

Oxford eco-pan revolutionises cooking efficiency



Oxford's novel cooking pan technology incorporates external fins to deliver a fast and highly efficient cooking process.

Cooking pans, as used in kitchens around the world, are generally simple vessels whose designs have not changed much over many years. Researchers at the University of Oxford have recognised however that such pans, particularly when used on gas stoves, allow a large proportion of heat energy from the heat source to dissipate into the surrounding atmosphere, rather than being used to cook food.

Efficient cookware

Developed in the internationally-renowned Oxford Thermofluids Institute, Oxford's novel cooking pan technology achieves higher efficiencies through use of external fins. The unique, patented, finned design channels heat from the flame across the bottom and up the sides of the pan, resulting in highly efficient, even heat distribution. By ensuring that more energy is captured by the new cooking pan, a higher proportion of energy from the heat source can contribute to heating food within the pan. In turn, this leads to a quicker and more efficient cooking process.

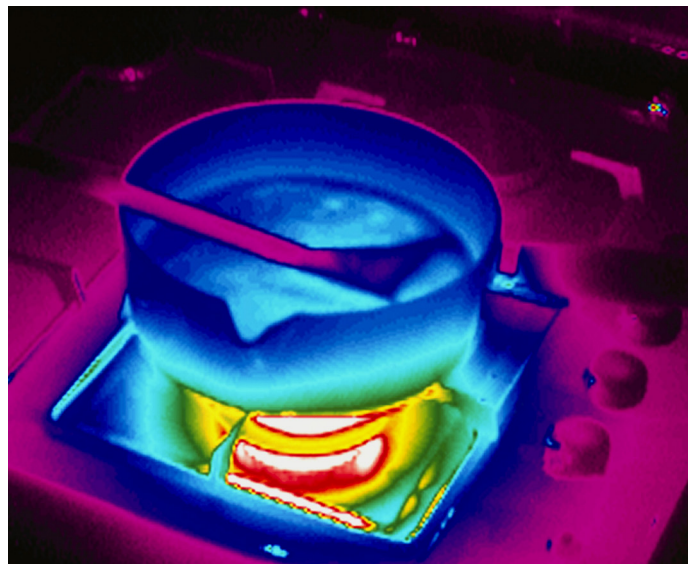
Oxford's cooking pan designs have arisen from a facility where world-leading solutions for jets and rockets are researched, tested and engineered. Transferring this expertise into an everyday application has led to a cooking pan design found to save up to 31% energy compared to conventional pan designs. The greatest benefit is obtained when the gas flame is largest, i.e. when the user wants the fastest cooking process possible.

The cooking pan has been the subject of two awards in recent years. In 2014, the Worshipful Company of Engineers awarded Professor Thomas Povey, the inventor of Oxford's novel cooking pan technology,

their prestigious Hawley Award for "the most outstanding Engineering Innovation that delivers demonstrable benefit to the environment". The project behind Oxford's cooking pan was also a Green Apple Award winner in 2014. The Green Apple Awards is an annual campaign to recognise, reward and promote environmental best practice around the world.

Commercialisation

The Oxford cooking pan technology has been protected with patents, utility models and registered design rights in key territories worldwide. Following a successful initial launch of a range of cooking products (saucepans, frying pans and stockpots), Oxford University Innovation is now seeking commercial partners to make and sell further products incorporating the technology worldwide.



Above: Standard cooking pans do not use all the energy available to them, particularly from gas stoves.

For further information please contact:

Ben Oakley

ben.oakley@innovation.ox.ac.uk

+44 (0)1865 280869

www.innovation.ox.ac.uk

Project number: 9280

Technology Transfer from the University of Oxford

The information in this Project Profile is provided "as is" without conditions or warranties and Oxford University Innovation makes no representation and gives no warranty that it is the owner of the intellectual property rights in the technology described.