

Knowledge Transfer Partnerships at London South Bank University

What is KTP?

Knowledge Transfer Partnerships (KTPs) are government funded programmes designed to help businesses improve their competitiveness and productivity through the better use of the knowledge, technology and skills available within UK Universities. Our academic team working at the interface between academia and business maintain strong links with employers, professional bodies and public and private sector enterprises making them ideal for these partnerships.

Benefits of KTP

The company or organisation gets:

- Associate 2-3 years full time with qualifications and experience required by your company
- Associate works in your company on your projects
- Specialist expertise and technical advice from LSBU
- LSBU academics work closely with the Associate to implement company goals
- **Budgets include** employment costs, training, travel and equipment

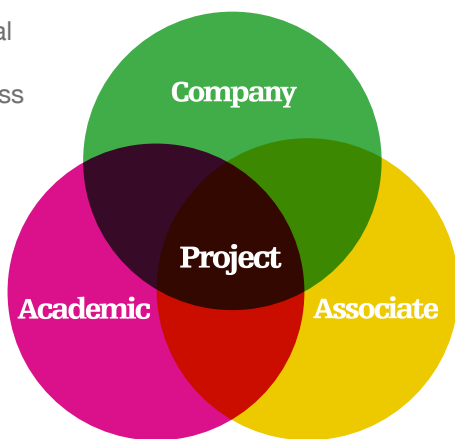
Your Project

At the heart of every Knowledge Transfer Partnership scheme is a project with specific strategic objectives. A high-quality graduate (a KTP Associate), supported by the academic expertise at LSBU, will work exclusively on the project at the company to deliver tangible results.

In order to apply for a KTP a company must have a project in mind that needs external knowledge to develop and is of strategic importance to the business. It must also have a commercial edge and see a healthy return on funding.

Company
needs additional expertise to improve business

Academic
provides expertise and assists with implementing the goals of the company



Project
created by company to improve business

Associate
experienced graduate works for company to carry out project



Centre for Knowledge Transfer

90 London Road, London SE1 6LN
T 020 7815 6922
F 020 7815 6915
ktpinfo@lsbu.ac.uk
www.ktp-lsbu.co.uk

Knowledge Transfer Partnerships

All Partnerships received financial support from the Knowledge Transfer Partnerships programmes (KTP). KTP aims to improve their competitiveness and productivity through the better use of knowledge, technology and skills that reside within the UK knowledge base. KTP is funded by Technology Strategy Board along with other Government funding organisations.

Centre for Knowledge Transfer

Manufacturing, Engineering, Electronics & Materials

- Manufacturing Engineering
- New Materials, Composites and Applications
- Control Engineering
- Non-destructive Testing
- Operations Management
- Geotechnical Engineering
- Environmental Safety, Systems and Testing
- Environmental Acoustics
- Computer Networks Engineering
- Thermal Systems, Refrigeration and Cooling
- Microprocessors
- Electrical and Electronic Engineering
- Product Design and Manufacture
- Hazardous Environment Testing and Safety
- Quality Control
- Heat Transfer and Fluid Mechanics
- Robotics and Artificial Intelligence
- Transport
- Structural Engineering

When Universities and
Business work together
good things can happen...

Manufacturing, Engineering, Electronics and Materials

Today, manufacturing and engineering management encompasses a broad range of advanced methodologies, techniques, strategies and tools that can be applied to a variety of areas in the

manufacturing and engineering field. London South Bank University continues to be at the forefront of developments in this sector.

KTP projects are active in product and process design, manufacturing and operations, engineering design, environmental acoustics and mechanics to name but a few.

Give your heating some time off

Giving homeowners realistic potential for 25% energy savings.

A KTP with London South Bank University will help homeowners save money and energy with the new eTRV (Electronic Thermostatic Radiator Valve) energy saving device being developed at **Chalmor**.

"The problem with a normal TRV", says KTP Associate Shyel Stark, "is that it takes a long time for it to react, causing peaks and troughs of over-heat and under-heat, wasting huge amounts of energy." The new eTRV, with its programmable handset means you can programme your radiators so that you can have the heating on in only one room. By not

heating the whole house unnecessarily the system makes less demand on the boiler, therefore saving energy. "We are entering a brand new market in the domestic heating field that has so far been un-tapped by our company. This product will mean we can become a big player in the heating market. We expect our business to double," comments Barrie Morris, Commercial Director at Chalmor.

Currently Shyel is focusing on testing the product using empty housing and an environmental chamber which will allow him to compare performance at various temperatures controlled using traditional TRVs and the new eTRV, proving the energy savings that

are available using this technology. "We are hoping to dramatically change user behavior; it's a real hot topic in the great energy debate at the moment. Our vision for the future is that it is adopted in every household nationwide."

Helping Shyel and Barrie with this project has been LSBU academics, Professor John Missenden, Dr Gordon Lowry and Anna Zacharewicz. "John and Gordon have been a great help with their knowledge on thermodynamics, praises Barrie. "Anna has been instrumental in helping Shyel develop Marketing skills, which will prove invaluable when we begin the real push on getting this product to market." ♦





Government sets new challenges for the energy sector

When the British government said it wants to reduce heat loss from buildings, through changes to building regulations with a carbon emissions target of zero by 2016, windows and doors manufacturer, **Soundcraft**, knew they needed to be ahead of the game.

With windows and doors representing a major area of heat loss, Soundcraft wanted to lead by example and discover a way to manufacture their products so that there is a reduction in both heat loss and carbon emissions. The company manufacture timber based 'Passive Windows,' a product with a high thermal performance rate. These are made by traditional joinery methods, a time consuming and inefficient process.

KTP Associate, Fowad Jarmoozi provided his expertise and skills to manage the necessary changes that took place as the traditional workshop was replaced with modern factory manufacturing processes. "This change is vital for Soundcraft to ensure that they can compete in an ever growing market," said Fowad. With this opportunity available to them, Soundcraft can now increase Passive Window manufacture and exploit the growing market.

Soundcraft were aware that they lacked sufficient knowledge in modern manufacturing methods and so needed the support of a KTP project with expertise from LSBU academics Dr Alan Dunn and Chris Dowlen. ♦

Raising energy standards in refrigeration – that's cool!

When a manufacturer of large refrigeration cabinets decided to improve their product range, compete with fierce competition and meet new energy standards they called LSBU. Refrigeration experts, Judith Evans and Alan Foster, jumped on board this KTP project in order to transfer technology on refrigeration cabinet design and development and allow the company to become technically independent.

Bond Display Cabinets now have the in-house capabilities to design, test and manufacture refrigerator cabinets, not only meeting industry standards but also conforming to the necessary low

energy requirements. This has meant significant new sales and a far stronger customer base. "At the moment a lot of UK supermarkets are still buying their refrigerators abroad, as it is cheaper, but the carbon footprint implications of bringing the cabinets back into the country are huge. Meeting the design and price specifications of our customers will encourage them to 'buy British' and hopefully further increase our customer base," reports Matt Longhurst, Research and Development Manager at Bond.

KTP Associate Samir Barve has introduced new CFD (Computational Fluid Dynamics) software. "CFD allows you to create a

prototype design cabinet in a visual test room and get the test results back in just a few hours," comments Samir. The new software has reduced development time from six months to two months, saving time and money. In addition, an in-house test facility was developed that allows Bond to test its own designs without having to use external agencies.

"Our company always lacked that academic backup. We now have the theory and qualifications to match our experience," praises Matt. ♦