

Process analytical aspects of biopharmaceutical manufacturing

<u>Location:</u>	University of Kuopio, Medistudia, Lecture hall ML2
<u>Date:</u>	May 4, 2010
<u>ECTS Credits:</u>	0.5 (if EuPAT4 included 1.0 ECTS / with poster or oral presentation 1.5ECTS)
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<u>Registration on web:</u>	http://www.oppi.uku.fi/lomake/data/6073-38921.html
<u>Registration deadline:</u>	April 14, 2010
<u>Course aim:</u>	This course will give an introduction how Process Analytical Technologies can be implemented to biomaterial production. Basics of biomaterial production, measuring technologies and freeze-drying process will be covered.
<u>Fees:</u>	Free for Ph.D. students in Graduate School of Pharmaceutical Research, for all others 90 EUR (will be charged after registration)
<u>Language:</u>	English
<u>Accommodation:</u>	Hotel Puijonsarvi (www.sokoshotels.fi/en/hotels/kuopio/) Reservations sales.kuopio@sokoshotels.fi Discount code: University of Kuopio/EuPAT4 (Deadline April 14, 2010)

Program:

Morning session – Biopharmaceutical processing

9:00 – 9:15 Opening

9:15 - 10:00 Production of bioactives (Robert Shaw, Ark Therapeutics Ltd.)

10:00 – 10:30 Viral delivery (Riikka Pellinen, University of Kuopio)

10:30 – 10:45 Break

10:45 – 11:15 Non-viral delivery (Marika Ruponen, University of Kuopio)

Midday session – PAT and QbD in bioprocesses

11:15 – 12:00 QbD in biopharma I (Emil Ciurczak)

12:00 – 13:00 Lunch

13:00 – 13:45 Challenges of implementation of PAT in bioprocessing (Juha-Pekka Pitkänen, VTT)

13:45 – 14:30 QbD in biopharma II (Emil Ciurczak)

14:30 – 14:45 Break

Afternoon session – Downstream lyophilization

14:45 – 15:00 Basics of lyophilization (Ossi Korhonen, University of Kuopio)

15:00 – 15:45 Lyophilization process development (Henning Gieseler, University of Erlangen)

15:45 – 16:30 Real-time analysis of lyophilization process (Thomas de Beer, University of Ghent)



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