



### 6<sup>th</sup> Newsletter – December 2017

#### 6<sup>th</sup> Workshop at LifeTec Group BV and DWI/UK Aachen— November 20-22<sup>th</sup>, 2017

Eindhoven, the Netherlands – Aachen, Germany

The 6<sup>th</sup> BIOGEL workshop on *in vitro*, *ex vivo*, and *in vivo* models started at LifeTec Group with presentations about the company and its *in vitro* and *ex vivo* models, including marketing approaches for the life science sector. This was followed by a hands-on training, where the students learned about the physiology of the heart, as well as the set-up for the *ex vivo* osteochondral model and the vascular bioreactor. The second day, the students were introduced to the Institute of Laboratory animals at the University Hospital in Aachen. Researchers presented their experiences with animal work and the ethical issues involved. A tour of the animal facilities gave further insight about *in vivo* testing and behavioral studies. With a hands-on workshop in Prof. Baron’s laboratory, the students were exposed to an *ex vivo* skin model, including laser experiments to induce skin injury to test potential treatments.



The third day started with a guest lecture of Prof. Bart Spee (Utrecht University) on human liver organoids. Afterwards, the students worked out case studies and presented *in vivo* or *ex vivo* approaches for different research topics. The Jury voted the team of Paula Almeida and Leander Poocha as winners of the debate, who presented a novel idea for an *ex vivo* cancer model.

#### ITN OPEN DAYS

As part of the communication and public engagement strategy of BIOGEL, the participants opened their doors to students and the general public during an ITN OPEN DAY. Visitors received presentations and tours in the research institutions and laboratories and participated in hand-on workshops. Below you find some impressions from the ITN open days that the different BIOGEL partners organized.



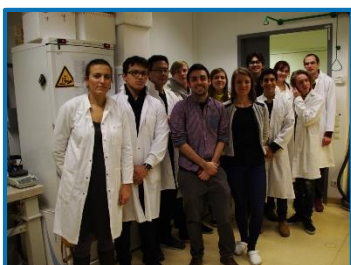
CERTH, 14<sup>th</sup> February and 6<sup>th</sup> March



DWI, 21<sup>st</sup> September



LTG, 8<sup>th</sup> October



AIT, 14<sup>th</sup> December



Pepsican, 20<sup>th</sup> December

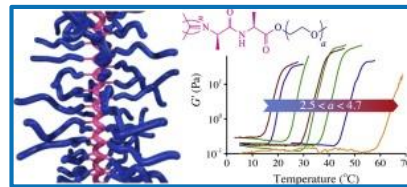


### Publication

Congratulations to Paula Almeida and our partners at RU with their publication in Chinese Chemical Letters!

#### Paula Almeida; Chin. Chem. Lett; November 2017 Controlling the gelation temperature of biomimetic polyisocyanides

This work demonstrates that the mechanical properties of oligo(ethylene glycol)-substituted polyisocyanides (PICs)-based hydrogels can be tuned by precisely tailoring the gelation temperature between 10 °C and 60 °C utilizing a co-polymerisation approach.



### Events and dissemination

The BIOGEL students are very active in sharing their results with the scientific community at multiple events.

#### Filippo Cipriani

Presented a poster and won a debate at the TERMIS Meeting (Davos, CH), gave a talk at the 28<sup>th</sup> Annual Conference of the European Society for Biomaterials (Athens, GR), gave a talk, presented a poster, and won an outreach award at the Future Investigators of Regenerative Medicine Symposium (Girona, ES), presented a poster at the Advanced Materials for Biomedical Applications Conference (Ghent, BE), and gave a flash talk at the International Symposium on Bioinspired Macromolecular Systems (Aveiro, PT).



#### Nestor Quilis

Presented a poster at the Nanophotonics and Micro/Nano Optics International Conference (Barcelona, ES) and gave a talk at the VBST Meeting (Attendorf, DE).

#### Paula Almeida

Gave a talk at the Chemistry as Innovating Science Conference (Veldhoven, NL).



#### Melanie Krüger

Presented a poster and pitch talk at the 28<sup>th</sup> Annual Conference of the European Society for Biomaterials (Athens, GR) and gave a talk at the 26<sup>th</sup> Annual Meeting of the Netherlands Society for Biomaterials and Tissue Engineering (Lunteren, NL).



#### Evgenia Tsanaktsidou

Gave a talk at the 11<sup>th</sup> Panhellenic scientific conference of chemical engineering (Thessaloniki, GR), at the 14<sup>th</sup> International conference on Nanosciences & Nanotechnologies (Thessaloniki, GR), and at the EUROMAT European congress and exhibition on advanced materials and processes (Thessaloniki, GR).



#### Daria Kotlarek

Presented a poster at the Nanophotonics and Micro/Nano Optics International Conference 2017 (Barcelona, ES) and gave a talk at the VBST Meeting (Attendorf, DE).

#### Leander Poozca

Presented a poster at the TERMIS Meeting (Davos, CH) and at the Advanced Materials for Biomedical Applications Conference (Ghent, BE).

### Upcoming events

- **Workshop 7 "Imaging" and Network Meeting 6** in Vienna, Austria, January 29-31, 2018
- **Theodore von Karman Discussion Conference on Materials for Life: Bioinspired and Biomimetic Hydrogels** in the Kardinal-Schulte-Haus in Bergisch-Gladbach, Germany, April 15-18, 2018. Poster submission now on Biogel website until January 21<sup>st</sup>. Registration opens in January.

Confirmed speakers are Takuzo Aida, Mitsuru Akashi, Esther Amstad, Aranzazu del Campo Becares, Ovijit Chaudhuri, Dennis Discher, Benny Geiger, Jürgen Groll, Sarah Christine Heilshorn, Paul Kouwer, Sanjay Kumar, Matthias Lutolf, Virgil Percec, Jose Carlos Rodriguez Cabello, Alan Rowan, Peter Seeberger, Tatiana Segura, Sergei Sheiko, Joachim Spatz, Britta Trappmann, Carsten Werner, Hua Ye

For detailed information about the BIOGEL network: [www.biogel-mariecurie.eu](http://www.biogel-mariecurie.eu)

### BIOGEL partners

