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University Industry Collaboration: Research and enterprise activity within University of Huddersfield Product Design courses.

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# University and Industry Collaboration

Research and enterprise activity within  
University of Huddersfield  
Product Design courses

**Glynn Stockton** BSc (HONS) PGCE PGDip MSc FHEA

Research Team:

Dr Ertu Unver BSc MSc PhD PgCert FHEA AIED

Dr David Swann MDes PhD FRSA FHEA

# Students:

In Module (Year 2)

Placement Year

Final Year Major Project

KTP

Post-graduation

# Staff:

Research

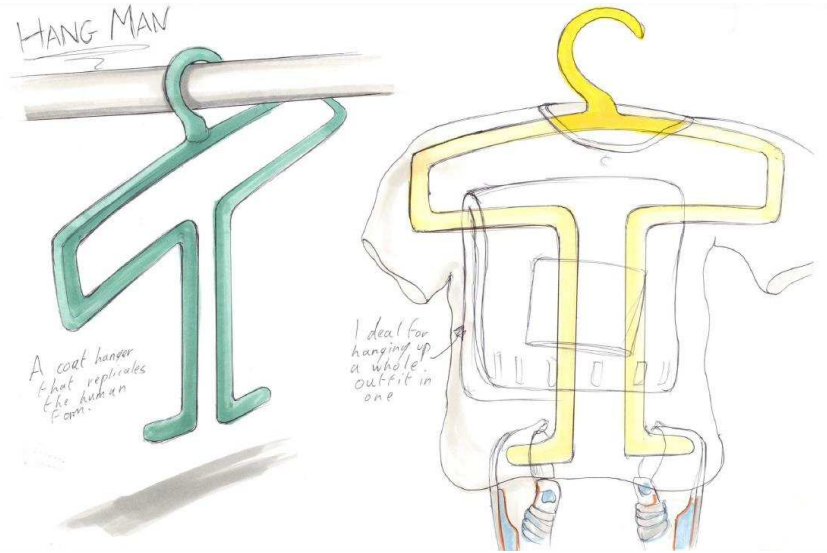
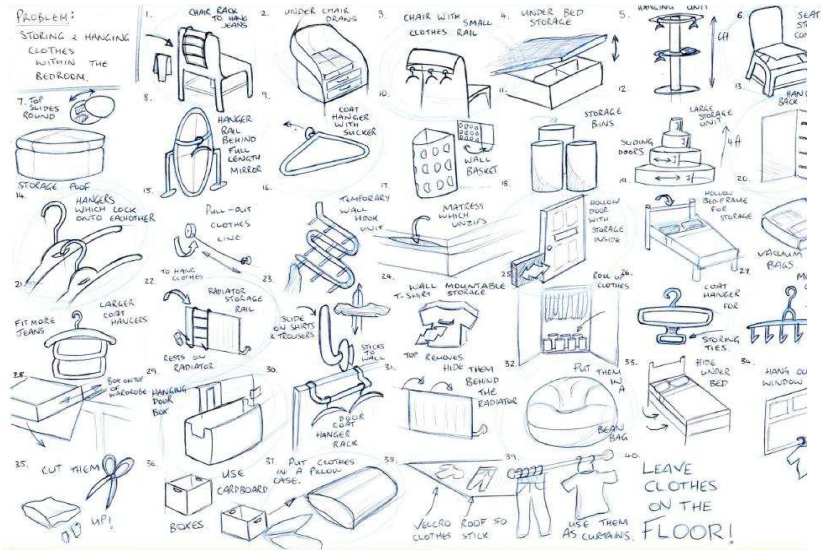
Design

Facilities

# Students: In Module (Year 2)

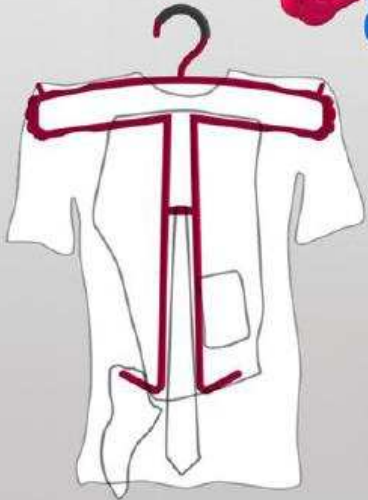


# wilkinson

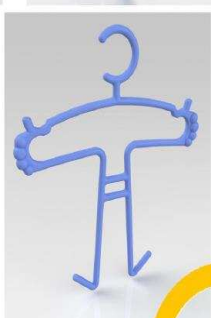
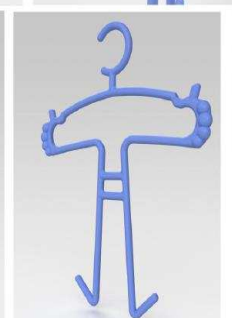
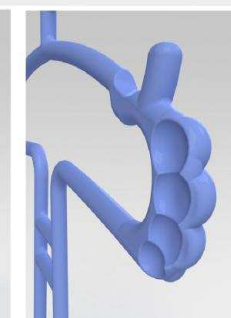
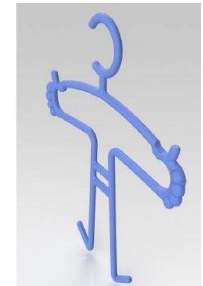
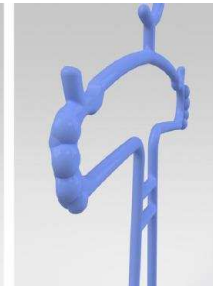
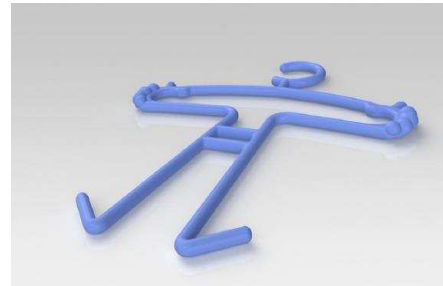
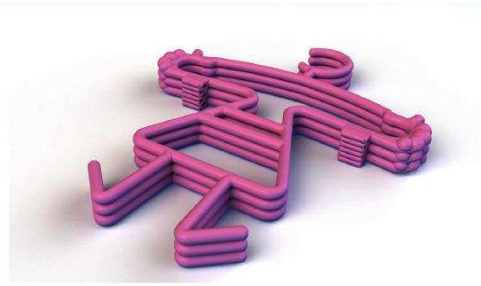
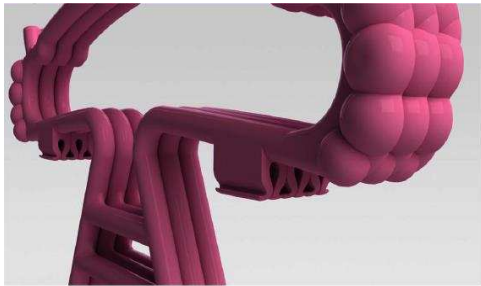
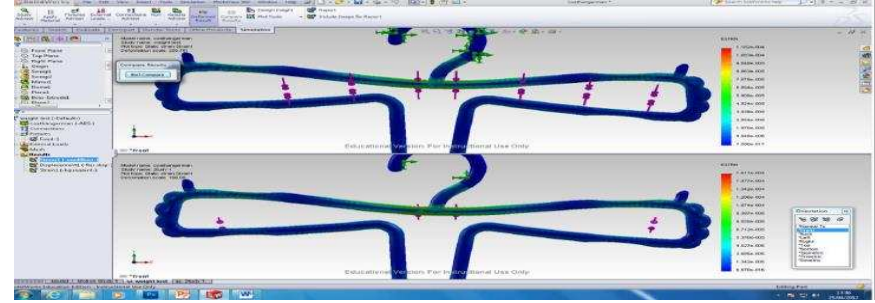


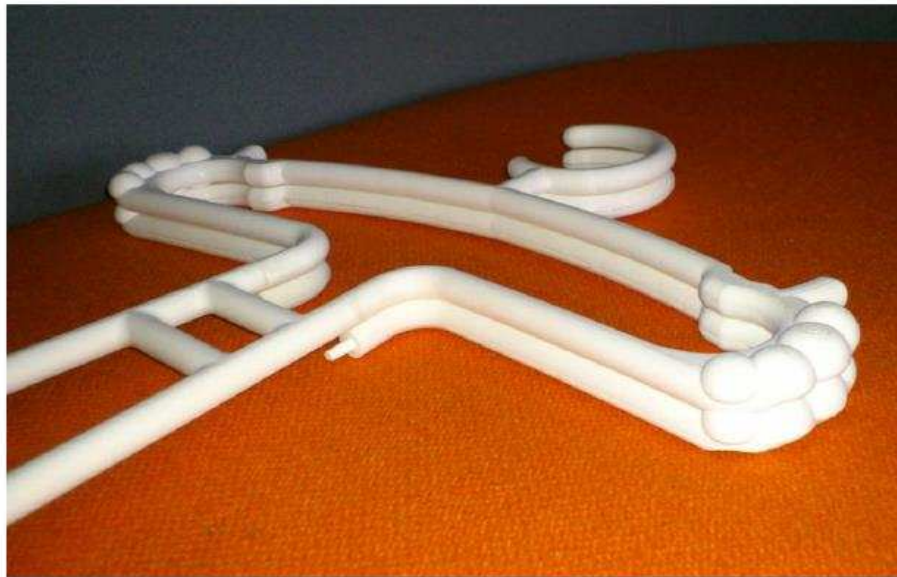
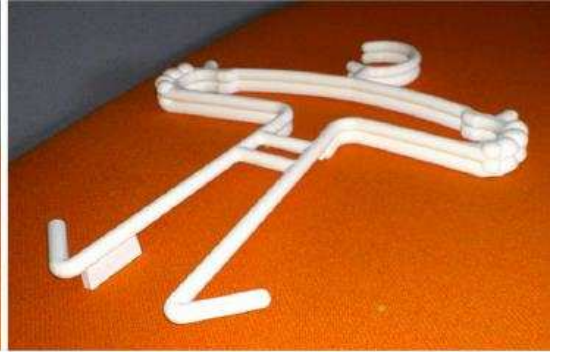
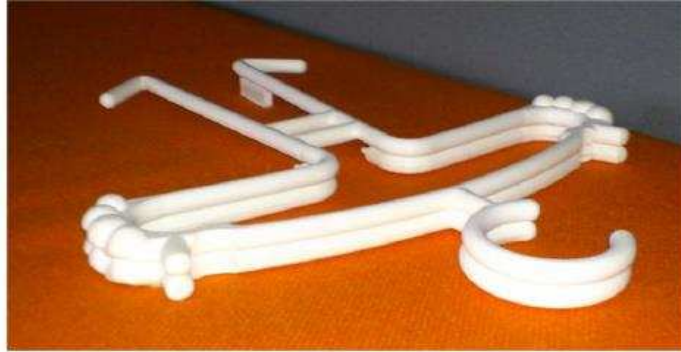
wilkinson

Concept 6- Hangman



- Unique Design
- Can Hold and entire outfit
- Injection moulded body so cheap to produce
- Comes in a pack of 3
- Aimed at a younger/ family market
- Practical yet novelty design









Will be a simple, single piece of card with two holes cut so that it can fold over the product as a collar. This keeps it cheap to package and doesn't add any recycling issues.

The graphics will be clear showing the HangMan logo with the brand name above and a brief description of the product. On the back will have the bar code and a larger description.

[Shop By Department](#) ▼[Shop By Room](#) ▼[Shop Deals](#)[Student Life Sorted](#)[FREE HOME DELIVERY ON £80 SPEND](#)[FREE STORE DELIVERY](#)[WILKO LIFE BLOG](#)[EMAIL SIGNUP](#)[Home](#) / [Housewares](#) / [Laundry](#) / [Garment Hangers](#) / [Wilko Outfit Hangers Girls Pink x 3](#)[click to zoom +](#)

## Wilko Outfit Hangers Girls Pink x 3

£4.00

(6) In stock and ready to ship

1 Quantity

[ADD TO BASKET](#)

catalogue No: 0334028

[Write the first review](#)[Follow this product](#)[Description](#)[Specification](#)[Delivery & Returns](#)

The ingenious Wilko Girls Outfit Hangers come in a pack of three and are ideal for dressing up, wedding outfits and school uniforms. Each complete-outfit hanger holds four items – a shirt, a skirt, a tie and a pair of socks. Get organised the night before and make your mornings easier!



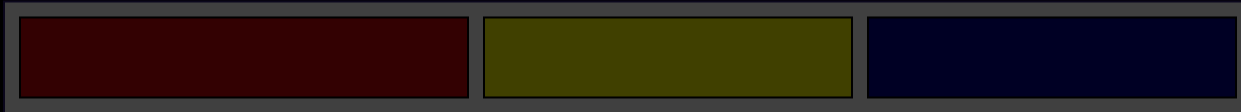
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# Students: Placement Year

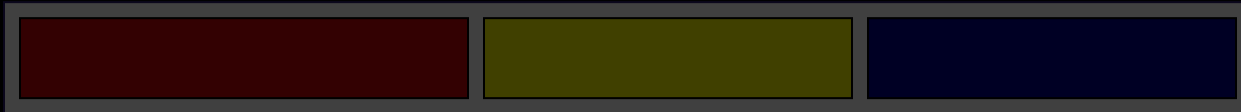


# Students: Final Year Major Project

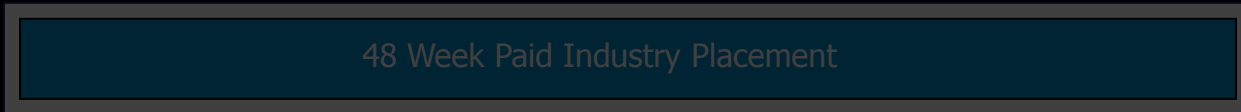
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2



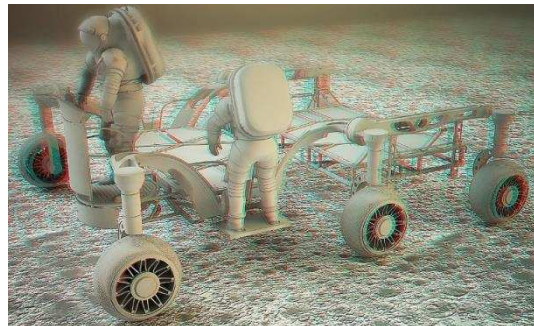
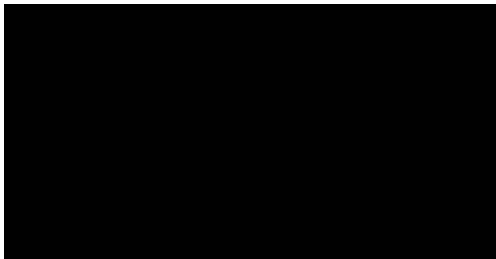
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4



# Students: Final Year Major Project



Product Design

Transport Design

Postgraduate, MA 3DD, MA by Research , PhD

# 3D Digital Design:

3D character and costume design



MA Postgraduate Dan Hughes –McGrail portrayal of Sir Patrick Stewart as Elizabethan Francis Bacon.

# Students: Post-graduation

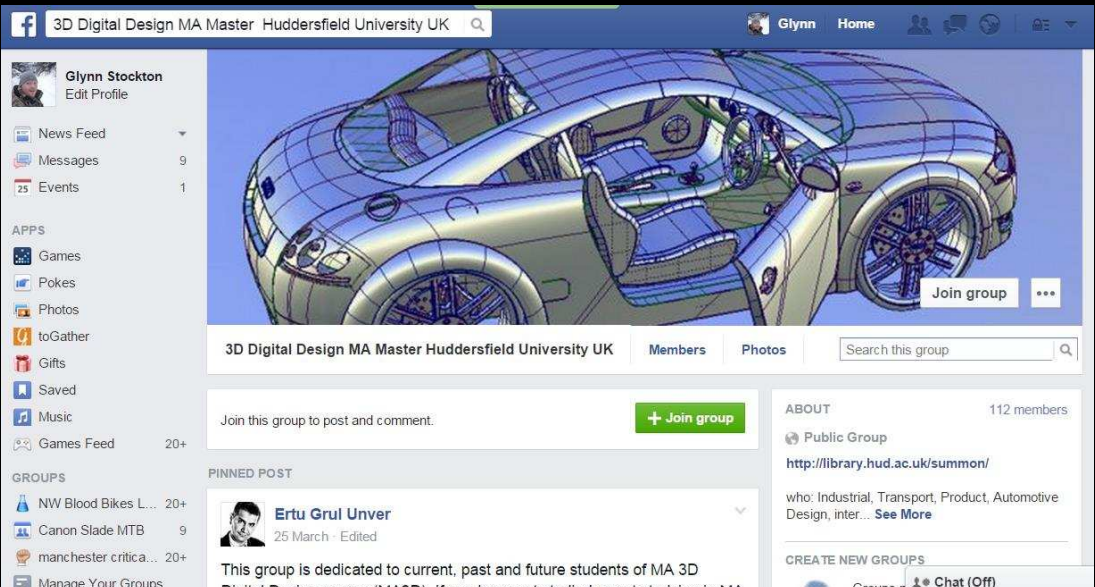


Left to right : Adam Barnes, Transport Design BA(Hons), 2008. Cephas Howard, Creative Imaging BA(Hons), Tim Ainley, Product Design BA(Hons), 2005. Michael Fuller, Product Design BSc(Hons), 2009. Stewart Whitehead, Product Design with Animation BA(Hons), 2008.



"We only recruit the most talented graduates and benefit from their high level of design skill and knowledge of the latest techniques – new ways of brainstorming, visualising concept and approaching challenge."

**Mike Ganderton, Creative Director LEGO**





# Students: Post-graduation – KTP

## Knowledge Transfer Partnership

**Knowledge Transfer Partnerships**

Database Search | New User Registration | Existing User Entry


Search Site:

[Home](#) | [Business](#) | [Academics](#) | [Graduate](#) | [Resources](#) | [Sponsors](#) | [Contact us](#)

**Current KTP Vacancies:** Polymer Gear Desing Engineer

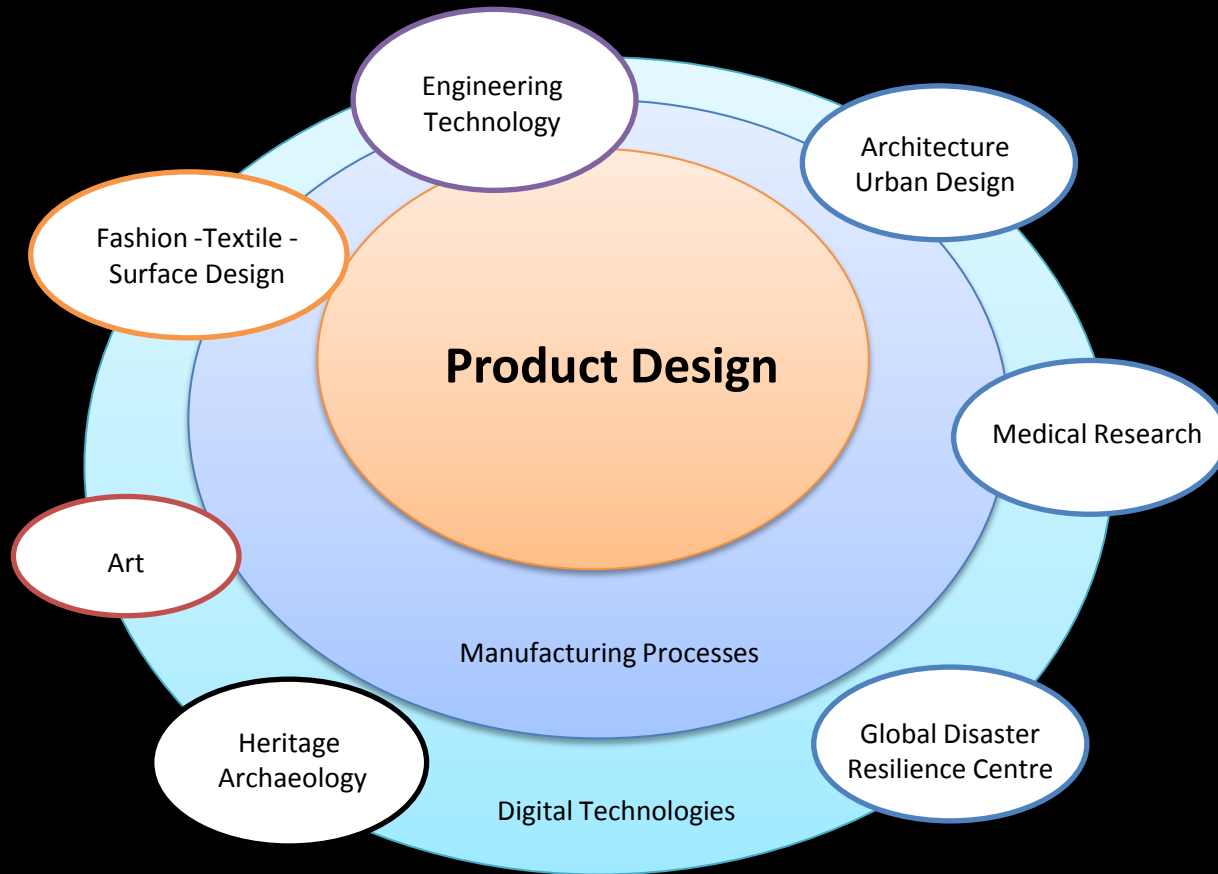
### Graduate vacancies with a difference

Classic KTP Vacancy Advertisements

RSS Feed:  | [What is RSS?](#)

Area	Info	Salary	Closing date	
East of England	KTP Associate (Embedded Systems Engineer)	£23,500 - £27,000	27/11/2014	<a href="#">Info (2836)</a>
East of England	Polymer Gear Desing Engineer	£22,000 - £28,500 per annum	28/11/2014	<a href="#">Info (2840)</a>
East of England	KTP ASSOCIATE - ULTRA THIN FILMS USING ATOMIC LAYER DEPOSITION (ALD)	£25,000 - £28,300 pa	15/12/2014	<a href="#">Info (2850)</a>
North East of England	Mechanical / Manufacturing Engineering vacancy to develop bespoke manufacturing platform	£21,000 - £24,000 per annum	26/11/2014	<a href="#">Info (2833)</a>
North East of England	Business Behaviour Analyst (KTP Associate)	£24,057	09/12/2014	<a href="#">Info (2799)</a>
North West of England	DEMENTIA COMMUNICATIONS FACILITATOR	£23,870-£25,451	12/12/2014	<a href="#">Info (2847)</a>
North West of England	SOCIAL DATA SCIENTIST	£21,170 - £21,960	12/12/2014	<a href="#">Info (2855)</a>
Scotland	Senior Data Scientist - KTP Associate	£32-36000 pa	27/11/2014	<a href="#">Info (2817)</a>
Scotland	KTP Associate	£24,000	30/11/2014	<a href="#">Info (2859)</a>
Scotland	KTP Associate - Information and Records Management	£21,000-£25,000	01/12/2014	<a href="#">Info (2837)</a>
Scotland	KTP Associate - Business Development Officer	£25,000 - £27,000	01/12/2014	<a href="#">Info (2848)</a>

# Staff: Research

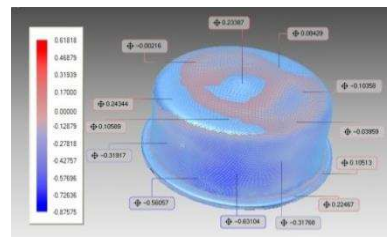
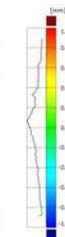
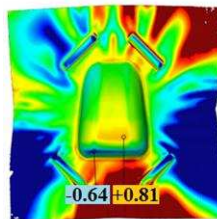
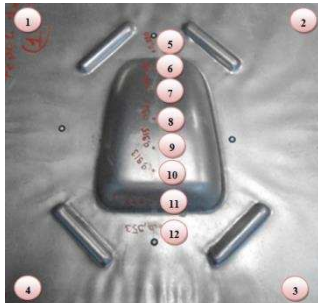
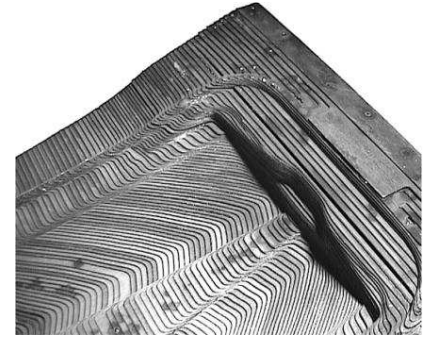
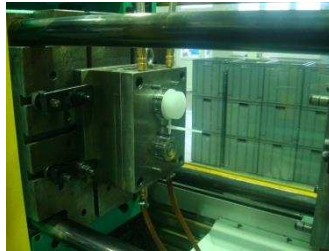
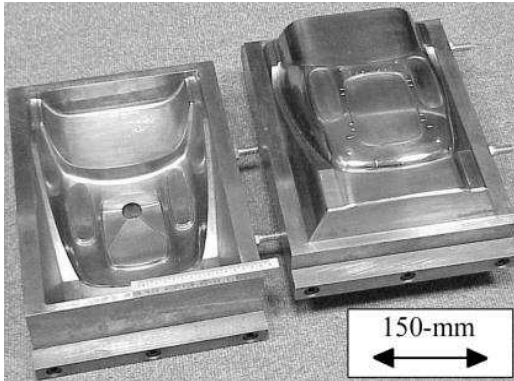


# Enterprise and Research activities : Staff

To challenge this, Paxman engaged the expertise of researchers at two of the University of Huddersfield's academic schools. Initially funded by an Innovation Voucher from Kirklees Council, Paxman started working with the School of Applied Sciences, using its cutting-edge cell biology techniques to help identify the mechanisms that govern patients' variable responses to scalp cooling. Following additional funding from [Knowledge Transfer Partnership](#) (KTP) and [Technology Strategy Board](#) (TSB) grants and from the Collaborative Ventures Fund at the University, the School of Art, Design and Architecture then joined the team to investigate the design of the scalp cooling ca



# Low Cost Tooling for Product Design(ers) (2012)



# Staff: Design



ABC Syringe  
Dr. David Swann

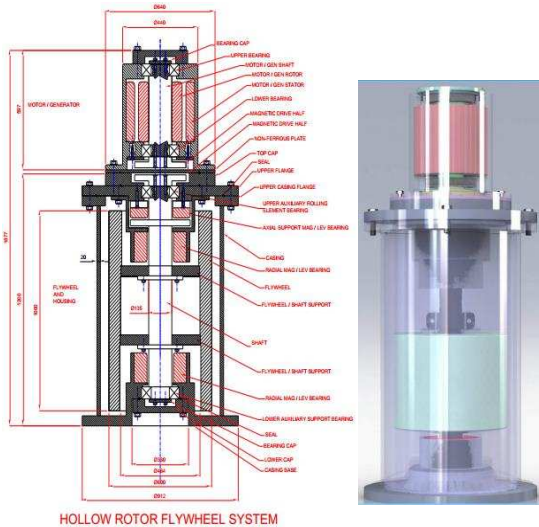


Brittanic Watch  
Rob Silkstone

Organ Care System  
Glynn Stockton



# Enterprise activities



Kinetic Energy Storage Device, ESP Ltd



Blister pack opener:



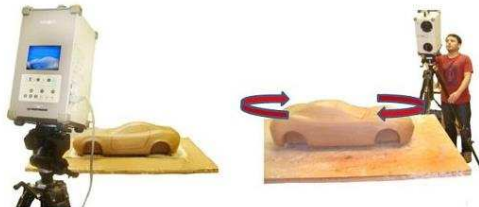
Bob the Builder Tractor : Mackinnon & Saunders



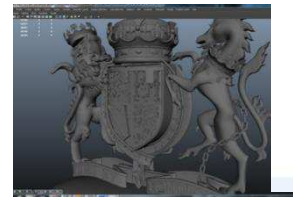
Paxman Cap



Royal Coat of Arms, 3M Buckley



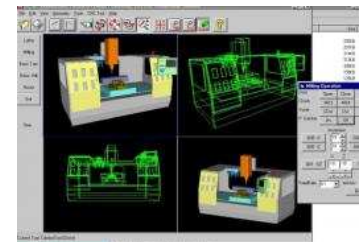
3D Scanning: Mackinnon & Saunders



Wheelie Bin Lock: JA innovation

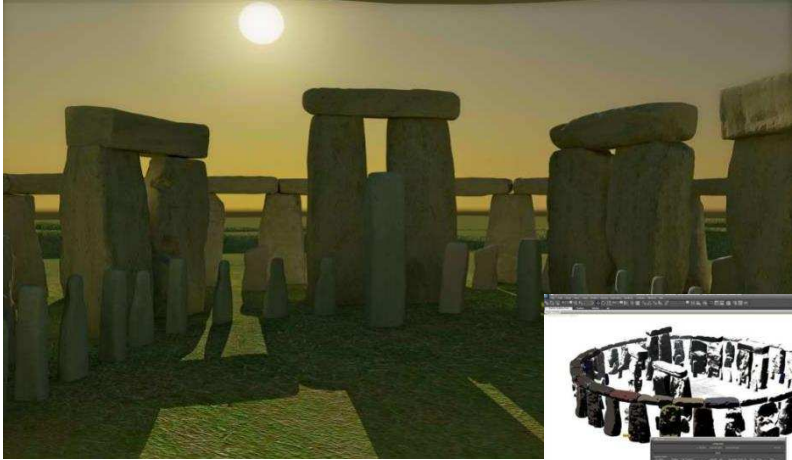


Portable Potty: Simple Little Creations Ltd

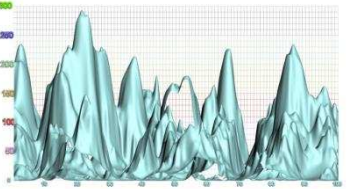
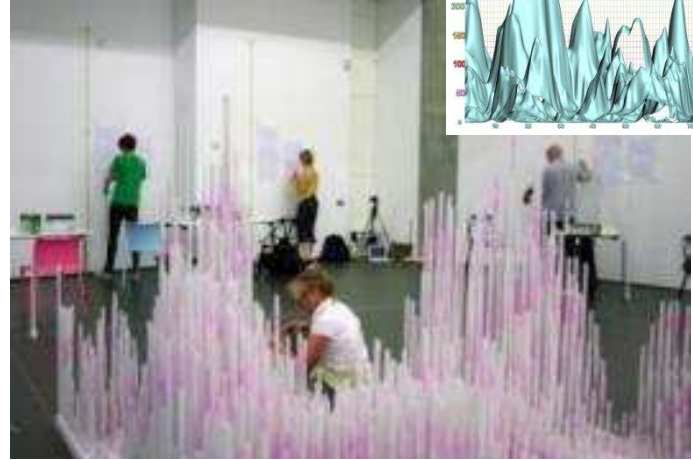
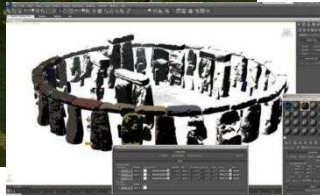


CNC Learning Software: Kirklees College

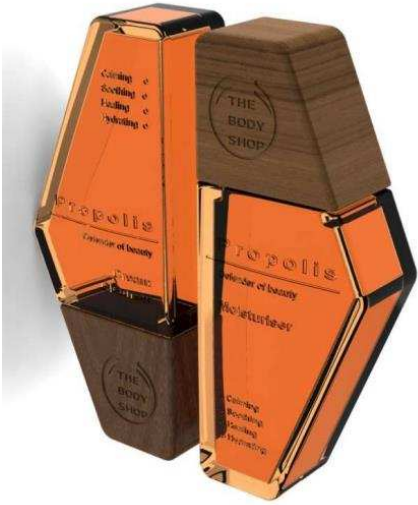
# Interdisciplinary & International Impact



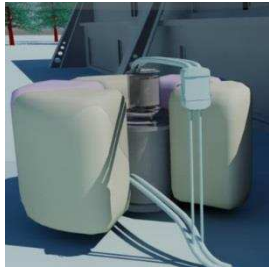
Rupert Till-Heritage, Music



Jill Townsley, Art



Business L'Oreal



Engineering



Costume

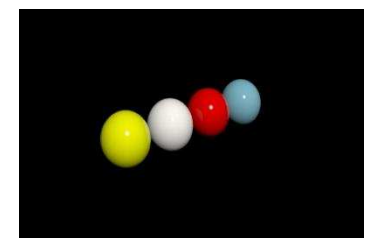


Digital Doubles



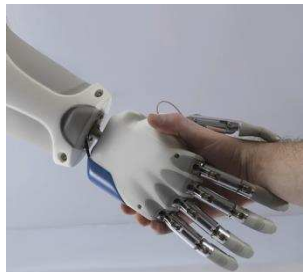
Prof Bromley & Prof Ball

International



# Current & Future Projects planned:

- **UNICEF Innovation Lab:** portfolio of high impact products
- **Erasmus+:** design methodologies for prosthetic design using RP technologies
- **Others:** *Acoustic* products to reduce noise; Working prototypes of *animatronics* mechanical characters; *Low melting alloy* for forming sheets metals; Novel tooling methods for manufacturing low volume products, application of 3D Printing for tooling, Algorithmic 3D Modelling and visual programming such as using *Grasshopper* for exploring new shapes.





Staff: Facilities

# 3D PRINTING @ SCHOOL OF ART, DESIGN AND ARCHITECTURE:

Students and research project from 2003 onwards. Including the **Future Factories** Project in 2003, at ADA, University of Huddersfield where to research the direct digital manufacture of randomly generated and consumer controlled 3D models. This led to the “Automake Project” in collaboration with Sheffield Hallam and Falmouth Universities. Product/Transport students at Huddersfield used 3D printing for design realisation.



**"Buzz" the Buzzle Bank**

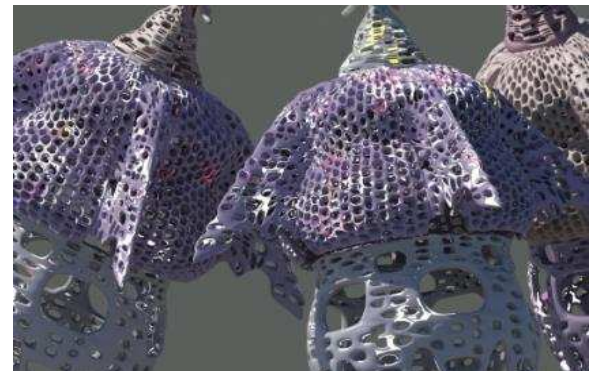
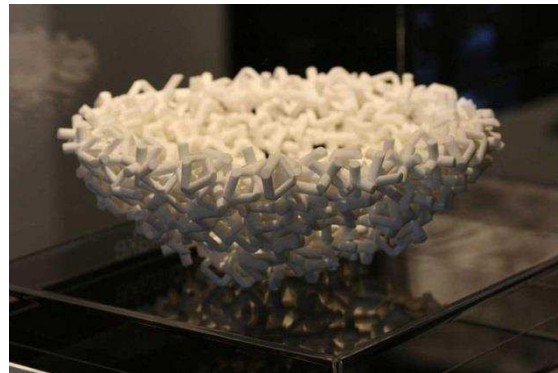
*"Buzz the Buzzle Bank" is a coin and tin bank designed to encourage recycling by getting children involved with the process at an early age. Its built in puzzle and coin crusher aim to make the process more fun and make recycling a habit in later life.*

*Installed in playgrounds of primary schools.*

*Complements National Curriculum teaching of green issues.*

*Child collecting tins and cans at home could increase parental awareness of recycling.*

GreenClean

A diagram of the Buzz the Buzzle Bank showing a child and a bee-like insect.

# 3M Buckley Innovation Centre



# 3D Printers at University of Huddersfield: 3M Business Innovation Centre

## 3M Business Innovation Centre has EOS FORMIGA P 110

Laser Sintering Machine cost around £200k,  
Similar Machines for metal sintering cost over £500k

### A wide range of materials are available:

(PA 2200, PA 2201, PA 3200 GF, PrimeCast 101 & PA 2105)

Design for low-dust, ergonomic work conditions

Layer thickness (depending on material): 0.06 mm, 0.1 mm, 0.12 mm

Effective building volume: 200 mm x 250 mm x 330 mm

Building speed (depending on material): up to 20 mm/h

Laser type : CO<sub>2</sub>, 30 W

Power consumption : 2 kW

Requires Compressed air supply and integrated Nitrogen generator

**BIC offering free 1 day 3D printing and modelling services  
for local businesses through 2014 !**

**Contact Susan Lipthorpe at 3D BIC**



www.

hud

.ac.uk

www.

huddersfield3d

.co.uk

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Unver, Ertu (2006) [Strategies for the transition to CAD based 3D design education.](#) Computer-Aided Design and Applications, 3 (1-4). pp. 323-330. ISSN 1686-4360

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