



## 4<sup>th</sup> Newsletter December 2016

### 3<sup>rd</sup> Workshop at CERTH - 15<sup>th</sup>-16<sup>th</sup> September, 2016

#### Thessaloniki, Greece

The 3<sup>rd</sup> workshop was conducted at CERTH and the topic in-focus was *Polymer Synthesis*. Researchers from CERTH introduced the ESRs to the basic principles of polymer reaction engineering, while Prof. Dr. Timmerman from PEPSCAN and Dr. Girotti from BioForge UVa gave lectures regarding peptides and elastin-like polymer synthesis. Additionally, two PhD students from partner organization, Max Planck Institute for Intelligent Systems (MPI), Stuttgart presented the unique properties of hyaluronic acid including a hands-on workshop to design new hyaluronic acid modification to prepare hydrogels. The ESRs were also introduced to the CERTH facilities and their biosynthesis platform.



### Midterm meeting at DWI- 15<sup>th</sup> November, 2016

#### Aachen, Germany

The midterm meeting was organized at DWI to report the progress of the BIOGEL network and the scientific achievements & training of the ESRs. We received feedback from the project advisors from the European Commission, REA-Unit A.1 & Dr. Thomas Cruzier, an external expert from Royal Institute of Technology, KTH, Sweden. Prof. Möller and Dr. De Laporte presented the status of the project and every

ESR presented her/his research. All beneficiaries and partner organizations were represented. During the meeting a direct interaction between the ESRs and the project officers was organized. A keynote lecture on *Programming Biological Membrane Mimics & their Glycan with Sequence Defined Janus Glycodendrimers* was given by Prof. Dr. Percec from the University of Pennsylvania, a partner organization of Biogel.



### 4<sup>th</sup> Network Meeting at UVA - 12<sup>th</sup> December, 2016

#### Valladolid, Spain

The ESRs presented their research progress to the network. Valuable comments and innovative ideas for the advancement of the projects were brought to the table. It was decided to organize the BIOGEL conference in April 2018 at the Kardinal Schulte Haus, Bergisch Gladbach, Germany featuring functional

hydrogels for biomedical applications. As a keynote lecture, Prof. Dr. med. Baron (Uniklinik, Aachen) gave an inspiring talk on *Organotypic 3D Models for in vitro studies of Human Skin*.



### 4<sup>th</sup> Workshop at UVA- 13<sup>th</sup> – 14<sup>th</sup> December, 2016

#### Valladolid, Spain

The 4<sup>th</sup> workshop was organized at the University of Valladolid.

Focused on *Biomimetic Hydrogels*, the workshop commenced with a talk on *Processing technologies of fibrin as hydrogel scaffolds in cardio vascular and pulmonary tissue engineering* by Dr. Petra Mela (RWTH, Aachen). An extensive overview was provided on *Biofunctionalization of Hydrogels* by Dr. Israel González (TPNBT, Valladolid). Finally, Dr. Jose Luis Gerardo Nava (RWTH, Aachen) introduced the ESRs to the *Cell-biomaterial interaction in the injured nervous system*, followed by hands on session on the fabrication of anisometric scaffolds. In addition the ESRs followed a practical course to produce and purify recombinant proteins.



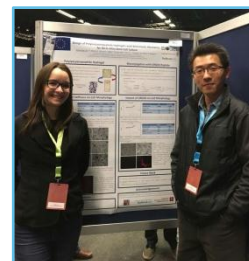
#### New ESR President for 2017

Melanie Krüger was appointed as the new ESR president for the year 2017 by the former president Arturo Castro Nava.



#### BIOGEL Participation at conferences

1. Nestor Gisbert Quilis had a poster presentation at the conference Meta'16 focused on metamaterials at Malaga, Spain, July 2016.
2. Melanie Krüger participated at the Dutch Liver Retreat and delivered an oral pitch presentation in Spier, the Netherlands, October 2016.
3. Kaizheng Liu attended the annual meeting of the Netherlands Society for Biomaterials and Tissue Engineering (NBTE) in Lunteren, the Netherlands, December 2016.
4. Paula de Almeida and Kaizheng Liu attended the Dutch Chemistry Conference (CHAINS) in Veldhoven, the Netherlands, December 2016.



The BIOGEL Network wishes you Merry Christmas and a Happy New Year!