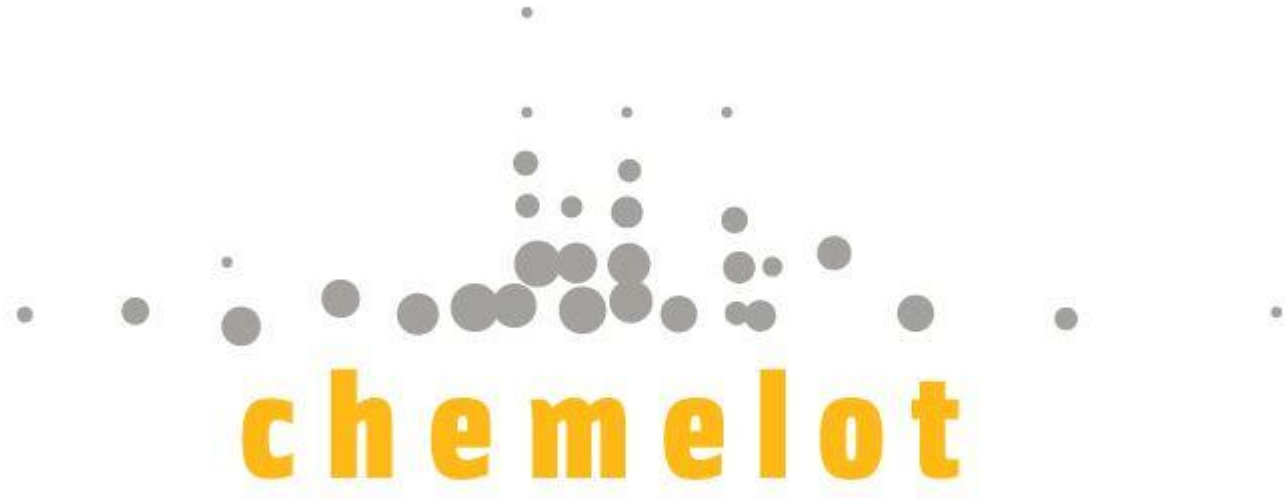


CHEMELOT CAMPUS BUILDS A NEW ROAD FOR REGENERATIVE MEDICINE

Chemelot Campus builds a new road for Regenerative Medicine

Chemelot Campus is presenting itself during the World Stem Cells Regenerative Congress 2014. Read what this site has to offer the attendants of this event.

Introducing Chemelot Campus

Chemelot Campus is an Open Innovation Campus, located in South Netherlands (Sittard-Geleen). Over fifty companies have found there the Real Estate, Venture Capital and Business Development services they need to perform their business in the best possible way. These companies are active in Research & Development in the fields of Performance Materials, Bio-based Materials and Biomedical Materials.

The field of Biomedical Materials comprises Regenerative Medicine, Tissue Engineering, Drug Delivery Systems, Medical Coatings and Implants.

With its location at the axis of the cross-border region Netherlands-Belgium-Germany and the offices of the European Parliament, the campus is a European stepping stone for global expansion. This unique position attracts innovative companies and visionary investors. Chemelot Campus is a junction where entrepreneurs and companies accelerate each other's growth.

Regenerative Medicine

Regenerative Medicine is a new dimension in the Pharma world. Its goal is to invent, build and supply innovative solutions by tapping into the healing powers of our own bodies through the use of autologous or allogeneic cells, in some cases combined with biomaterials that serve as scaffolds or delivery mechanisms for the human cells. The aim is to maintain health care at reasonable costs by moving from a palliative, disease controlling health care system to solutions that actually cure the disease, apart from prevention, of course.

This development offers enormous market opportunities for Regenerative Medicine. However, the scientific, technological and definitively the manufacturing developments are still in their infancy. Large progress can be made in terms of cost reduction and production efficiency. Especially because the product that is being manufactured is a living entity, often a patient-specific product. By definition this product differs from patient to patient. These variations require a unique set of skills to define product specifications and to design manufacturing processes that deliver a consistent quality.

The Regenerative Medicine industry is estimated to be a $900M industry in 2013. The industry is currently at a tipping point and is positioned to hit its next phase of growth in the coming years. An important indicator that for that is the number of clinical trials that are currently going on: 2,500 disruptive RegenMed-based clinical trials right now, of which over 500 in late stage.

With today's success rate of about 60% from phase III to market approval, this means we can expect over 300 highly innovative products to enter the market. And this brings with it an entirely new set of challenges.

Chemelot and Regenerative Medicine

One of these challenges concerns expanding production capabilities and facilities. This is where Chemelot Campus comes in. With all its expertise in real estate, scalable production plants and Good Manufacturing Practices, related to innovative industries, Chemelot Campus is committed to play a defining role in the coming years.

This commitment is stimulated by the fact that two of the three approved ATMPs (Advanced Therapy Medical Products) are produced in the (Dutch) province of Limburg, where Chemelot Campus is located.

Chemelot Campus is accelerating the commercial manufacturing of living human cells for medical treatment, the production of living tissue and (in the distant future) completely new organs. Globally there are over 700 companies with patents and innovations in this field. Many of these will need dedicated manufacturing facilities with skilled and trained employees and the appropriate QC systems. Preferably in a scalable and modular manner, so that the facilities can grow and develop as the individual company develops.

Regeneration Street

In 2013, Chemelot Campus started the construction of Regeneration Street: 50,000m2 of world-leading research, production and innovation in Regenerative Medicine across several state-of-the-art high-tech buildings.

The first step in the realization of Regeneration Street is the acquisition by Chemelot Campus of the production site of PharmaCell. This is an advanced facility for cell therapy and regenerative medicine, which was previously owned by TiGenix, a Belgian cell therapy company.

This building (see photo), simply called Regeneration Street nr.1, will be home to ATMP Manufacturing companies, Research Institutes, CMO companies and startups in the fields of Regenerative Medicine and Tissue Engineering. It offers an advanced facility, open for all RegenMed companies, regardless of what stage of development they are in.

Regeneration Street nr.1 is an impressive combination of flexibility in set up and scalability through an innovative construction of the interior. The flexibility in the construction is that all utilities are placed above the ceiling or below the floors. This way the walls can be moved around and organized to create rooms in desirable shape and size. By simply adjusting the air control the quality of a part of the room can be scaled up to a higher grade of clean room. The building has a total ground floor size of 2,400m2 with 750m2 clean room facilities.

Regeneration Street nr 1. is currently being equipped and will be up and running by Q4 of this year (2014).

Pharmacell

As a dedicated partner of Chemelot Campus and a global leader as CMO in Regenerative Medicine, PharmaCell plays an important role in the realization of Regeneration Street. This GMP certified company, headquartered in nearby Maastricht, recruits clients worldwide in the field of cell therapy and Regenerative Medicine, and performs the manufacturing of these companies for the European market.

A substantial part of the Regeneration Street Nr. 1 facility will be rented by PharmaCell, who will use it as the production facility for, amongst other products, the Tigenix' ChondroCelect manufacturing.

PharmaCell will also act as the Service Provider for the entire facility to assure that the required QC controls are met, which offers new tenants a serious advantage in time and cost to get their manufacturing up and running according to the highest regulations.

If required PharmaCell can also perform additional services for individual companies.

Chemelot InSciTe

PharmaCell is not the only user of Regeneration Street Nr. 1. A second part of the facility will be rented to Chemelot Institute for Science and Technology, Chemelot InSciTe.

This new research institute is a unique Public-Private Collaboration of the Eindhoven University of Technology, Maastricht University/Medical Center, DSM and Chemelot Campus. One of the goals of Chemelot InSciTe is to develop smarter biomedical materials to be able to sustain the ever more expensive health care.

Chemelot InSciTe

Chemelot InSciTe bundles the complementary strengths of the founding fathers:

DSM: innovation and commercialization experience:

- Material science and technology, process technology and commercialization
- State-of-the-art R&D and production facilities
- Spin-out generation and venturing.

Maastricht University/Medical Center: academic expertise and clinical perspective

- Medical sciences, (pre)clinical testing, biology, (bio)chemistry and sustainable processes
- Education and entrepreneurial support.

Eindhoven University of Technology: technical expertise

- Biomedical engineering, chemistry, materials science, chemical engineering, process technology, renewable energy technology
- Education and entrepreneurial support.

Chemelot Campus: ecosystem of open innovation and shared facilities

- Physical infrastructure – R&D infrastructure & pilot and mini plant facilities
- Entrepreneurial support, network and open innovation.

Chemelot InSciTe combines the forces, knowledge and expertise of talented scientists, pioneering R&D focused companies and innovative laboratories active in the field of Biomedical Materials. The founding fathers have jointly invested €40M for the coming 6 years, the total budget will be €80 million, thereby stimulating both employment and the further development of knowledge and activity in the Limburg region and beyond. For biomedical applications, the institute will be working on, among other things, materials for new blood vessels, materials by means of which cartilage can repair itself and regenerate in the body, and clever miniature ‘containers’ of medicines that are placed in the eye to prevent and treat eye infections.

Valorisation

Chemelot InSciTe will focus on developing new applications that are technologically feasible, meet a satisfactory need, and are cost-effective to increase the opportunities for a successful product in the global market.

Therefore, Chemelot Campus will support this process by various activities:

1. The research programs of Chemelot InSciTe are open to third parties that complement the expertise of Chemelot InSciTe and strengthen the research programs.

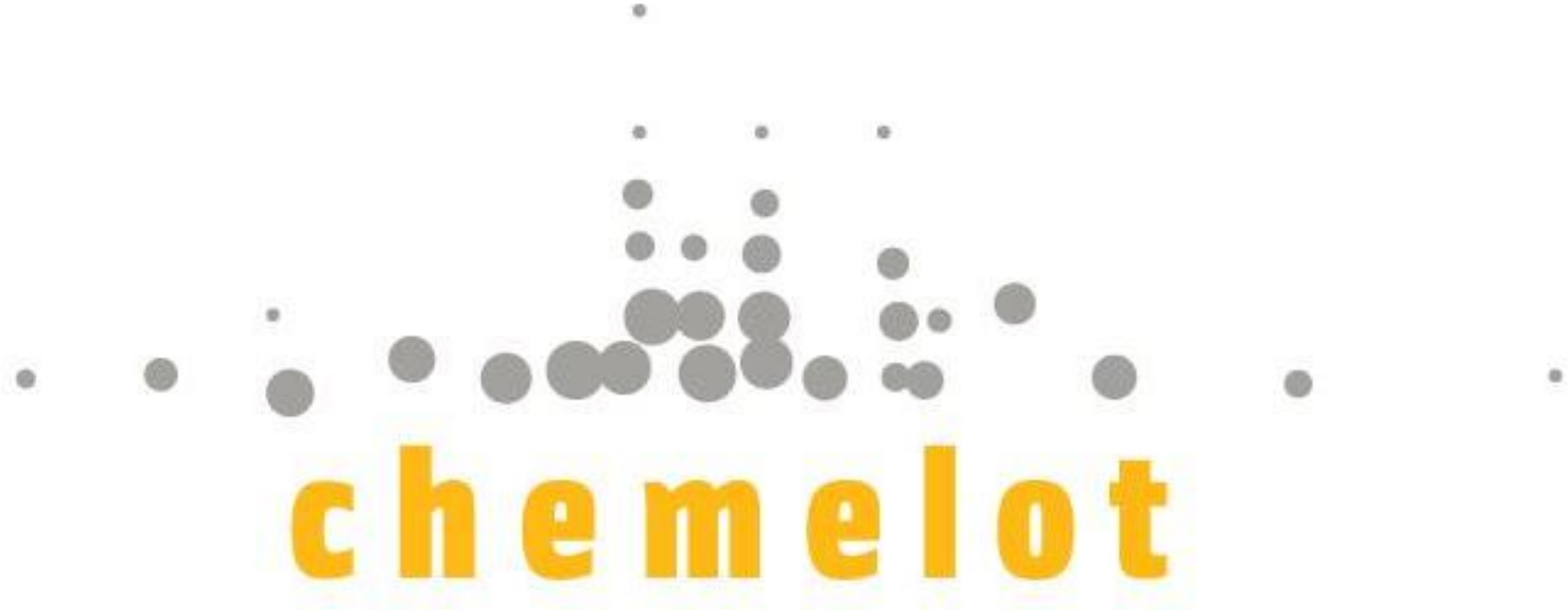
2. The research program of Biomedical Materials Chemelot InSciTe offers open R&D and small batch GMP production facilities for third parties. Additional demand for offices, laboratories and/or pilot plant infrastructure can be accommodated as well on Chemelot Campus.

3. Chemelot InSciTe offers two business development managers to support the valorization process. These valorization managers shall be involved in the selection, scoping and front-end loading of the various projects of the R&D programs with the aim to maximize the valorization potential.

4. Chemelot Campus offers an excellent R&D infrastructure and open innovation ecosystem for the benefit of the execution of the Chemelot InSciTe Research Programs. During the project execution, the valorization managers will contribute to accelerate the process of creating a marketable product from the outcomes of the scientific projects.

5. The process of exploiting scientific project outcomes by optimizing their value and impact via the creation of new companies, e.g., valorization, will be supported by valorization managers. The start-up lead will be assessed on valorization potential, a start-up entrepreneur will be recruited and fully supported in the first years (e.g., business plan, funding, intellectual property and regulatory affairs) by business development managers, using their network too.

6. If one of the partners or a third company is interested in the newly developed technology, the process of spinning-in will be supported.



Chemelot Campus is open for new tenants and would be honored to help accelerate your business success as well!