



\* **MONDAY, MAY 21, 19.00 -22.00 GET-TOGETHER DINNER, Opening of Exhibition & R<sup>3</sup> Olympics**

PROGRAMME DAY 1 - TUESDAY MAY 22

08.00	<i>Registration (08.00 - 09.30), Coffee &amp; Exhibition</i>		
09.30	<i>Opening of the 49<sup>th</sup> R<sup>3</sup> Nordic Symposium</i>		
10.00	<i>Keynote Lecture 1: Current Topics in GMP. Pirjo Hänninen, Fimea</i>		
10.45	<i>Keynote Lecture 2: Automation, a Peculiar Task for Cleanroom Areas in Hospital Pharmacies, Counsellor Pharmaceutical Affairs Kirsti Torniainen, Turku University Hospital Pharmacy</i>		
11.30	<i>Lunch &amp; Exhibition</i>		
	<b>PHARMA &amp; HOSPITAL PHARMACY</b>	<b>HOSPITALS</b>	<b>GENERAL</b>
12.30	A Practical Approach to GMP Cleanrooms and Cleanroom HVAC <i>Markku Mäkinen, Elomatic</i>	12.30 Protective Supply Air Distribution in Hospital Isolation Rooms <i>Petri Kalliomäki, TUAS</i>	12.30 Safety Ventilation in Ultraclean Air Operating Rooms <i>Bengt Ljungqvist, Chalmers</i>
13.00	GMP-grade Clinical Cell Production with an Isolator System <i>Timo Kangasmaa, Finnish Red Cross</i>	13.00 New Standard for Ventilation in Hospital – Isolation Units <i>Kari Solem Aune, Sykehusbygg</i>	13.00 Surgical Clothing Systems for Ultraclean Air Operating Rooms <i>Berit Reinmüller, Chalmers</i>
13.30	Contamination Recovery Rates as Control Indicator for Aseptic Environment <i>Alexander Stoll, Fresenius Kabi AB</i>	13.30 Operating Room Ventilation: CFU-concentration Measurements <i>Aleksanteri Setälä, Aalto University</i>	13.30 From Individual Thermal Sensation to Smart Control of Heating and Cooling <i>Pekka Tuomaala, VTT</i>
14.00	<i>Coffee &amp; Exhibition</i>		
14.30	Risk-based Environmental Control and Monitoring Guidance <i>James L. Drinkwater, PHSS</i>	14.30 Air Distribution in Hybrid Operation Rooms <i>Kim Hagström, Halton</i>	14.30 Lean to Enhance Cleanroom Efficiency <i>Jori Reijula, Granlund Consulting Oy</i>
15.00	Harmonized Method for Cleanroom Hard Surface Disinfectant Efficacy Evaluations <i>James Tucker, Ecolab</i>	15.00 Unidirectional Air Flow Systems with Low Velocities in Operating Rooms <i>Bengt Ljungqvist, Chalmers</i>	15.00 Design of Microbiological Safety Cabinets Meeting the New EN Norm <i>Heikki Aro, Kojair</i>
15.30	Risk Management for Development of Safe PUPSIT Strategies <i>Alain Vanhecke, Pall Life Sciences</i>	15.30 Surgical Clothing System without and with Textile Knee-length Boots <i>Berit Reinmüller, Chalmers</i>	15.30 The Antimicrobial and Air-purifying Effect of Blue Light <i>Camilla Höglund, LED Tailor</i>
16.00	<i>Coffee &amp; Exhibition</i>		
16.30	<i>Keynote Lecture 3: PHSS Review of Key Comments of the EU GMP Annex 1 Draft, James L. Drinkwater, PHSS (45 min)</i>		
17.30	<i>R<sup>3</sup> Nordic Annual Meeting (≈ 60 min)</i>		
19.30	<i>Welcome Drink and Mingling</i>		
20.00	<i>Banquet Dinner (ends at mid-night)</i>		

PROGRAMME DAY 2 - WEDNESDAY MAY 23

08.00	<i>Registration (08.00-09.45) 2<sup>nd</sup> day participants</i>		
08.30	<i>Keynote Lecture 4: Virtual Reality Model in Cleanroom Design, Tero Järvinen, Granlund Oy</i>		
09.15	<i>Coffee &amp; Exhibition</i>		
	<b>PHARMA &amp; HOSPITAL PHARMACY</b>	<b>FOOD &amp; BIOTECH</b>	<b>GENERAL &amp; 1<sup>st</sup> DAY of BASIC HYGIEN</b>
09.45	Design of GMP Premises, <i>Jukka Vasara, Granlund Kuopio Oy</i>	09.45 GMP in the Food Industry – Requirements in Manufacturing Unit Design <i>Riina Brade, Elomatic</i>	09.45 Introduction to Cleanroom Technology <i>Lennart Hultberg, Processhygien</i>
10.15	How to Implement a RT Microbial Monitoring System into an Isolator <i>Thomas Lööf, Brookhaven</i>	10.15 New ISO16890 for Air Filters - Focus on Clean Air in Food Processing <i>Erkki Koskinen, Camfil Oy</i>	10.15 Design of High Containment Research Facilities <i>Anette Bonsted, Erichsen &amp; Horgen AS</i>
10.45	Continuous Monitoring of Environmental Conditions Keeps Data and Assets Safe <i>Piritta Maunu, Vaisala Oyj</i>	10.45 Contamination Control in Food Industry <i>Frans Saurwalt, Kropman Contamination Control</i>	10.45 Cleanroom Disinfection in GMP and Contamination Control <i>Jennie von Fielitz, Miclev AB</i>
11.15	<i>Lunch &amp; Exhibition</i>		
12.15	Reconstitution Robotics in Cleanroom <i>Marja Jaurakkajärvi, Newlcon</i>	12.15 Microbial Genomics in Assessing Contamination Risks <i>Eveliina Munukka, TUAS</i>	12.15 Microbial Surface Hygiene <i>Gun Wirtanen, University of Helsinki</i>
12.45	General Requirements for Good Projecting of Facilities through GMP <i>Esa Högel, Alpiq InTec Ost AG</i>	12.45 High Quality Ph. Eur. Water by Membrane Technology <i>Reijo Ahonen, Veolia Water Technologies</i>	12.45 Cleaning Technology in Controlled Areas <i>Leila Kakko, TAMK</i>
13.15	<i>Lunch &amp; Exhibition &amp; Certificates of Participation</i>		
13.45	<i>Keynote Lecture 5: Cleanroom Zoning, the Challenge of Pressure Differential and Flow. Frans Saurwalt, Kropman Contamination Control</i>		13.45 Legal Requirements in Building Process Equipment <i>Alan Friis, Tech4Bizz</i>
14.30	<i>Closing of the Symposium</i>		
<p><i>On Wednesday the programme of the GENERAL will be executed together with 1<sup>st</sup> day of the Basic Hygienic Design Course. All symposium delegates interested in the Basic Course topics during the first course day are welcome to attend these lectures. The Programme of the 2<sup>nd</sup> day in the course you will find the part "Utbildning" further back in this issue. Participation in the 2<sup>nd</sup> course day requires separate registration.</i></p> <p><i>Arrange your transportation from 3 o'clock pm to</i>  <i>Turku Airport (ARN at 16.35 or 20.35 / HEL at 17.10)</i>  <i>Port of Turku (Tallink-Silja at 20.15 / Viking at 20.55)</i>  <i>Turku Central (trains to Helsinki at 16.21, 17.17 &amp; 18.30 / to Tampere at 16.05 &amp; 18.05)</i></p>			<p>14.45 <i>Coffee/Tea</i> <i>for the Participants in the Course "Hygienic Design &amp; Contamination Control"</i></p> <p>15.00 <i>Basic Criteria in Hygienic Design</i> <i>Gun Wirtanen, University of Helsinki</i></p> <p>16.00 <i>Construction Materials in Food Equipment</i> <i>Alan Friis, Tech4Bizz</i></p>