



SPORTS AND WELLBEING; **Technological and nutritional aspects**

Multidisciplinary Research Symposium in Vuokatti, Finland 18-19.3.2010

ORGANIZED BY

Sports Technology Unit, Vuokatti
Department of Biology of Physical Activity
University of Jyväskylä

Laboratory of Biotechnology, Sotkamo
Kajaani University Consortium
University of Oulu

Centre for Wireless Communications
University of Oulu

Measurement and Sensor Laboratory
Kajaani University Consortium
University of Oulu

Snowpolis Oy, Vuokatti

UNIVERSITY of OULU
OULUN YLIOPISTO



SNOWPOLIS
VUOKATTI FINLAND

Member of
**European
Network of
Living Labs**

CONGRESS VENUE

Snowpolis, Kidekuja 2, Vuokatti



REGISTRATION

Registration fee:

Program, coffee, dinner and lunch: 135 €
(95 € for students and HyteNet-members)

For registration and abstract and poster instructions please visit:

<https://fbhost.bms.fi/asiakkaat/snowpolisfb/index.asp?k=nkdfxrzwwgqdeqluhdxz>

For questions regarding registration
contact congress coordinator
Mr Mika Suutarinen, Tel. +358 8 6178 680

ACCOMMODATION

Sokos Hotel Vuokatti
Kidekuja 2, Snowpolis, 88610 Vuokatti
Tel. +358 20 1234 688
e-mail: sales.vuokatti@sokoshotels.fi
www.sokoshotels.fi

Vuokatti Sports Institute
Opistontie 1, 88615 Vuokatin Urheiluopisto
Tel. +358 8 619 11
e-mail: sporthotel@vuokattisport.fi
www.vuokattisport.fi

For more information contact Symposium Chair
Prof Vesa Linnamo
e-mail: vesa.linnamo@jyu.fi
Tel. +358 40 5044 800

PROGRAM

Thursday, March 18th	
9:00	Opening of the symposium: Rector Aino Sallinen, University of Jyväskylä Mayor Petri Kauppinen, Sotkamo
University of Jyväskylä; Session on Nordic skiing. Chairs: Professor Keijo Häkkinen and Professor Janne Avela	
9:15	Vesa Linnamo, professor, University of Jyväskylä: Nordic skiing research in Vuokatti
9:35	Paavo Komi, professor emeritus, University of Jyväskylä: Evidence of use of stretch-shortening cycle (SSC) in cross-country skiing
10:00	Robert Norman, professor emeritus, University of Waterloo, Canada: Mechanical and metabolic power implications of exploiting SSC in skiing
10:20	Hans-Christer Holmberg, Ph.D, Mid Sweden University, Östersund: Cross-country skiing – a challenging endurance sport
10:40	Coffee break – Conference Room Polanne
11:10	Stefan Lindinger, Ph.D, University of Salzburg: Frequency adaptations of double poling technique in elite cross-country skiers
11:30	Thomas Stöggl, Ph.D, University of Salzburg: Strength properties in sprint skiing
11:45	Gerold Sattler, Ph.D, University of Salzburg: Biomechanical aspects and influence of fatigue in biathlon shooting
12:00	Jyri Pelkonen, M.Sc, Vuokatti Sports Institute / University of Jyväskylä: Biomechanical measurements in ski-jumping
12:15	Lunch – Restaurant Amarillo
University of Oulu, Centre for Wireless Communications (CWC) Chair: Dr Matti Hämäläinen	
13:30	Pauli Mikkonen, M.Sc, CWC: The wireless measurement system of Vuokatti ski tunnel
13:50	Keijo Ruotsalainen, M.Sc, CWC: Wireless system for continuous observation of whole body vibration in working machines
14:10	Matti Hämäläinen, Dr.Tech, CWC: Wireless Medical communication
14:30	Coffee break and poster session – Conference Room Polanne
University of Oulu, Measurement and Sensor Laboratory Chairs: Professor Anssi Mäkynen and Professor Pasi Karjalainen	
15:30	Pasi Karjalainen, professor, University of Eastern Finland: Biosignals – Monitoring human in rest and motion
15:50	Koyo Watanabe, Ph.D, project researcher, Measurement and Sensor Laboratory: Novel techniques for detecting protein interaction in an ideal environment by using localized surface Plasmon
16:10	Taneli Rantaharju, M.Sc, project manager, Measurement and Sensor Laboratory: Whole-body vibration research and simulation environment
16:30	Anssi Mäkynen, professor, Dr.Tech, Measurement and Sensor Laboratory: Characteristics of ice
20:00	Dinner – Restaurant Olas, Vuokatti Sports Institute

Friday, March 19th	
University of Jyväskylä; Session on Nutrition. Chairs: Professor Klaas Westerterp and Professor Heikki Kyröläinen	
9:00	Klaas Westerterp, professor, Maastricht University, Holland: Physical activity, food intake and body weight regulation: Insights from doubly labeled water studies
9:45	Minna Tanskanen, lecturer, University of Jyväskylä: Effects of energy bar supplement on energy and water balance during 8 days arduous physical activity
10:00	Pia Hartonen, Clinical Life Sciences Ltd: Services of Clinical Life Sciences Ltd
10:10	Coffee break and poster session – Conference Room Polanne
University of Oulu, Laboratory of Biotechnology Chairs: Docent Vesa Virtanen and Professor Guiseppa Palleschi	
11:10	Vesa Virtanen, docent, research director, University of Oulu: The activities of laboratory of Biotechnology
11:30	Guiseppa Palleschi, professor, Università Tor Vergata, Rome: Biomeasurements and Well Being
12:00	Ibtisam Tothill, professor, University of Cranfield: Environmental diagnostics and their impact on humans
12:30	Adama Sesay, Ph.D, University of Oulu: Physiological biomarkers in fitness, nutrition and wellbeing
12:50	Lunch – Restaurant Amarillo
13:50	Pekka Kilpeläinen, Ph.D, University of Oulu: Measurement of fatigue and overtiredness
14:05	Adina Arvinte, Ph.D, University of Bucharest: Nano-composite materials in human physiology sensors
14:20	Sirpa Filppula, Ph.D, University of Oulu: Nutritional biotechnology and human health
14:35	Mari Jaakkola, Ph.D, University of Oulu: Effect of nutritional phenolic compounds on human health
Snowpolis, Vuokatti Chair: Professor Vesa Linnamo	
14:50	Seppo Karikko, CEO, Base Vision Ltd: 4Dswing golf analyzer
15:10	Antti Toivanen, managing director, Snowpolis Oy: Snowpolis now and in the future
15:30	Closing of the Symposium: Professor Vesa Linnamo
Saturday, March 20th	
Vuokatti Ski Competition	

