



# Cross-industry innovation: New Materials



invest  
in  
bavaria

## Business opportunities

For entrepreneurs or investors in the field of new materials, Bavaria offers enormous potential. To keep its strong research landscape's and well-developed industrial base's edge, Bavaria needs to think ahead in terms of new materials. Thus, entrepreneurs and investors find a wide range of business opportunities, funding possibilities and locational advantages. Let's take a look at some of the key initiatives:

- › [Innovative Solid Construction Network](#): It is committed to promote innovative building materials and construction methods. A central tool for this are regular workshops and cluster meetings. They strengthen the performance and competitiveness of the Bavarian construction industry and focus on innovation, sustainability, and efficiency in construction.
- › [Additive manufacturing coordination center](#): It acts as a hub for all key players in and newcomers to 3D printing. Here, new applications and materials are found and optimized for processes and applications.
- › [BayFOR](#): It is a close partner for Bavarian Research Associations and offers various services for research networks: from basic advice on setting up a new network to support with networking activities and PR.
- › [Resource efficiency Center Bavaria](#): The REZ fosters resource efficiency through its knowledge transfer to decision-makers and implementers. By pooling and providing information and constantly expanding the network, it helps to continuously develop resource efficiency expertise in Bavaria.

## Access to talent

Bavaria's top-class universities – like the [Technical University of Munich \(TUM\)](#), the [Friedrich-Alexander University Erlangen-Nuremberg \(FAU\)](#) and the [University of Bayreuth](#) – provide students with advanced education in new materials. All of them offer courses in materials science, the TUM also teaches [materials engineering and nanotechnology](#). But there are many more non-academic institutions that play an important role in the new materials sector. For example:

- › [Fraunhofer Institute for Silicate Research](#): The ISC is a world-leading research institute that has carried out several successful new materials research projects for the aerospace and construction industry.
- › [Bavarian Polymer Institute](#): This interdisciplinary research institute is operated by the Universities of Bayreuth, Erlangen-Nuremberg and Würzburg and is specialized in the research and development of new polymer materials. These can be used in the fields of energy, communication, climate change and health.
- › [Max Planck Society](#): It is one of the leading research organizations in the world. Here, scientists study a wide range of materials – including metals, polymers, ceramics, and nanomaterials. Possible applications are electronics, energy, medicine, and environmental protection.

## Effective networks

Bavaria features numerous top-class networks in the field of new materials. They serve as an important source of inspiration for new ideas, close gaps in the value chains and build the necessary regional, national, and international ties. Today, for example, more than 600 companies and scientific institutes are part of the [New Materials Cluster](#). Other important clusters in the new materials sector are:

- › [MAI Carbon Cluster](#)
- › [Industrial Biotechnology Cluster](#)
- › [Nanotechnology Cluster](#)
- › [Forestry and Wood Cluster](#)
- › [Chemistry Cluster](#)

But there are also options beyond cluster initiatives to network in initiatives:

- › [ATC conference](#): It is one of the most important events in the field of inorganic chemistry, playing a crucial role in promoting sustainable manufacturing practices. The conference allows industry and research to exchange ideas and develop new common goals.
- › [Garching Research Center](#): Here, research institutions like the Technical University of Munich (TUM), the Max Planck Institute of Quantum Optics and the Fraunhofer Institutes for Solar Energy Systems meet companies like Siemens or Dräxlmaier to collaborate.
- › [Composites United e.V.](#): It's clusters, networks, and members are constantly developing new approaches and solutions for fiber-based, multi-material lightweight construction.
- › [Bavarian Semiconductor Congress](#): The Congress is held annually in Munich to discuss current trends and future challenges in the industry.

## Global perspectives

It is essential to always unite as many perspectives as possible in the initiatives – especially when it comes to a topic that requires such innovation as new materials. That's why Bavaria's new materials initiative not only incorporates the whole of Bavaria but also reaches out to global partners.

- › Examples here are global players such as [Continental](#), [Bosch](#), [SGL Carbon](#) and [Airbus](#) who work internationally from their Bavarian locations. You will also find many international start-ups that set up a location here to become part of this dynamic ecosystem.
- › [MTU Aero Engines](#) – a multinational manufacturer of engines for aircraft. The company is headquartered in Munich and has production facilities in Germany, the US and China.
- › The global industrial leader [Wacker Chemie](#), a specialty chemicals giant with production sites in over 20 countries worldwide, generates around 85% of their sales outside of Germany.
- › [BAVARIAN CHIPS ALLIANCE](#) involves existing cluster and network structures, brings together stakeholders to establish a Bavaria-wide semiconductor ecosystem and interconnects activities in Germany, Europe and the world.
- › [SEMICON Europa](#) is the largest European electronics platform connecting industry leaders across the entire design and manufacturing supply chain and co-located with productronica / electronica.