3rd Conference on Rapid Prototyping, Rapid Tooling and Rapid Manufacturing

20th - 21st June 2002, Chalfont Campus, Buckinghamshire Chilterns University College

Provisional Conference Programme

Thursday 20th June

8.00 – 10.30  Registration - Coffee and biscuits

10.30  Welcoming Speech and Keynote Speaker – To be announced

SESSION 1.  Applications & Techniques,
Chairman – Dr S S Dimov, Cardiff University

11.00  Rpblox - A Novel Approach Towards Rapid Prototyping.
T. Lim, J.R. Comney, J.M. Ritchie & J.B.C. Davies
Heriot-Watt University, UK

S.G. Dhande & A. Chatterjee
Indian Institute of Technology, India

12.00  Preliminary Investigation Of Surface Roughness And Dimensional Accuracy Of Thermojet And SLA Parts.
I.M. Mulyadi, S.O. Onuh & N.G. Bennett
University of Portsmouth, UK

12.30  The Development Of 3D Printing Techniques For ”Concept Modellers” To Competitive Rapid Prototyping Systems.
P.M. Hackney
University of Northumbria at Newcastle, UK

13.00  Lunch – Served in the Old Library

SESSION 2  High Speed Machining
Chairman – Dr I T Chang, University of Birmingham

J.F. Antunes Simões*, E. Matos da Rocha* & R.M. Oliveira Baptista**
Instituto Politécnico de Setúbal, Portugal* & Universidade Técnica de Lisboa, Portugal**
15.00 Multi-Axis Machining Using A 6-Axis Anthropomorphic Robot.
Pires*
Instituto Politécnico de Setúbal, Portugal*, Buckinghamshire
Chilterns University College, UK** & Staffordshire University,
UK***.

15.30 Tea/Coffee and cakes

SESSION 3 Medical & Materials
Chairman - Dr Alf Linney, University College, London

15.30 A Review Of The Manufacture Of Below-Knee Prosthetic
Sockets Using Rapid Prototyping Technologies.
N.S. Herbert
University of Strathclyde, UK

16.00 Fabrication Of Customised Bioceramic Implants Using Selective
Laser Sintering.
F. Cruz*, T. Coole**, C. Bocking** & J. Simões*
Instituto Politécnico de Setúbal, Portugal* & Buckinghamshire
Chilterns University College, UK**

16.30 The Microstructure Of Laser Fabricated Ti6Al4V.
J. Liang, J. Mei, M.H. Loretto & X. Wu
University of Birmingham, UK

17.00 End of Sessions

19.00 Conference Dinner BBQ on the terrace of the Old Library. Bar
open from 18.45. After dinner speaker in the Old Library – Trevor
Bayliss, Inventor and TV personality. The bar will remain open until
01.00.

Friday 21st June

08.00 – 09.00 Breakfast for those staying on campus - Campus Refectory

SESSION 4 - Methodologies
Chairman – Mr P Hackney, University of Northumbria

09.30 Lean Rapid Production Concept Realisation In The Compact
Manufacturing System.
D.N. Svirsky
Vitebsk State Technological University, Republic of Belarus
10.00 Reducing The Uncertainty Of The Prototyping Decision  
K.A.M. Steele, G.J. Ryder, W.J. Ion & A.I. Thomson  
*University of Strathclyde, UK*

10.30 Benchmarking The Rapid Design And Manufacture Process.  
*University of Strathclyde, UK*, Glasgow Caledonian University, UK**, University of Glasgow, UK***, Glasgow School of Art****

11.00 Coffee

SESSION 5  
Sintering and Related Technologies.  
Chairman – Dr Chris Bocking, Buckinghamshire Chilterns University College

11.30 Fabrication Of Functional Metal Parts Using Laser Sintering: A Case Study.  
D.E. Dimla, H. Singh & M. Day*  
*De Montfort University, UK & Pall Europe Ltd, UK*

D. Uzunsoy & I.T.H. Chang  
*University of Birmingham, UK*

12.30 Experimental Investigation Of The Direct Metal Laser Remelting Of Dissimilar Metals.  
S. Pogson, P. Fox & W. O'Neill  
*University of Liverpool, UK*

13.00 Lunch Served in the Old Library

SESSION 6  
Laser Processing and Microfabrication  
Chairman – Prof. D Wimpenny, De Montford University

14.00 Rapid Manufacture Of Burn Resistant Ti Components Using Direct Laser Fabrication.  
R. Sharman, X. Wu, M.H. Loretto & W. Voice*  
*University of Birmingham, UK & Rolls-Royce plc., UK*

14.30 Laser Engineered Net Shaping™: Technology And Applications.  
M. Hedges & D. Kiecher  
*Neotech Services MTP, Germany & Optomec Inc, USA*

15.00 Ceramic microcomponents by rapid prototyping process chains.  
R. Knitter, W. Bauer, D. Göhring & P. Risthaus  
*Forschungszentrum Karlsruhe GmbH, Germany*

15.30 Coffee/tea and cakes
SESSION 7  Electrochemical Machining For Rapid Manufacturing
Chairman - Dr W O’Neill, University of Liverpool

16.00  Rapid Manufacture Of Complex Shapes By ECM.
R. Temur, T Coole
Buckinghamshire Chilterns University College, UK

16.30  Tool Electrode Design For ECM.
R. Temur, C Bocking
Buckinghamshire Chilterns University College, UK

17.00  Final discussion and conference closure