

Munich, May 3, 2018  
**Press Release**

## 20 top startups at IFAT 2018

- Trade fair provides innovation platform for startups
- Fresh ideas for the environmental sector
- Topics: Plastic recycling, autonomous municipal vehicles, and much more

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**Looking to the future with its new experience.science.future. platform, IFAT 2018 is giving startups within the environmental technology sector an international forum of their own for the very first time. With new ideas surrounding recycling multi-layered plastic packaging and operating autonomous waste collection vehicles, the World's Leading Trade Fair for Environmental Technologies will be revealing the 20 most promising innovations between May 14 and 18 at the trade fair center in Munich.**

Stefan Rummel, Managing Director of Messe München, says: "As the world's largest trade fair for environmental technologies, IFAT is the perfect place to move forward with new business ideas. The aim of our new experience.science.future. platform is to create an innovation hub for the industry by bringing startups working on technology together with potential customers, partners, and investors."

### Recycling multi-layered plastic packaging

Among the companies represented at the trade fair, APK Aluminium and Kunststoffe AG will play a particularly pioneering role. The company has developed a chemical-physical process for recycling plastic waste that produces single-origin, new-quality plastics at low prices (Newcycling). This technology is of particular interest for the recycling of types of plastic that this was previously not possible for, such as multilayer films in packaging. Founded in 2008, the company now has over 65 employees and a 57,000 m<sup>2</sup> site in Merseburg,

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Saxony-Anhalt, Germany. Several plastic recycling plants in Europe and Southeast Asia are in the pipeline for construction by 2025.

Another relevant concept for the recycling industry is one that has been formulated by BNL Clean Energy Group, a company founded in 2010 and based in Cham, Switzerland. Among other things, the company builds power plants that generate emission-free energy from waste. The plants are based on an innovative “zero emissions, zero waste” method: Thanks to a patented catalytic reaction, all carbon is transformed into synthetic hydrocarbons. In liquid form, this can also be sold as a basis for synthetic fuels. Although it is impossible to completely avoid waste in liquid and solid forms, the company provides an option to recycle this waste in a BNL clean recycling plant and then process it into valuable chemical compounds (e.g. phosphorus or copper.)

### **Autonomous waste collection vehicles with centimeter-precision positioning**

Startup business and newcomer Enway GmbH was founded in Berlin in 2017. At IFAT, it will present a technology platform for autonomous and automated specialty vehicles, such as street sweepers and waste collection vehicles, which intends to make centimeter-precise navigation possible. In doing so, Enway's aim is to make the operation of these vehicles safer and more efficient in terms of their autonomous operating procedures. Autonomous waste collection vehicles are not designed to replace employees however, but to support them. The past year has seen the launch of an initial cooperation project with the Berlin City Cleaning Company (Berliner Stadtreinigung, BSR), where applications for autonomous sweepers in the municipal sector are to be analyzed.

There is no shortage of startups in the water and sewage industries, either. Island Water Technologies, founded in 2013 and based in Charlottetown, Canada, has designed several regenerative technologies for wastewater treatment: “Regen” is the world’s first solar-powered wastewater treatment system for decentralized wastewater treatment, i.e. for on-site wastewater

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treatment in the form of small treatment plants beyond the central wastewater system. It was tested by the Canadian military for eight weeks last year.

The company has also designed a technology called “ClearPod”, which removes microbes from wastewater tanks with biological methods. Microbes must be removed from septic systems, otherwise they could enter drinking water and endanger human health when the treated wastewater is discharged into rivers. The company has already gained approval in Florida as an alternative repair method for septic systems.

The most recent development, Sentry-AD, is a bio-electrode sensor technology for wastewater. It can, for example, be integrated into biogas facilities in order to monitor important microbial processes for anaerobic fermentation. This makes process optimization possible, among other things.

### **Reducing energy consumption through filtration**

The Danish company Sani Membranes, founded in 2013 and based in Allerød on the island of Zealand, Denmark, has developed Hollow Plate technology for microfiltration and ultrafiltration. While microfiltration is used in many industrial areas for clarification, sterilization and sterile filtration, ultrafiltration is used in drinking water treatment and water and wastewater treatment, as well as in food technology and biotechnology.

Sani Membrane's Hollow Plate technology allows cross-flow filtration over a flat membrane surface and can be integrated into both existing and new plants. Among other things, this innovative method can reduce energy consumption by 30 to 50 percent and improve separation. Since August 2017, the first large-scale commercial plant for protein extraction and fractionation has been under construction.

The Luxembourgian company RTC4Water (headquarters: Esch-sur-Alzette), founded in 2014, has launched the Global Predictive Controller (GPC), an intelligent piece of software that automatically and continuously optimizes municipal water supply networks and wastewater collection systems in order to improve the usability of the infrastructure. After configuration, it monitors SCADA systems, i.e. computer systems used for process control, to ensure that tanks

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and basins are running at full capacity. According to the company, it is already working with international clients and research teams.

### **Additional offers for young talent**

IFAT has much more to offer with a view to promoting young talent and young professionals. At the Careers Center, as part of the [experience.science.future](#) platform, young professionals and students can find out about [job vacancies](#) in the area of environmental technologies. Various competitions aim to promote job profiles within the industry. During the [“Water Skills” competitions](#), for example, experts in wastewater technology demonstrate their skills and simulate, among other things, safe entry into a wastewater canal (May 14 to 17 in the Atrium/West Entrance). During the [“Pipeline Construction Challenge”](#) (May 15 to 17/Atrium), pipeline constructors give practical demonstrations to show how modern pipe labyrinths for water and wastewater are planned and built. Which materials are used? Where is the best place to insert the valves? All answers are from experts with firsthand knowledge.

**Exhibitor directory of IFAT 2018:** [ifat.de/trade-fair/information/exhibitor-directory/index](http://ifat.de/trade-fair/information/exhibitor-directory/index).

**For accreditation:** [ifat.de/press/services/accreditation](http://ifat.de/press/services/accreditation)

### **IFAT**

IFAT is the world's leading trade event for environmental technology. A total of 3,097 exhibitors from 59 countries, and 136,885 visitors from 168 countries took part in the last event. IFAT is held every two years; the next edition takes place from May 14 to 18, 2018 in Munich.

### **IFAT worldwide**

Messe München's competence in organizing environmental-technology events is demonstrated not only in the world's leading trade fair for the sector, IFAT, but also in a range of other international trade exhibitions around the world. The spectrum encompasses IFAT Africa in Johannesburg, IFAT Eurasia in Istanbul, IFAT India in Mumbai, and IE expo in Shanghai. With IE expo Guangzhou there is now also a regional edition of the trade fair, focusing on the market in South China.

### **Messe München**

Messe München is one of the leading exhibition organizers worldwide with more than 50 of its own trade shows for capital goods, consumer goods and new technologies. Every year, a total of over 50,000 exhibitors and around three million visitors take part in more than 200 events at the exhibition center in Munich, at the ICM – Internationales Congress Center München and the MOC Veranstaltungszentrum München as well as abroad. Together with its subsidiary companies, Messe München organizes trade shows in China, India, Brazil, Russia, Turkey, South Africa, Nigeria, Vietnam and Iran. With a network of associated companies in Europe, Asia, Africa and South

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America as well as around 70 representations abroad for over 100 countries, Messe München has a global presence.