

A MATERIAL COMMUNITY

Dr Marco Falzetti

Chairman, Alliance for Materials

The **Alliance for Materials** started in 2010 with the goal of providing European Technology Platforms with a unified voice on crucial materials science topics. Dr Marco Falzetti discusses the formation of the Alliance and how its member organisations have worked together to advance the field as a whole

What was the impetus behind the creation of Alliance for Materials (A4M)?

Prior to A4M, there was a distinct lack of coordination between players within the European material R&D scene. In particular, there was no coordination between the relevant European Technology Platforms (ETPs), which meant that there were several voices all approaching the EC simultaneously with different strategies and different objectives. Clearly, this was problematic from a strategic point of view. A4M was created in recognition of the value of working together, to enable ETPs to approach the EC in parallel and with a common strategy so that we can gain real value through collaboration and be more effective overall.

This decision was reinforced by the discovery that the concept of a materials value chain was a strong element behind the actions of all ETPs, binding us together. As ETPs, we feel that our approach to materials should not start from a basic, purely academic perspective of research innovation, but should be driven by all the actors involved in the value chain. It is very important that we create the conditions necessary for effective dialogue between the people who transfer materials for producing market goods and value, and the people who know about and create materials, in order to match the need for future products.

Were there any particular challenges associated with forming the Alliance?

The main problem we encountered when we were first putting A4M together stemmed from the fact that we were trying to unite ETPs dealing with competing materials areas. For example, we had to form an alliance between players such as the ETP for Sustainable Chemistry (SusChem), which is clearly interested in pushing for materials based mainly on polymers, and the European Steel Technology Platform (ESTEP). These ETPs deal with completely different products in a very hostile, competing market. The question of how to create a condition for real synergies between such players was not answered easily, but we found that the key to success could be found in providing evidence of the value of collaboration, even between areas of materials research considered to be in competition with one another. We had to demonstrate the benefit that could come from working together to create a single, recognised voice. I would say the biggest challenges have been accepting that we are a unit and understanding the value of collaboration, since we are larger and stronger together than we are as individual actors.

That said, there clearly remain differences between us. There are common interests that can be supported in a single A4M action, but there are many others that are specific to individual ETPs. A4M



recognises that the actors involved in the Alliance are in control of their own priorities and will continue to do their own business, merging only when appropriate to create a unified strategy for materials.

How has A4M developed since its creation?

Preparations for A4M began in 2008, with the Alliance officially launching in 2010. Since then we have progressed significantly. In addition to the six ETPs that founded the Alliance, the European Materials Research Society (EMRS) and the Federation of European Materials Societies (FEMS) – two of the largest organisations dealing with materials research in Europe – have joined us. Because EMRS and FEMS operate predominantly on an academic level, their presence complements that of the ETPs, which is typically more industrial.

We are now in the situation where we are well known, and we have achieved notable success at the European level. The next step is to shift our focus to the national and regional level. We plan to spend the next two years extending our network in this manner.

To what extent is MatVal, a project targeting materials innovation implementation through value chain collaboration within the European materials community, assisting A4M in achieving its objectives?

MatVal is an EC-funded project, running from September 2012-14, with the aim of supporting the A4M concept. The main action we have carried out within MatVal so far has been linking the materials

A4M'S VISION

Materials R&D is a technology area that affects almost every industrial sector. The achievement of effective coordination between different sectors, while maintaining their relative autonomy, interests and strategies, is an essential condition to achieve the best and most effective use of community resources.

A4M intends to provide an effective answer to coordinate R&D needs, working within the framework of present and future European research and innovation programmes and initiatives.

A4M is a new way of thinking: a cross-sector, value-chain-encompassing partnership for networking in materials research and innovation in Europe.

THE SIX FOUNDING FATHERS OF A4M

EuMaT

The ETP for Advanced Engineering Materials and Technologies

SusChem

The ETP for Sustainable Chemistry

Manufuture

The ETP on Future Manufacturing Technologies

FTC

The ETP for the Future of Textiles and Clothing

SMR

The ETP on Sustainable Mineral Resources

ESTEP

The European Steel Technology Platform

community with industry in the energy, transport, construction, health and creative industry sectors. These five sectors were selected based on their relevance to Horizon 2020's societal Grand Challenges and their importance in terms of European policies in R&D. Nevertheless, we are very interested in enlarging these networks to include other sectors in the future, following the completion of MatVal.

What are the objectives of A4M, to what extent has the Alliance achieved them and what does the future hold for the organisation's activities?

In many ways we have achieved the original, overarching objective of A4M: to create a single voice. Today, anybody can play a role in contributing to the materials strategy and policy for R&D in Europe through A4M, and we have become a real reference point for the European materials community. We are also dealing with several specific issues. For example, we have a dedicated work package within the MatVal project in which we try to understand from a materials innovation perspective the main regulatory problems that affect the transfer of knowledge from the laboratory to the market. At the moment, this process can roughly take a decade.

Looking to the future, if you examine the Horizon 2020 programme, materials science is present in many different areas of the programme: from the first to the third pillar, from basic and industrial research through to the Grand Challenges. Although this is proof of the importance of materials science, it also highlights the amount of fragmentation and lack of coordination between different Horizon 2020 activities, and the subsequent need for a common observatory tower where we can bring together the vision of different materials players from across the R&D landscape. We need to better integrate, align, coordinate and synergise the different parts of the Horizon 2020 programmes in which materials is fundamental for future R&D activity.

How do you ensure that your deliverables are widely disseminated and applied? Has clear communication between the stakeholders in A4M been important to the success of this activity?

Dissemination of information and communication are important issues for any kind of organisation without its own resources, as is the case for A4M. At the very beginning of A4M, communication was mainly the responsibility of single actors. The situation improved significantly along with the implementation of MatVal, as this provided us with the resources we needed to create a better, more professional communication strategy; indeed, we have a work package dedicated solely to communication.

Communication is quite complicated for two major reasons: first, we have a very broad potential target in terms of dimension of size; second, this target is very heterogeneous. When you are targeting people from industry, research, society and academia, the question of effective communication can become extremely complex. Nevertheless, it is important when bringing together different cultures.

Communication between stakeholders is crucial, not only due to the importance of sharing key concept and ideas, but also in relation to the need to facilitate clear communication between people. Most of A4M's successes rely on people. People represent the organisation, but obviously, people have differences. It is therefore very important that communication between different players in A4M is based on the human capability to link and establish a genuine connection. I would say that A4M exists today because a group of individuals – not just organisations – were able to discuss issues together and to accept a common challenge as the challenge for materials science.

Are there any plans in the pipeline for A4M's future?

At present, we are discussing how to modify A4M's approach in terms of its organisation and business model, in order to assure its long-lasting future existence. However, A4M as a concept is not under discussion. The future of A4M is clear: A4M will continue to create a materials community within Europe that everybody can be a part of, no matter what culture, area or sector from which they originate.

Dr Marco Falzetti is Manager of EU Research Affairs at Centro Sviluppo Materiali, a private Italian company operating worldwide that focuses on materials R&D with a commitment to incremental and radical innovation in the materials sector



www.matval.eu

