

JSPS London Symposium Scheme

Sports Engineering: Engineering the Future of Sport



Thursday 24th February, 2011

Sir Dennis Rooke Conference Centre
Loughborough University, U.K.

Organised by: Loughborough University, Tokyo Institute of
Technology & JSPS London

Contact: Dr Ruth Goodridge, R.D.Goodridge@lboro.ac.uk (pre-
registration necessary)

UK-Japan Sports Engineering Symposium

Thursday 24th February, 2011

8.30 am Coffee and Registration

9.00 am Welcome by Shirley Pearce, Vice Chancellor of Loughborough University

9.10 am Welcome by Professor Kozo Hiramatsu, Director of JSPS London

Keynotes (chaired by Prof. Mike Caine)

9.20 am Keynote 1: *An overview of Sports Technology research within the UK* (Prof Mike Caine, Director of the Sports Technology Institute, Loughborough University)

10.05 am Keynote 2: *History of Sports Engineering in Japan* (Prof Sadayuki Ujihashi, Tokyo Institute of Technology)

10.50 am Break and Networking

Session 2 (Chaired by Dr Andy Harland)

11.10 am Talk 1: *Trackside Technology for Developing Athletics Coaching and Performance.* (Prof David Kerwin, University of Wales Institute, Cardiff)

11.40 am Talk 2: *Aerodynamic Analysis of Flight Trajectory of Sports Balls* (Prof T Mizota, Fukuoka Institute of Technology, Japan)

12.10 pm Talk 3: *Motion capture in the field: 3D analysis with minimum fuss.* (Professor Steve Haake, Sheffield Hallam University, UK)

12.40 pm Talk 4: *Computer Aided Prediction and Estimation System for Tennis Racket Performance Considering Player's Individuality* (Prof Y Kawazoe, Saitama Institute of Technology, Japan)

1.10 pm Lunch

Session 3 (Chaired by Dr Stephanie Forrester)

2.10 pm Talk 5: *Technology in cricket - the arm, the bat, & the ball / Biomechanics Research in Rowing - Performance & Injury Impact* (Professor Anthony Bull, Imperial College London, UK)

2.40 pm Talk 6: *Quantification of the functional role of joint torques in sports motion based on multi-body dynamics* (Prof S Koike, University of Tsukuba, Japan)

3.10 pm Break and Networking

Session 4 (Chaired by Dr Jon Roberts)

3.30 pm Talk 7: *Possibilities and current limitations of Additive Manufacturing for sports equipment.* (Dr Ruth Goodridge, Loughborough University, UK)

4.00 pm Talk 8: *FE simulation of golf impact* (Mr K Tanaka, Tokyo Institute of Technology, Japan)

4.30 pm Talk 9: *Analysing golf performance – biomechanics and technology.* (Prof Eric Wallace, University of Ulster, UK)

5.00 pm Closing Remarks