



Nordic POP Workshop for PhD students

„Electrospinning“

03.-06.02.2020

Location: Institute of Pharmacy, Faculty of Medicine, University of Tartu,
Nooruse str. 1, Tartu, Estonia

Welcome to Tartu and to the Nordic POP Workshop on Electrospinning! The goal of this Workshop is to introduce and deepen the knowledge on electrospinning as a versatile technology for fabricating polymeric nanofibers for pharmaceutical and biomedical applications. The course will provide the topic-related lectures, demonstrations, practical laboratory works, and hopefully also stimulating discussions, new contacts, networking and setting up collaboration. Tartu city is full of history and a lot of attractive points to be visited. It is a city of students, therefore also several social events are often taking place. Most recently, we have obtained here the Estonian National Museum which is worth to be seen not only because of the exhibition, but also due to its unique architecture. The museum and also the old town of Tartu will offer very unforgettable experience for every visitor. We do hope that you will find enough time to visit there and all the other city attractives and activities.

Programme

Mon 03.02. (Aud. 707, 7th floor, Nooruse str. 1)

13:00-13:30 Opening. Introduction to the course.

Prof. Jyrki Heinämäki, Dr Ivo Laidmäe, Associate.Prof. Karin Kogermann (University of Tartu)

13:30-14:15 **Lecture 1:** Different methods to produce fibers
Dr. Ivo Laidmäe (University of Tartu)

14:30-15:15 **Lecture 2:** Electrospinning overview
Dr. Ivo Laidmäe (University of Tartu)

15:15-15:45 Coffee/tea

15:45-16:15 **Lecture 3:** Analysis of fibers, Associate.Prof. A. Meos (University of Tartu)

16:15-17:00 **Lecture 4:** Analysis of fibers, Associate.Prof. K. Kogermann (University of Tartu)

17:00-17:10 Final discussion

19:00-22:00 *Welcoming dinner*

Tue 04.02. (Teaching laboratory in the 6th floor & Aud. 707, Nooruse str. 1)

09:30-12:00 **Lab-work session 1** (introduction to labwork and specific lab assignments)

Supervisors: Dr. Ivo Laidmäe, PhD student Arle Kõrkjas, PhD student Kairi Tiirk, PhD student Georg- Marten Lanno, Associate.Prof. Andres Meos, Associate.Prof. Karin Kogermann, Associate.Prof. Urve Paaver

12:00-13:00 Lunch

13:00-13:45 **Lecture 4:** Melt-electrospinning
Prof. Jyrki Heinämäki (University of Tartu)

14:00-14:45 **Lecture 5:** Combining electrospinning and pharmaceutical printing technologies
Dr. Mirja Palo (Åbo Akademi University, Finland)

14:45-15:00 Coffee, tea

15:00-18:00 **Lab-work session 2**
Supervisors: Dr. Ivo Laidmäe, PhD student Arle Kõrkjas, PhD student Kairi Tiirk, PhD student Georg- Marten Lanno, Associate.Prof. Andres Meos, Associate.Prof. Karin Kogermann, Associate.Prof. Urve Paaver

Wed 05.02. (Teaching laboratory in the 6th floor, Nooruse str. 1)

09:30-12:30 **Lab-work session 3**
Supervisors: Dr. Ivo Laidmäe, PhD student Arle Kõrkjas, PhD student Kairi Tiirk, PhD student Georg- Marten Lanno, Associate.Prof. Andres Meos, Associate.Prof. Karin Kogermann, Associate.Prof. Urve Paaver

12:30-14:00 Lunch; Coffee/tea

14:00-17:00 **Lab-work session 4**
Supervisors: Dr. Ivo Laidmäe, PhD student Arle Kõrkjas, PhD student Kairi Tiirk, PhD student Georg- Marten Lanno, Associate.Prof. Andres Meos, Associate.Prof. Karin Kogermann, Associate.Prof. Urve Paaver

17:00-19.00 Excursion to AHHAA (<https://ahhaa.ee/en>)

Thu 06.02. (Aud. 707, Nooruse str. 1)

09:30-10:15 **Lecture 6:** Wound dressing materials and other applications of the fibers
Associate. Prof. Karin Kogermann (University of Tartu)

10:30- 11:15 **Lecture 7:** Impact of physical properties of electrospun fibers in pharmaceutical and medical applications
Adjunct Prof. Ari Salmi (University of Helsinki, Finland)

11:15- 11:45 Final remarks and summary of the course

12:00-13:00 Lunch

Good bye!!!

General information

Registration

There is no registration fee for participating in the present Nordic POP Workshop. For registration, please contact Associate prof. Urve Paaver (email urve.paaver@ut.ee). The maximum number of participants is **20**. The deadline for registration is **January 31, 2020**.

Venue

Lectures and laboratory works are held in the Institute of Pharmacy, Faculty of Medicine, University of Tartu, Nooruse str. 1, Tartu, Estonia.

Workshop materials

The lecture notes and other course material will be given to the participants on a memory stick. If needed, the participants can also ask Certificate of Attendance from the course organisers. For practical laboratory works, please take your own laboratory coat and shoes with you.

Travelling info

The most convenient way to travel to Tartu city is via Helsinki by plane <http://www.tartu-airport.ee/eng>. If you plan to travel via Tallinn city, then you can take a bus or train from Tallinn to Tartu (the traveling time is approximately 2-2.5 hours). The express busses depart from the Tallinn bus station every exact hour from 7:00 to 21:00 (the first stop is the Tallinn Airport). The express bus tickets are available at <http://www.tpilet.ee/en>. If you would like to step in the bus from the Tallinn Airport, please choose the ticket from Tallinn Airport to Tartu bus station. In case of train, the closest train stop to the airport is Ülemiste (just a walking distance). The train tickets are available at <https://pilet.elron.ee/en/Schedule?from=%C3%9Clemiste&to=Tartu&date=11.01.2017>

The city map of Tartu <https://www.google.ee/maps/@58.3709486,26.7254659,13z>

Hotel accommodation

Enclosed you will find some potential hotel/hostel contacts for a short-term accommodation in Tartu. These hotels are located quite a city centre and not far away from the Institute of Pharmacy. If you need any help in room reservation, just let us know.

- Hotel Tartu <http://tartuhotell.ee/en>
- Hotel Dorpat <https://www.dorpat.ee/>
- Hostel Hektor <https://hektorhostels.com/>

The other alternatives for accommodation in Tartu can be found at <http://www.visittartu.com/en/>

Social event

Welcoming dinner will be held in 03.02. (Mon) at 19:00-22:00. Place to be announced.

Contacts and further information

For more details, please visit at <https://www.farmaatsia.ut.ee/en>

Prof. Jyrki Heinämäki (email jyrki.heinamaki@ut.ee) and Associate. Prof. Urve Paaver (email urve.paaver@ut.ee) and Associate. Prof. Karin Kogermann (email karin.kogermann@ut.ee), Institute

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