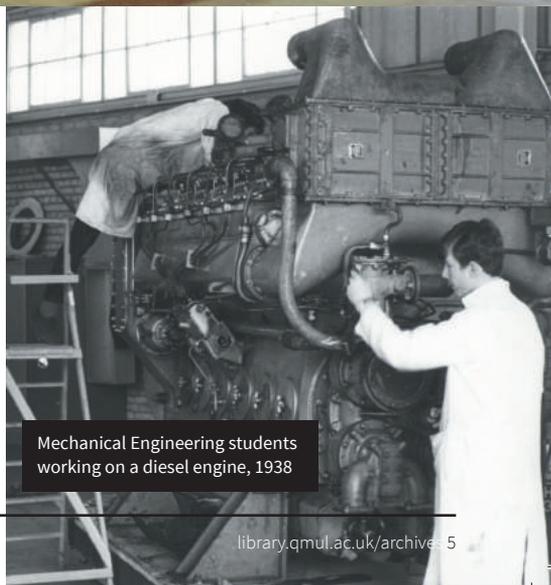
This guide provides an overview of collections held in the Queen Mary Archives that relate to Science and Engineering. We hold records of Queen Mary University of London and its predecessor bodies, as well as the papers of individual scientists including former staff and students. This guide is organised by subject, covering Biological Sciences; Geography and Geology; Chemistry; Physics and Astronomy; Engineering and Computer Science; Medicine and Health; and Faculty and Administrative Records.



Queen Mary's Neuron Pod science education centre on the Whitechapel Campus, opened in 2019

Collection reference numbers can be searched on the Archives Catalogue, where you will find a more detailed description of each collection: archives-catalogue.library.qmul.ac.uk/CalmView/default.aspx

Please note that records relating to the School of Medicine and Dentistry are looked after by Barts Health NHS Trust, not by Queen Mary Archives. For more information, see the Medicine and Health section.



Mechanical Engineering students working on a diesel engine, 1938

Biological Sciences

Papers of the Botanist **Ellen Delf-Smith (1883-1980)**, mainly relating to her research into algae. The collection includes publications, lab notes, expedition diaries, collecting books and pressed specimens, dating from the 1910s-1970s. There are also papers relating to the teaching of Botany at Westfield College in the 1920s-1940s. (Ref: EMDS)

Papers of the Professor of Ecology **Richard Clymo (fl. 1961-)**, relating to the teaching of Biological Sciences, Botany and Environmental Science at Westfield College, both before and after the merger with Queen Mary College, 1922-2018. (Ref: RC)

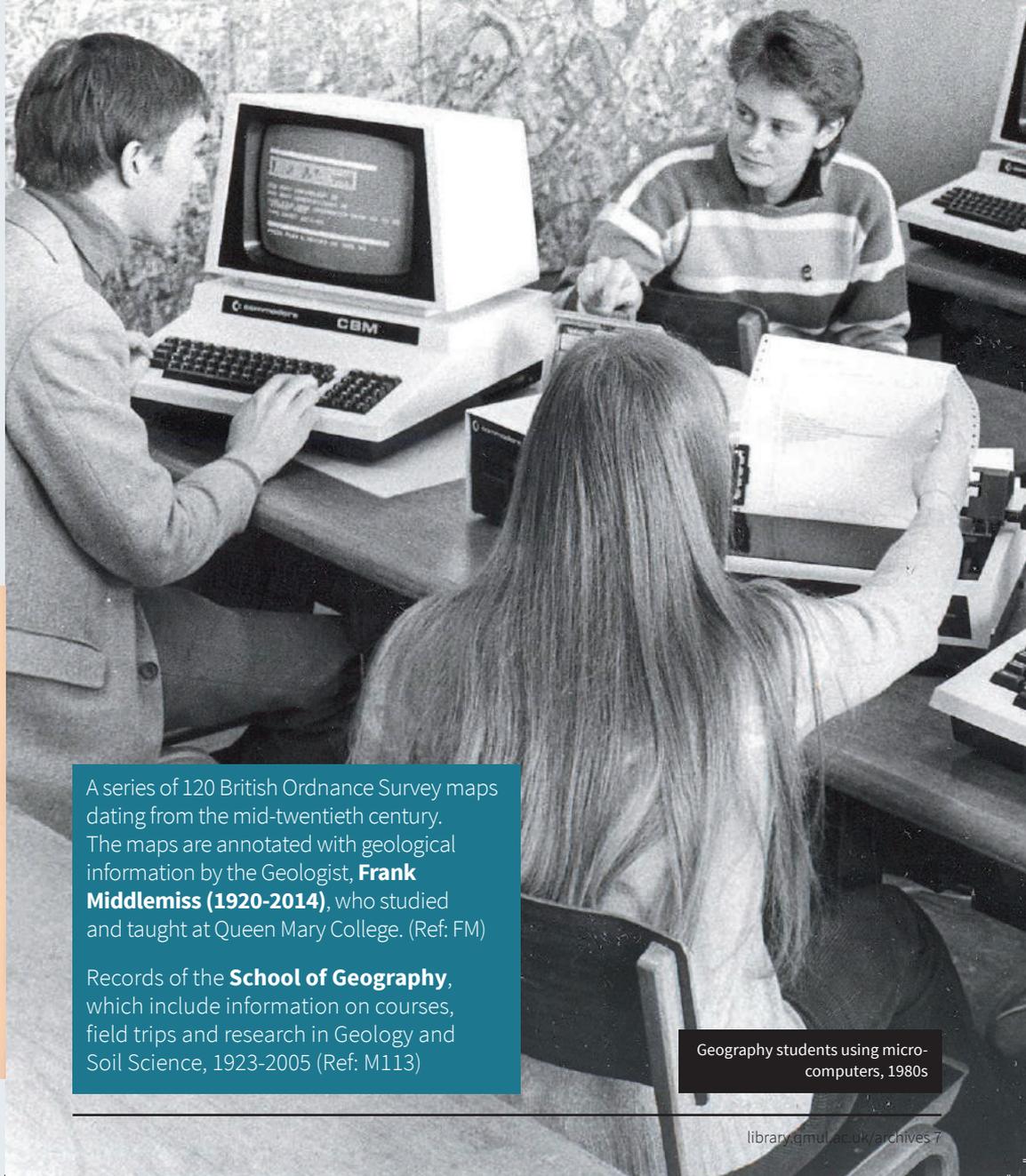
Archives of **Westfield College** including:

- Papers relating to the running of the Botany Department, including administrative papers, photographs of the laboratory and information on students, dating from the 1920s-1970s. (Ref: WFD/13/1/4)
- Reports from students' Botanical and Zoological expeditions to Greece during 1969-1971. (Ref: WFD/13/1/7)



Algae specimens collected by Ellen Delf-Smith in South Africa, 1921

Geography and Geology



A series of 120 British Ordnance Survey maps dating from the mid-twentieth century. The maps are annotated with geological information by the Geologist, **Frank Middlemiss (1920-2014)**, who studied and taught at Queen Mary College. (Ref: FM)

Records of the **School of Geography**, which include information on courses, field trips and research in Geology and Soil Science, 1923-2005 (Ref: M113)

Geography students using micro-computers, 1980s

Chemistry

Papers of the Chemist **Robert Garwood (1914-1984)**, who taught at Queen Mary College, including lecture notes on inorganic chemistry dating from the 1950s. (Ref: RFG)

Papers of the Professor of Organic Chemistry **Raymond Bonnet (1931-)**, including material relating to the development of the Chemistry Department at Queen Mary College. The collection also contains two wall charts from the early 1900s, attributed to **James Partington**, depicting Lavoisier's Experiment and Charles Soret's Diffusion Apparatus. (Ref: RB)

Papers of the Chemist **Gerry Moss (fl. 1966-)**, including copies of his publications on Organic Chemistry. In his role as departmental archivist, Moss assembled material relating to the history and administration of the Chemistry Department at Queen Mary, including photographs, departmental histories, biographies of former staff and students, and material relating to teaching and special events. There are also records relating to the construction and fitting out of the new Chemistry building in the 1960s. (Ref: GM)

Moss also collated papers relating to individuals associated with the Chemistry



Department at Queen Mary, including:

- Trivial name book belonging to **Robert Garwood**, listing the common names of chemical compounds with diagrams showing their structural formulas, c. 1970s (Ref: GM/8/3)
- Academic papers compiled by **Dorothea Grove**, 1950s-1980s (Ref: GM/8/4)
- Administrative papers relating to research undertaken by **Wilfred Hickinbottom** and the publication of his book 'Reactions of Organic Compounds', 1930s-1970s (Ref: GM/8/5)
- Correspondence relating to the possible involvement of **John Hewitt** in the Piltdown Man hoax, 1980s (Ref: GM/8/6)

A selection of items from the papers of East London College student Arthur Pitt, 1890s-1910s



- Organic chemistry notebook belonging to **R A Massy-Westropp**, containing descriptions of experiments and structural diagrams of chemical compounds, c. 1972 (Ref: GM/8/12)
- Papers of East London College student **Arthur Pitt**, including a copy of his thesis on the preparation of chromyl dichloride, 1894-1949 (Ref: GM/8/14)
- Biographical information and research into notable former staff and students including **John Howe, David Jones, Arthur Pillans Laurie, Raymond Le Fevre, Duncan MacNair** and **James Partington**.

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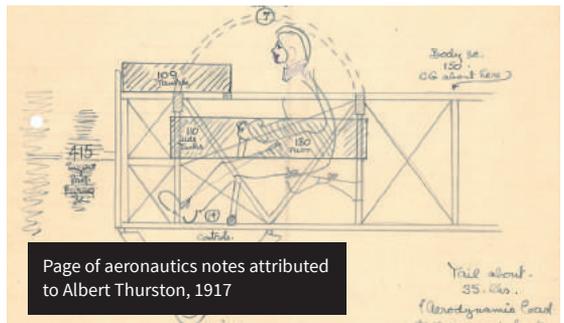
Physics and Astronomy

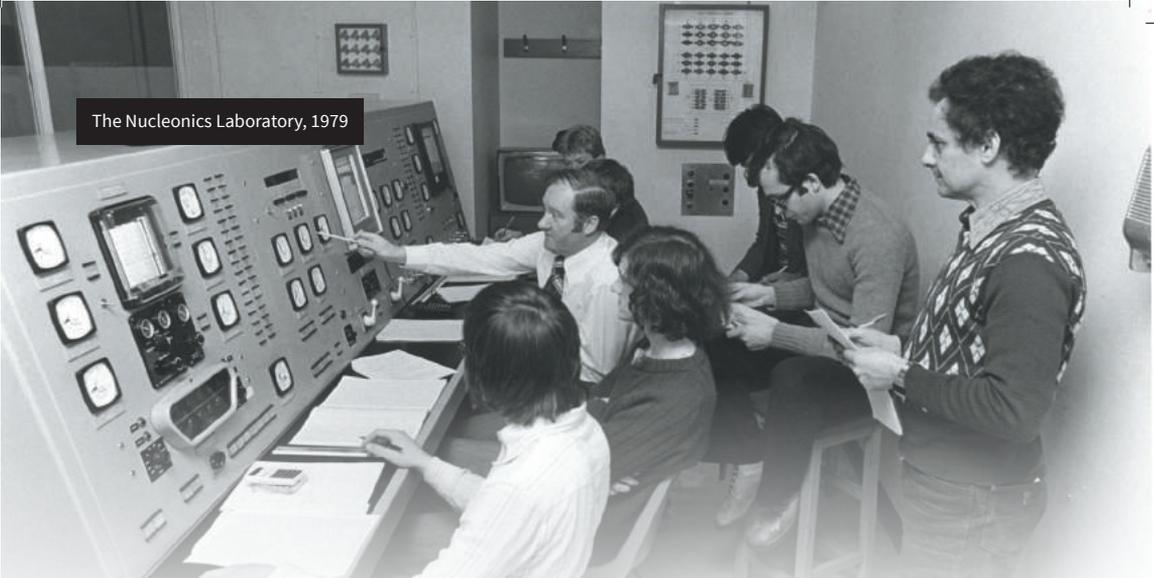
Papers of **Gwyn Owain Jones (1917-2006)**, Professor of Physics at Queen Mary College. The collection includes publications, typescripts of lectures and lecture notes, dating from the 1950s-1970s. The papers cover topics such as the physics of glass, solids and work at low temperatures. (Ref: GJ)

Records of the **School of Physics and Astronomy**, including information on laboratory equipment, administrative papers, early student exercise books, departmental publications, exam papers, course information and photographs, 1897-2016. (Ref: M166)

Engineering and Computer Science

Papers of the Professor of Electrical Engineering **John MacGregor-Morris (1872-1959)**, including his research notes on cathode ray oscillography. There are also administrative papers dating from the 1900s-1930s relating to the running of the Electrical Engineering Department at East London College, the development of the College's High Voltage Laboratory, and the early activities of the College Engineering Societies. The collection also contains publications and research notes relating to the work of **Albert Thurston**, who studied Engineering at East London College and later became the first Doctor of Science in Aeronautics in Great Britain. The notes record the outcomes of tests to see how different parts of a variety of aircrafts respond to increased loading. (Ref: JMM)





The Nucleonics Laboratory, 1979

Photographic collection belonging to **Michael Laughton (1934-)**, Professor of Electrical Engineering at Queen Mary College. The collection contains photographs of Electrical Engineering laboratories and staff, c. 1930s-c. 1980s. (Ref: ML)

Archives of **Queen Mary College** including:

- Laboratory notes belonging to East London College student **Arthur Buckton**, comprising two volumes of meticulously presented notes on 'Strength and Elasticity of Materials' and 'Theory of Heat Engines'. The volumes contain photographs of equipment and experiments, and hand drawn diagrams, 1908-1911. (Ref: QMC)
- A report of a tour and inspection of high voltage facilities in the United States of America undertaken by **John MacGregor-Morris** in 1928 as part of his investigations into setting up a High Voltage Laboratory for Electrical Engineering students. MacGregor's extensive report contains a typed account of the tour, photographs, diagrams and press cuttings. (Ref: QMC)

- Papers relating to **Queen Mary College's nuclear reactor**, dating from the 1960s-1980s. Queen Mary's Department of Nuclear Engineering was the first in the United Kingdom to carry out the mechanical and nuclear commissioning of a reactor. The papers include logbooks, safety information and approved drawings. (Ref: QMC)

- Records of the **School of Electronic Engineering and Computer Science**, including photographs of facilities, departmental histories, research reports, records of conferences and symposia, and papers relating to research projects in pile monitoring, black box recording devices, antenna design, robotics, optoelectronics, satellites and telecommunications, c.1960s-1990s. (Ref: M47, M48, M81, M83, M88 & M176)

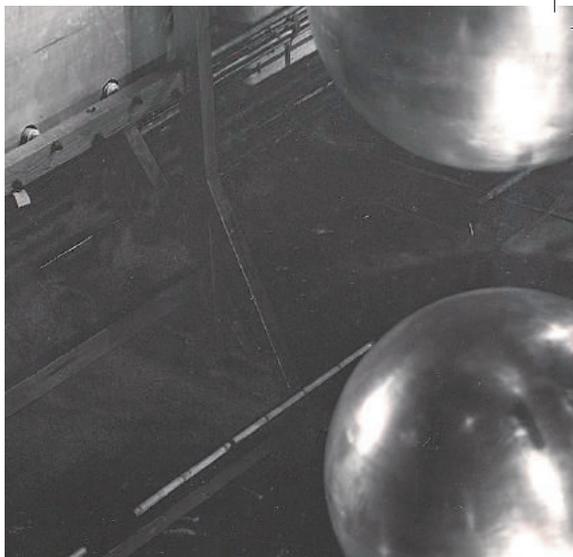
Archives of **Westfield College** including papers relating to setting up computing facilities and the teaching of Computer Science in the 1960s-1980s. (Ref: WFD/13/1/5)

Medicine and Health

Papers of the Mathematician and Medical Statistician **Eileen Minnie Brooke (d.1989)**, who studied at East London College. The collection contains publications by Brooke and other papers relating to mental health research undertaken in the 1960s-1970s. Topics covered by the papers include mental health services, rehabilitation programmes, mental health information systems, suicide and the cost benefit of drugs. (Ref: EB)

Archives relating to **Barts and The London School of Medicine and Dentistry** are looked after by Barts Health NHS Trust. Please contact one of their Archives to access these records:

- Archives of The Royal London Hospital and its Medical College are held at the Royal London Hospital Archives: bartshealth.nhs.uk/the-royal-london-hospital-museum-and-archives
- Archives of St Bartholomew's Hospital and its Medical College are held at St Bartholomew's Hospital Archives: bartshealth.nhs.uk/st-bartholomews-museum-and-archives



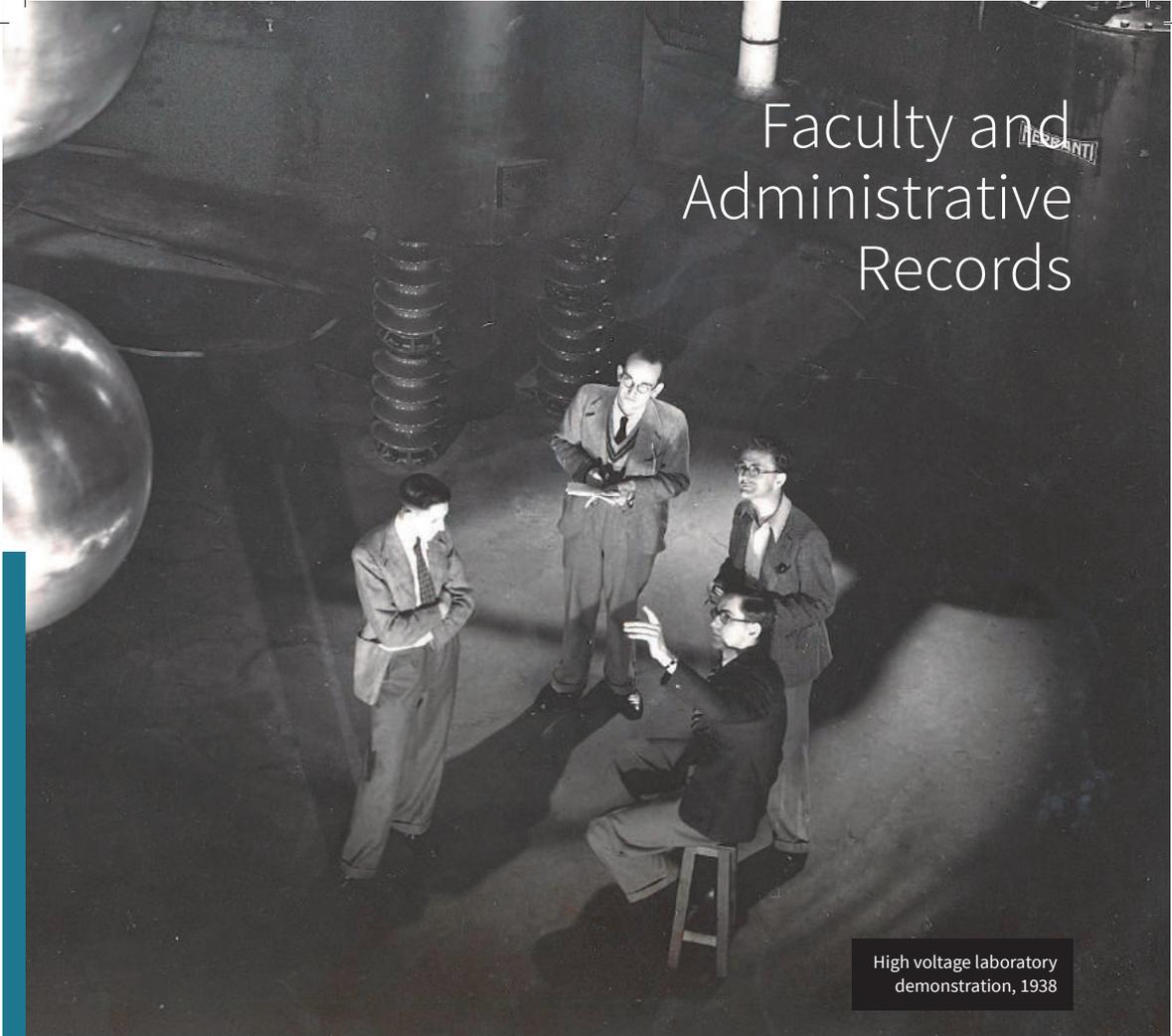
The Archive holds administrative papers of the Science Faculties of both Queen Mary and Westfield Colleges, and other papers relating to the administration and teaching of science courses. These records give an insight into how university administration, course content and examinations in science subjects have changed over the past 130 years. Additionally, the departmental records and personal papers of former members of staff – listed above – often provide an insight into university teaching and the administration of research in their respective specialisms.

Faculty and administrative records include:

Institutional archives of the **People's Palace Technical Schools and East London Technical College**, dating from the 1880s-1900s. The archive includes correspondence, syllabuses and prospectuses containing information on the science courses offered. (Ref: QM/1/12)

Institutional archives of **Westfield College**, including:

- Papers relating to the reintroduction and development of the Faculty of Science in the 1950s. (Ref: WFD/13/1/3)



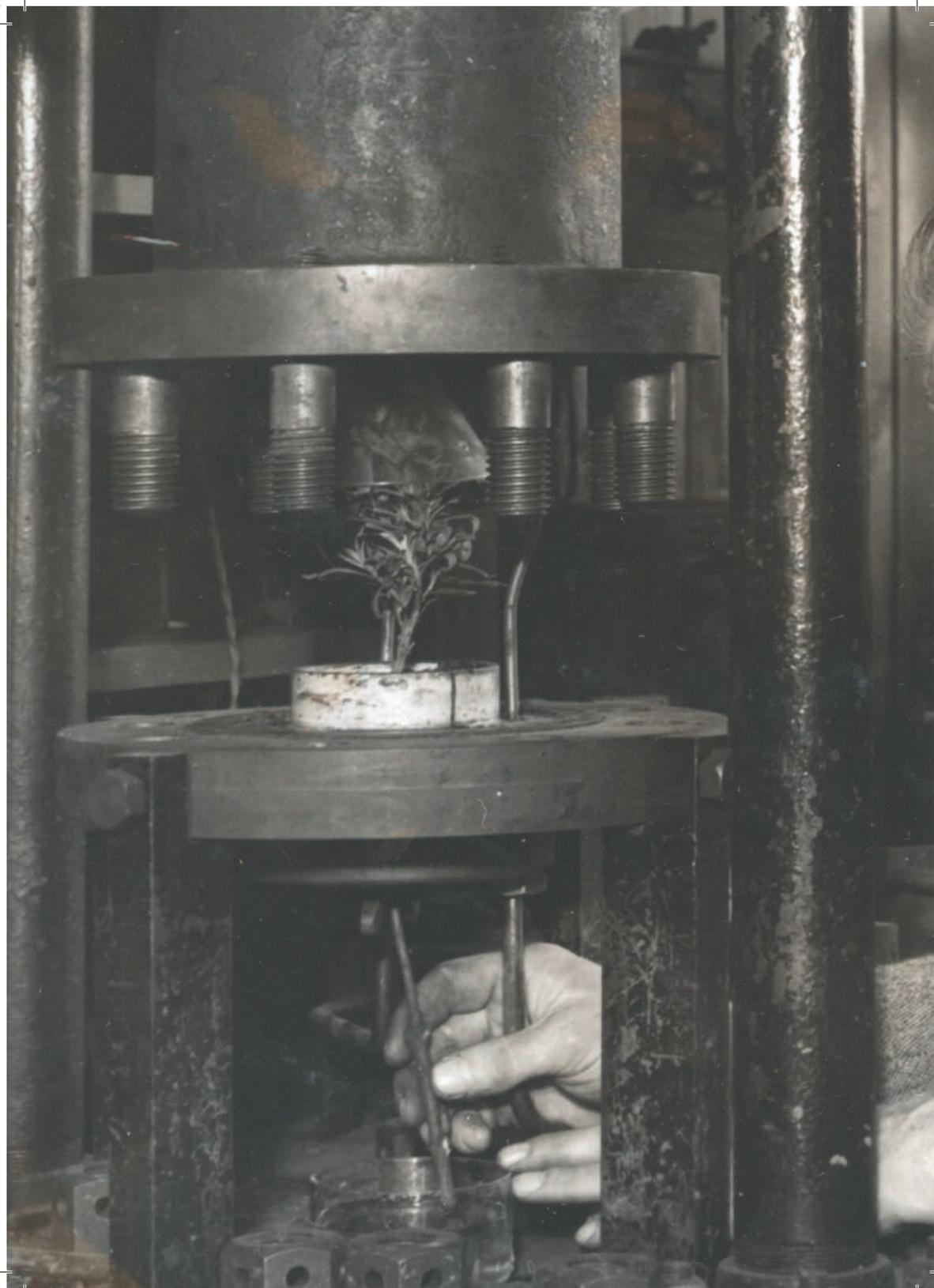
Faculty and Administrative Records

High voltage laboratory
demonstration, 1938

- Faculty of Science meeting minutes, 1960s-1980s. (Ref: WFD/13/1/1-2)
- Papers relating to programmes of study in the Faculty of Science, 1970s-1980s. (Ref: WFD/13/1/6)
- Papers relating to course content and examinations for science subjects, including past examination papers, 1960s-2000s. (Ref: M83, M109, M152 & M193)

Institutional archives of **Queen Mary College**, including:

- Records of the Principal's Office, including files of correspondence with science departments, 1910s-1990s. (Ref: QMC/PS)
- College newsletters, which provide updates on research and the latest departmental or society news. Includes newsletters of the Chemistry Department, Geographical Society, Engineering Society and Computer Centre. (Ref: QMC)
- Papers from Science Faculty Board meetings, 1960s-2000s. (Ref: M58, M83, M96, M128 & M171)





Dr Haines setting up apparatus for a plant physiology experiment, 1938

Visit us

The Archives Reading Room is based on the 2nd Floor of Mile End Library at Queen Mary University of London. The nearest tube stations are Mile End (Central, District and Hammersmith and City lines) or Stepney Green (District and Hammersmith and City lines). The Reading Room is open for appointments every Monday-Friday between 9am-4pm.



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