



MATERIALS FOR A BETTER LIFE ...
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Shaping the Future of Science and Technology with Materials

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Today, most of our education and research activities are based on thematic lines that behave as vertical silos. This idea is fatally doomed to failure, once does not match the ambition and desires of a transdisciplinary target as required by proper eco-sustainability of our world.

Indeed, the promotion of goods, systems and products to bring welfare and comfort to human kind lead by the Internet of Things and the Cloud Computing, connected to the Artificial Intelligence and the prospects of quantum computing, more and more require an exponential growth of devices able to serve all these demands. Moreover, the importance of the microprocessor is no longer so significant. The main unit of analysis is now the data centre and the display (the human interface).

This means that we must change the attitude to raise the hope for a better future, where sustainability is of primordial importance for shaping our future.

This clearly demands a strategy that should be centred in how to substitute the materials we are now using and how to design novel ones, able to serve cross-cutting fields, as our key Missions of the future?

The possibility of producing materials able to perform different functions and respond to external stimuli will undoubtedly be an extremely important research and education area for the foreseeable future. This consequently renders materials the enabler for many expected developments at a Macro and Nano scales, promoting creativity and innovation across many different fields. Therefore, the activity undertaken by materials scientists and educators underpins so vital technological advances.

The scope of this presentation is to establish the future challenges capable of sustaining a harmonious development of science and technology that will shape our future. This implies commitments in relation to how to develop a more creative and innovative research and education linked programmes capable of serving multi-sectors with responsibility raised by the discoveries and behaviour of the human being.

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