

ADVANCED MATERIALS INTERNATIONAL FORUM

Bari (Italy), September 18th - 19th 2014

The **Advanced Materials International Forum**, which will be hosted for the first time in the Apulia region and will take place in Bari on the 18th and 19th September 2014, is an international conference event, dedicated to specialists in the fields of advanced materials research and industry in the transport sector.

The Forum will provide an important opportunity for debate and discussion on the evolution of the advanced materials and technologies sector, with particular emphasis on market trends and the development of new potential applications in major industries, involving experts from the world of research, as well as industrial “end users”.

SMARTPUGLIA 2020

The Forum is organised by the **Apulia Regional Government - Office for International Business Promotion**, in collaboration with the **Office for Innovation and Industrial Research** and **ARTI-Regional Agency for Technology and Innovation** - within the framework of the new regional strategic vision “**SMARTPUGLIA 2020**”, which focuses on the “intelligent” business sectors, identified as being strategic to the development of the competitiveness of the regional economy in the upcoming 2014 - 2020 programming period, creating cross-cutting regional policies for industrial development, linked to regional initiatives in favour of investments in research and innovation, in the development and industrial deployment of enabling technologies, as well as in the development of international market prospects.

Advanced Materials

The regional strategy follows the European Union’s guidelines for the 2014 - 2020 programming period which aim to create a more competitive economy through the “*Europe 2020 Strategy*”, based on the development of smart, inclusive and sustainable growth throughout Europe’s regions, by looking to reinforce the so-called “*Smart specializations*”, building on the critical mass of scientific, technological and industrial competencies which denote specific territories and creating strategic links or alliances with similar or complementary specializations in the other European territories.

Within this framework, European regions are working towards the definition of their own “*Smart specialization strategy*”, bearing in mind the European Commission’s strategic guidelines which aim towards the development and industrial deployment of Key Enabling Technologies (KETs), including **advanced materials technologies**, which are considered crucial to the growth and competitiveness of European industry.

In the strategic vision of the European Commission, KETs are defined as “*knowledge intensive and associated with high R&D intensity, rapid innovation cycles, high capital expenditure and highly skilled employment. They enable process, goods and services innovation throughout the economy and are of systemic relevance. They are multidisciplinary, cutting across many technology areas with a trend towards convergence and integration.... KETs will catalyse the strengthening and modernising of the industrial base as well as drive the development of entirely new industries in the coming years.*”

Within the KETs, **advanced materials**, due to their inherent ability to enable a wide range of industrial applications and to be integrated into almost all industrial value chains, represent a very broad domain, although it is possible to focus on key segments or “niches”, whose relative market value increases year on year.

Key segments:

- ➔ advanced metals;
- ➔ advanced synthetic polymers;
- ➔ advanced ceramics;
- ➔ novel composites;
- ➔ advanced biobased polymers;
- ➔ “smart materials” (materials that respond dynamically to electrical, thermal, chemical, magnetic or other stimuli)

Advanced materials in Apulia

In Apulia, the field of advanced materials has assumed an increasingly strategic role, both in research and manufacturing, especially due to the far reaching, heterogeneity and transverse nature of all related applications that actively involve diverse business sectors, including aerospace, automotive and yacht building.

The presence of a strong research network including local universities (University of Bari, Polytechnic of Bari, University of Salento, University of Foggia), research centres and laboratories, technological clusters, public-private consortium for research, innovative enterprises and numerous spin-offs from universities located in Apulia, supports the development of well-structured innovation activities across the board, involving the development of advanced materials and related process technologies.

Some of the main areas of research are related to polymer matrix composites, nano composites and hybrid multifunctional materials, technologies for the recycling of materials, methods of physical/mechanical characterization of materials and components, surface treatments and surface modification of materials via cold plasma, eco-innovative textiles, multifunctional composites.

The fact that numerous large companies, operating in diverse business sectors such as aerospace, automotive and mechatronics, have chosen to invest in Apulia bears strong witness to the region's capacity to be highly competitive and attractive for inward investments, thanks to the continuous growth of poles of excellence in various business sectors, to the availability of a highly qualified workforce, as well as to the forward-looking policies of the regional Government aimed at supporting and promoting research, development and innovation activities through a comprehensive range of incentives.

Technological clusters and public-private consortium for research in Apulia, active in the advanced materials sector:

- DHITECH Hi-tech Technological cluster;
- DTA Aerospace Technological cluster;
- MEDIS Mechatronics Technological cluster
- RITMA Network for innovation and advanced materials applications in Italian industry

Participants

The 2-day programme of events for the **Advanced Materials International Forum**, offers participants the opportunity to take part in a series of debates and meetings, aimed to:

- provide a useful insight into the evolution of the advanced materials sector, at international level, thanks to the plenary conference and a calendar of thematic workshops;
- discover new product applications and advanced materials technologies through the thematic workshops;
- establish and enhance the possibility of new business and research partnerships thanks to “one-to-one” meetings.

Target business sectors

- Aerospace
- Automotive
- Yachting industry

The participants at the event will mainly be representatives of:

- European institutions and regions, national e regional government;
- European associations and research institutes, specialised in advanced materials;
- Business and technical clusters, SMEs and large companies (international “end users”), active in the fields of advanced materials.

Event programme

Thursday 18th September 2014

9.00 - 13.00

Plenary conference with focus on research strategies and trends, as well as the evolution of industrial end user demand for advanced materials and technologies.

14.00 - 18.00

Focus on advanced materials and related applications in aerospace business sector
Session of business-to-business meetings

Friday 19th September 2014

09.00 - 14.00

Focuses on advanced materials and related applications in automotive and yacht building business sectors

Session of business-to-business meetings