

## A proud history

The University of Birmingham has been active in energy research for more than a century. Today our coal mining research has been replaced with carbon capture and storage; our Department of Oil Refining has evolved into an advanced School of Chemical Engineering, developing bioprocessing techniques and internationally leading hydrogen fuel cell research.

**1900** The University of Birmingham is established

**1902**



The School of Mining established at the University, complete with a model mine beneath our Edgbaston campus. The department has strong links with local industrial figures and government. It teaches in underground colliery management and mine safety.

**1904** Research is being done at this time into petrol engines.

**1915** The University undertakes work and research for the Aircraft Establishment and the Petroleum Executive as part of War Effort. The physics labs are transformed to conduct work improving the quality and quantity of fuel and motor spirit from crude oil and fatigue testing is done on aircraft alloys.

**1919** Undergraduate degree in oil engineering established. It is the first to be offered in Britain and proves very popular with industry with great graduate employment rates. Handbook advertises it with the catch line, "Put your lad into oil!"

**1920s** An advisory board for oil engineering is established, drawing in the big layers in industry to Birmingham to shape research and the curriculum.

**1922** Chair in Petrol Mining established, as separate to that in Coal Mining. Neville Moss becomes head of mining, and his most important work is into physiological effects of working underground in high temperatures.

**1926** Centre of Research into Oil Engineering and Refining established with new building opened, with three full scale oil rigs on campus.



**1933** Arthur Vick graduates, later to become both a Knight and the head of UK Atomic Energy Authority.

**1937** The University decides to invest in Nuclear Power, and goes to Cambridge to try to attract a "name, and spend whatever was necessary to bring nuclear physics to Birmingham in a big way". Consequently, Marcus Oliphant joins the University. Lord Nuffield donates £60000 for the Nuffield building, to house a cyclotron, and a fellow. It is completed post war.



**1939** German physicists Rudolf Peirels and Otto Frisch join Birmingham, to escape Nazism. They later write the Frisch-Peirels Memorandum which leads to the Manhattan Project.

**1940** The School of Mining contributes research to the wartime Fuel Efficiency Committee.

**1956** The Physics and Technology of Nuclear Reactors MSc is established, in the same year as the world's first nuclear power station opens. The course still runs today.

