

## News Release

# Fat reduction paper wins Food Engineer of the Year Award

PhD student presented with prestigious prize

14 April 2009

A German PhD student has been awarded the Food Engineer of the Year Award for developing a cheaper system for homogenizing milk, presented by the Institution of Mechanical Engineers (IMEchE) and the Master Butcher Worshipful Company of Butchers.

Karsten Kohler, 31, from Wiesbaden in Germany, flew into London to receive the honour from IMechE and the Master Butcher, Brian Wheatley. The prestigious prize included an award of £1000. Mr Kohler attends Karlsruhe University in the Bundesland Baden-Wurttemberg in South-West Germany. The Food Engineering Committee, which is jointly run by IMechE and the Institution of Food Service Technology (IFST) cooks up the award every year to help raise the profile of Food Engineering and promote the best standards within the industry.

Mr Kohler beat all other entrants with his winning paper which was entitled 'Design of a microstructured system for homogenization of dairy products with high fat content'. The homogenization process stops fat droplets from gathering together in whole milk and forming a thick layer of cream on the top just a few days after it is fresh. His design took the cream formed in the milk and mixed it with skim milk, which as a result created whole milk again but with smaller fat droplets. The process also retained 90 per cent of energy that is used, instead of the typical 40 per cent, which in turn lowered the overall cost.

Mr Kohler said: "It was a great honour to receive the award in London and to win it means my work has not only been recognised by my professors but it has been supported on another level too. It was a pleasure to meet others in the same industry and learn about the topics that are important to food engineers in another country."

Donald Alfred, Chairman of IMechE's Food Engineering Committee commented: "The papers are judged by professors from various universities and all members of the IMechE Food Engineering Committee. We search for new and innovative methods of food processing, preservation and packaging and are always on the look out for interesting developments from food departments of universities. In the past we have had winners from the UK and Sweden and the award is becoming well known within the industry."

The competition, which has been running for eight years and is sponsored by the PM Group, opens every annually in September to professional engineers, graduates and undergraduates studying or training to become a food engineer. Entries are accepted from all areas of food engineering and people must send in a summary of the paper they intend to enter and those shortlisted will then be asked to provide a full paper. Mr Kohler was presented the award on 4 February this year.

According to a report by ADAS, the UK is the fifth largest exporter of food and drink and 435,000 people are employed in the manufacture of food, beverages and tobacco. Of the entire manufacturing industry in Britain, food engineering makes up 15 per cent – the largest UK manufacturing sector.

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Previous winning papers have included an experimental study of sheeting of wheat flour dough and an engineering analysis to conclude crispiness of wafers in terms of engineering properties. Award winners have gone on to become members of the Food Engineering Committee.



Cap: Winner Karsten Kohler receives the Food Engineer of the Year Award from the Master Butcher Brian Wheatley

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#### **Notes to Editors**

- For more information on this release please contact the IMechE Press Office on 020 7304 6888 or email [media@imeche.org](mailto:media@imeche.org) The Institution of Mechanical Engineers (IMechE) was established in 1847 and has some of the world's greatest engineers in its history books. It currently has around 80,000 members in 120 countries representing mechanical engineers involved in a diversity of fields such as the automotive, rail, aerospace, medical, power and construction industries to name a few. Visit [www.imeche.org](http://www.imeche.org) for more information.
- The Food Engineering Committee is part of the Process Industries Division and it aims to provide IMechE's focus for food engineering and promote awareness of the benefits of professional engineering within that industry.