

public lecture by ASICS AND MIZUNO



23rd February 2011, 5:30 pm till 7:00 pm
Wolfson School of Mechanical and Manufacturing Engineering
Lecture Theatre T.0.03. Refreshments available 5 till 5:30 pm



Presented by Dr Tsuyoshi Nishiwaki
(General Manager, Sports Science Institute)



Title "Footwear design methodology based on human responses"

Running footwear has three important roles - injury prevention, maximisation of runner's performance and maintenance of good in-shoe conditions. In the design process, eight key functions are considered that influence the roles of the footwear: forefoot flexibility, cushioning, stability, fitting, breathability, grip, lightness and durability. Considering the running footwear revolution, it is obvious that the quantitative evaluation methods of the above functions should be established. Moreover the method must be based on runner's responses. The presentation will focus on three quantitative evaluation methods and practical design examples for cushioning, stability and fitting, as well as expanding on the vision for future Asics products and technologies.



Presented by Dr Takeshi Naruo (Chief Researcher)

Title: "Technology for the development of new sports equipment"

Mizuno Corporation is a Japanese sports equipment company founded in 1906. Mizuno have been developing various sports goods including footwear and apparel for over a century. Recently the emphasis on development has been toward golf and baseball equipment, footwear and apparel. Mizuno research function, materials, structure etc. using sports engineering principles for development of new equipments. Specific sports engineering focus areas include, mechanical engineering, fluid dynamics, biomechanics, computational mechanics and materials engineering. Some examples of developing new sports equipments concepts are introduced.