

# European Workshop on Particulate Systems



## Program

30th and 31st May 2008



Henry-Ford-Building  
Garystraße 35  
14195 Berlin

**Organizers:** Prof. Dr. Rainer H. Müller, Dr. Cornelia M. Keck, Freie Universität Berlin

# European Workshop on Particulate Systems Berlin, May 30-31, 2008



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## Design and compilation of the abstract book:

**Jana Pardeike**

Freie Universität Berlin

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**Dr.RIMPLER**



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## Lecture Plan

### Friday:

13.00 - 13.50		Opening & Celebration Ceremony
13.50 – 14.10		Short Break (for supply with soft drinks)
<b>Session 1</b>	Chair: Elias Fattal (Paris)	
14.10 – 14.30	Robert Gurny (Geneve)	Paclitaxel loaded anti-Her2 immuno-nanoparticles - Biodistribution studies in healthy mice ( <i>page 18</i> )
14.30 – 14.50	Florence Delie (Geneve)	Effect of size and surface hydrophilicity on biodegradable particle interaction with intestinal cells ( <i>page 19</i> )
14.50 – 15.10	Claudia Di Tommaso (Geneve)	Hexyl-substituted polylactides as novel hydrophobic blocks in polymeric micellar drug delivery systems ( <i>page 17</i> )
15.10 – 15.30	Magali Zeisser (Geneve)	Hypericin-loaded nanoparticles to improve photodetection of ovarian metastases ( <i>page 16</i> )
15.30 – 16.10		Coffee Break & Poster Viewing (presenters must be present at their poster)

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### Session 2 Chair: Florence Delie (Geneve)

- |               |                                  |   |
|---------------|----------------------------------|---|
| 16.10 – 16.30 | Eva H. Møller<br>(Copenhagen)    | Liposomal formulations of ghrelin ( <i>page 27</i> )  |
| 16.30 – 16.50 | Camilla Foged<br>(Copenhagen)    | <i>In vivo</i> and <i>in vitro</i> investigations of the potential of CAF01 liposomes as a mucosal vaccine adjuvant ( <i>page 28</i> )                              |
| 16.50 – 17.10 | Dongmei Cun<br>(Copenhagen)      | Preparation and characterization of siRNA loaded PLGA nanoparticles ( <i>page 29</i> )  |
| 17.10 – 17.30 | Johannes Geiger (Munich)         | Targeting of the $\beta_2$ -adrenoceptor increases nonviral gene delivery to pulmonary epithelial cells <i>in vitro</i> and lungs <i>in vivo</i> ( <i>page 57</i> ) |
| 17.30 – 17.50 | Alparand H. Florindo<br>(Lisbon) | Surface modified polymeric nanoparticles as vaccine carriers for mucosal immunisation against <i>streptococcus equi</i> ( <i>page 35</i> )                          |
| 19.30         |                                  | Conference Dinner<br>(opening of buffet at 20.00)   |

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### Saturday:

#### Session 1

Chair: Sven Frøkjaer (Copenhagen)

- |               |  |  |
|---------------|--|--|
| 09.30 – 9.50  | Julijana Kristl<br>(Ljubljana)         | Careful selection of stabilizers used for solid lipid nanoparticles preparation ( <i>page 67</i> )   |
| 09.50 – 10.10 | Medha Joshi<br>(Mumbai/Berlin)         | Lipid Nanocarrier based potent anti-malarial formulations ( <i>page 39</i> )   |
| 10.10 – 10.30 | Eliana B. Souto (Porto)                | Assessment and evaluation of oral bioavailability of anticancer drugs by lipid-based nanoparticles coated with polysaccharides ( <i>page 32</i> )                      |
| 10.30 – 10.50 | Susana Martins (Porto)                 | Camptothecin-loaded SLN based on Trimyrustin (Dynasan 114) for brain delivery ( <i>page 33</i> )   |
| 10.50 – 11.10 | Louise Bastholm Jensen<br>(Copenhagen) | Solid Lipid Nanoparticles as drug delivery system for corticosteroids: Influence of lipid and drug substance on the release profile <i>in vitro</i> ( <i>page 30</i> ) |
| 11.10 – 11.30 |  | Coffee Break   |

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### **Session 2** Chair: Eliana B. Souto (Porto)

- |               |                           |   |
|---------------|---------------------------|---|
| 11.30 – 11.50 | Peggy Schlupp (Berlin)    | Solid lipid nanoparticles for improved skin uptake ( <i>page 40</i> )   |
| 11.50 – 12.10 | Aiman Hommoss (Berlin)    | Nanostructured Lipid Carriers (NLC) in cosmetic dermal formulations ( <i>page 43</i> )                                    |
| 12.10 – 12.30 | Jana Pardeike (Berlin)    | PX-13/18 – New phospholipase A <sub>2</sub> -inhibitors for dermal application in nanoparticles ( <i>page 45</i> )        |
| 12.30 – 12.50 | Rainer H. Müller (Berlin) | Second generation of drug nanocrystals: special features of smartCrystals ( <i>page 46</i> )                              |
| 12.50 – 13.10 | Cornelia M. Keck (Berlin) | Laser diffractometry of Submicron particles: Optical parameters and additional techniques - a pitfall? ( <i>page 52</i> ) |
| 13.10 – 14.00 |                           | Lunch break (lunch provided)  |

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### Session 3 Chair: Gert Storm (Utrecht)

- 14.00 – 14.20 Claudio Surace (Paris) Cationic liposomes containing a Dope-Hyaluronic conjugate for gene delivery (*page 22*)
- 14.20 – 14.40 Laure Lajavardi (Paris) Therapeutic effect of intravitreal injection of vasoactive intestinal peptide-loaded liposomes on experimental autoimmune uveoretinitis (*page 21*)
- 14.40 – 15.00 Caroline Roques (Paris) Influence of formulation parameters on organization of amphiphilic polymers/DNA systems and on their *in vivo* efficiency (*page 23*)
- 15.00 – 15.20 Raquel Díaz-López (Paris) Phospholipid-decorated microcapsules used as ultrasound contrast agent (*page 25*)
- 15.20 – 15.40 Hania Khoury (Paris) Lipidic prodrugs: a promising strategy for nucleoside analogues (*page 24*)
- 15.40 – 16.00 Coffee Break



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### **Session 4** Chair: Julijana Kristl (Ljubljana)

- |               |                                    |  |
|---------------|------------------------------------|--|
| 16.00 – 16.20 | Marcel H.A.M. Fens<br>(Utrecht)    | Liposomal encapsulation of ZD6126 shows enhanced antitumor efficacy in murine B16.F10 melanoma ( <i>page 61</i> )  |
| 16.20 – 16.40 | Niels Hagenaars (Utrecht)          | Particulate structure, vaccine composition and route of administration determine the immunogenicity of commonly used influenza vaccines ( <i>page 65</i> ) |
| 16.40 – 17.00 | Joost H. van den Berg<br>(Utrecht) | Dermal vaccination by DNA tattooing; characteristics and optimization in ex vivo human skin. ( <i>page 62</i> )  |
| 17.00 – 17.20 | Ethlinn V.B. van Gaal<br>(Utrecht) | A new method based on flow cytometry for rapid determination of size of gene delivery nanoparticles in biological fluids ( <i>page 63</i> )                |
| 17.20 – 17.40 | Sophie R. Van Tomme<br>(Utrecht)   | Microsphere-based self-assembling dextran hydrogels for pharmaceutical applications ( <i>page 64</i> )   |
| 17.40 – 17.50 |                                    | Award Ceremony   |

### **End of meeting**

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## Poster Session

1. Senta Uezguen (Munich) Characterization of pDMAEMA-graft-PEG copolymers as non-viral gene transfer agents (*page 58*)
2. Senta Uezguen (Munich) Transgene expression of transfected supercoiled plasmid DNA concatemers in mammalian cells (*page 59*)
3. Sarah K uchler (Berlin) Comparison of Solid Lipid Nanoparticles and dendritic Core-Mutishell Nanoparticles as drug delivery systems for topical application (*page 44*)
4. Aiman Hommoss (Berlin) BMBM-loaded nanostructured lipid carriers (NLC): a carrier system for more efficient and save sunscreens (*page 41*)
5. Medha Joshi (Berlin) Hydrophobic nanostructured lipid carriers as novel modification for dermal application (*page 42*)
6. Marc Muchow (Berlin/Nancy) Oral absorption enhancement by nanocarrier technology (*page 50*)
7. Julijana Kristl (Ljubljana) Formulation of new poorly water soluble active compounds in nanoparticles to improve their inhibitory effect in the cancer cells (*page 68*)
8. Cornelia M. Keck (Berlin) Size analysis of nanocrystals using dynamic light scattering (*page 53*)
9. Szymon Kobierski (Berlin) Production of Hesperidin dermal nanocrystals by novel smartCrystal combination technology (*page 47*)

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10. Rachmat Mauludin (Berlin) Production of lyophilised coenzyme Q10 nanocrystals (*page 48*)
11. Hai-Long Yuan (Bejing/Berlin) Preparation and long-term stability of ascorbyl palmitate nanosuspension by high pressure homogenization (*page 49*)
12. Cornelia M. Keck (Berlin) Parenteral Lipofundin Nanoemulsions: 20 years long-term stability (*page 51*)
13. Cornelia M. Keck (Berlin) Ultrasonic resonator technology: novel non-invasive method for assessing the physical stability of suspensions (*page 54*)
14. Susanne Schulze (Heidelberg/Berlin) Ultrasonic resonator technology - Characterization of drug delivery systems by ultrasonic velocimetry (*page 55*)

## **European Workshop on Particulate Systems Berlin, May 30-31, 2008**



### **Conference location and closest underground (U) station**

**Conference location:** Henry-Ford-Building  
Garystraße 35  
14195 Berlin-Dahlem

**Closest underground (U) Station:** U-Bahn Thielplatz

**For detailed information check the following link:**

<http://www.berlinonline.de/citymap/map.asp?sid=3b3fb44b8b475377444e8eea31769af7&id=3705&num=35>

### **Ravenna Hotel and closest train stations for going to the conference**

**Ravenna Hotel  
Grunewaldstraße 8-9  
12165 Berlin**

Bus lines X83, 83 a few moments from the Hotel  
in Grunewaldstraße

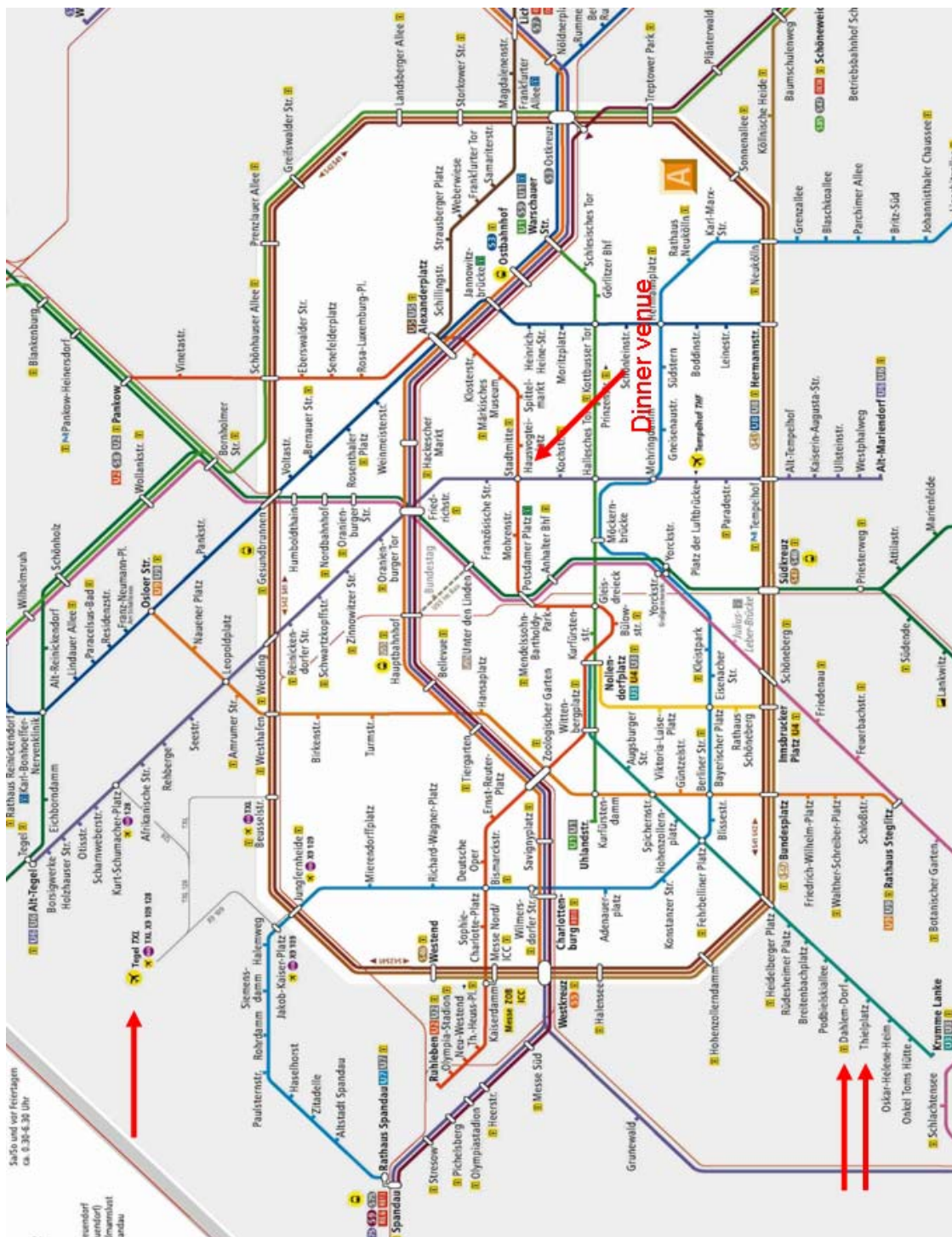
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# European Workshop on Particulate Systems Berlin, May 30-31, 2008



## Public transport system of Berlin



## **European Workshop on Particulate Systems Berlin, May 30-31, 2008**



### **Venue of the conference dinner is the Academy of Sciences**

(Akademie der Wissenschaften)  
at the Gendarmenmarkt,  
Markgrafenstraße 38  
(entrance from Jägerstraße 22-23)

**For detailed information check the following link:**

<http://www.berlinonline.de/citymap/map.asp?sid=3b3fb44b8b475377444e8eea31769af7&id=8163&num=>

### **How to get there from the Hotel Ravenna?**

Take the S1 (direction Oranienburg) from S+U Rathaus Steglitz to S+U Potsdamer Platz. Change here to the U2 (direction Pankow) and take this train to U Stadtmitte (leave station in driving direction of train). The travel time will be approximately 40 min.

### **How to get there from the conference venue?**

Take the U3 (direction Nollendorfplatz) from U Thielplatz to U Wittenbergplatz. Change here to the U2 (direction Pankow) and take this train to U Stadtmitte (leave station in driving direction of train). The travel time will be approximately 45 min.