E-Textiles for Sports and Fitness Applications

Thursday 14th July 2022, 09.30-16.30

Donington Suite, Jurys Inn East Midlands Airport

9.30	Registration & Coffee
10.00	Welcome and Introduction
10.05	**Current State and Future Considerations of Technology in Sports Science** - Dr Andrew Callaway (Bournemouth University) This session will give an overview of some of the current technologies and metrics used in sports science, and start to set an agenda to address the needs for sports science
10.25	**Technology for Training Load Monitoring in Sport** - Dr Stuart McErlain-Naylor (Loughborough University) This presentation will describe the application of technology for internal and external 'training load' monitoring in sport. Although other areas will be summarised, there will be a particular focus on inertial measurement units and GPS technology for the prescription and monitoring of exercises during training and rehabilitation. Literature on the use of manufacturer algorithms, raw data, and integration with other technologies and/or musculoskeletal modelling will all be critically discussed. Opportunities and limitations of current technologies will be outlined, as well as identifying potential areas for future development.
10.45	**Giving Data a Voice** - Peter Lazou (CEO & Founding Partner SportScienta) With artificial intelligence, health data is gold therefore by unlocking never before accessible data from the foot we can help deliver practitioners and athletes 'laboratory-level' insights into gait dynamics captured during everyday training and competition.
11.05	Panel Discussion – Q&A and General Discussion
11.15	Facilitated Workshop Session: 1. What parameters could we measure and how? 2. What are the important considerations from a user (trainee/trainer) perspective? 3. What are the drawbacks associated with existing wearables? 4.
12.30	Lunch and Networking

2.00	**Start-Up Journey** - Naomi McGregor (Founder and CEO Movetru) The experience and journey of beginning a start-up within the fitness industry and how e-textiles can be a part of it.
2.20	**The Challenges of Bringing Pro Sport Tech to the Mass Consumer Market** - Martin Ashby (Prevayl) There is an inevitable trade-off that wearable tech companies have to wrestle with when trying to meet the demands of a mass market consumer who expects a product that offers highly accurate data that is empowering, embedded in a normal looking garment that is also priced affordably. The talk will raise some of the challenges all parties in the supply chain must address if the garment based wearable tech sector is to achieve its growth potential.
2.40	Panel discussion – Q&A and General Discussion
2.50	Facilitated Workshop Session 1. What parameters and activities could e-textiles be used to monitor? 2. What are the technical obstacles to implementing an e-textiles solution in these applications?
4.05	Wrap Up and Next Steps
4.15	Close