



## **'Research is the door of tomorrow': the networks and culture of the Post Office Research Stations, Dollis Hill and Martlesham, c. 1910-1983**

### **Two Fully-funded AHRC PhD studentships**

Applications are invited for two AHRC-funded PhDs working on the Post Office Research Station at Dollis Hill, one of Britain's most important government research establishments in electrical engineering, telecommunications and computing. These two studentships are part of eight fully-funded awards made by the newly-established Collaborative Doctoral Partnership managed by the Science Museum Group and in association with BT Archives.

Both studentships are funded for three years full-time equivalent, and will begin in September 2013.

A third studentship in this project entitled 'Dollis Hill / Martlesham Heath: Research Transplanted and the Privatised: Digital and Information Era' will be advertised in May 2014.

**PhD Project 1: The Genesis and Early Development of the Post Office Research Station**  
Supervised by Graeme Gooday (University of Leeds) and Tilly Blyth (Science Museum, London).

Between the two World Wars the Post Office served as Britain's principal research organization for telecommunications and computing. This PhD studentship focuses on the development of the Post Office's dedicated research station at Dollis Hill (Northwest London) from 1925. Although it produced TIM the speaking clock and the electro-mechanical expertise later deployed in Second World War code-breaking activities, the origins and development of this Post Office laboratory have not previously been studied by historians.

Overall this project examine how the ethos and practices of Post Office research emerged from its national prerogatives in innovation and the broader agendas of the interwar military-bureaucratic state. Potential issues that students can choose to explore in reconstructing its multi-faceted story include the nationalization of the UK telephone network in 1912; the role of Post Office researchers during the Great War, and the subsequent automation of telephone exchanges using electromechanical and electronic switching technology. Further questions arise in understanding how Post Office researchers managed their relationships with the Treasury, the British Broadcasting Corporation, National Physical Laboratory and Armed services, both in access to resources and in serving as public authorities on technological novelty. Broader national and international perspectives on the techno-politics of communications and computing may also be useful for the student to consider.

Relevant sources for this PhD project include Post Office documentary collections held at BT Archives, e.g. the extensive papers on the early years of the Dollis Hill research station, and related telecommunications and computing object collections held at the Science Museum, e.g. early models of automated telephone exchanges.

Potential applicants for the first project may contact Prof. Graeme Gooday ([G.J.N.Gooday@leeds.ac.uk](mailto:G.J.N.Gooday@leeds.ac.uk)) for further information.

## **PhD Project 2: Research Life of the Established 'Station' in the 'long Cold War'**

Supervised by Jeff Hughes (CHSTM, University of Manchester) and Tilly Blyth (Science Museum, London).

By the late 1930s, the Post Office Research Station at Dollis Hill was one of the largest research establishments operated by a UK state agency, and had an international reputation in an extensive network of telecommunications research, testing and manufacturing facilities encompassing other state civil and military establishments, research associations and industry. This project will explore the institution's organisational development, its technical work and its changing relationship with the state and other institutions from the mid-1930s through WW2, the post-war years and the Cold War up to the 1960s.

There is significant scope for the student undertaking this project to develop their own thematic and empirical interests, but among the relevant topics that might be covered are: the mobilisation of Dollis Hill for war work on radio and electronic computers for code-breaking during WW2; the development of submarine cable and repeater technology, culminating in the transatlantic submarine telephone cable in 1956; work on automatic dialling and switching on long-distance telephone circuits and national trunk-mechanisation; electronic speech and artificial devices for telephone measurements; the development of microwave radio relay transmitters and the establishment's work on the Goonhilly satellite ground station; electronic switching and pulse code modulation; and the beginnings of fibre optics. Cutting across all these topics, the project will analyse Dollis Hill as a deep reservoir of skilled practice: its labs and workshops maintained huge expertise on materials and production processes – initially valves and crystals, later semiconductors and transistors. It will also explore the ways in which Dollis Hill was central to the British state's role as a provider of communications infrastructure both for public use and for national security purposes.

Among the sources for this exciting PhD project are the BT Archives, which contain extensive Post Office records; the National Archives at Kew; and the telecommunications collections of the Science Museum. There will also be opportunities for oral history.

Potential applicants may contact Dr. Jeff Hughes ([jeff.hughes@manchester.ac.uk](mailto:jeff.hughes@manchester.ac.uk)) for further information.

### **How to Apply**

Applicants should have a good Master's degree (or equivalent) in history of science/technology or a related subject, and will need to satisfy AHRC academic and residency eligibility criteria. Applicants will also need to demonstrate a commitment to collaborative research with fellow PhD students, partner archives, museums and universities, and a willingness to engage with wider publics in sharing the results of their work.

Applicants for either studentship should submit a curriculum vitae and a letter outlining qualifications and relevant experience for the studentship in the form of a single Word file no more than three pages in total. The names and contact details of two academic referees should also be supplied.

Applications for the first studentship should be sent to [g.j.n.gooday@leeds.ac.uk](mailto:g.j.n.gooday@leeds.ac.uk) no later than **10 June 2013**. Interviews are scheduled to be held in the Science Museum, London, on **10 July 2013**.

Applications for the second studentship should be sent to [jeff.hughes@manchester.ac.uk](mailto:jeff.hughes@manchester.ac.uk) no later than **10 June 2013**. Interviews are scheduled to be held in the Science Museum, London, on **10 July 2013**.