## A public engagement

The NanoBasque Agency's Igor Campillo, and Jose M Pitarke, of the CIC nanoGUNE Consolider, consider the importance of bridging the gap between science and society...

cience and technology influence business strategies, transform national economies, prolong people's lives, and are present in a great part of our existence. Nonetheless, the public at large is rather passive with regard to the power of scientific and technological knowledge and the possibilities that emerge from the development of science and technology.

While we talk about the advent of the society of knowledge, the understanding of science among the general public does not seem to move forward at the same pace as scientific discoveries, the development of novel ideas, and the introduction of new inventions, all of which irrefutably affect our wellbeing and progress while creating ethical challenges that are difficult to address from a position of ignorance. And the future is not more promising: industrialised countries seem to have a decreasing number of science students and, in particular, students who pursue scientific research after completing their studies.

This crisis could have important consequences in the future: only a small number of qualified researchers would take advantage of the investments that are currently being made in several countries, and the ability to respond to the ever growing demands for innovation will be diminished in our society. A society whose citizens lack proper scientific training and are unaware of the value of science and technology will hardly contribute to a culture of innovation, and will not be able to generate a competitive economy in a globalised world.

It is about time to launch policies that focus not only on sustainability and environmental protection, but also on the promotion of a culture of science and technology.

Hence, the large investments that are currently supporting R&D should be extended to increase the support of initiatives that would raise awareness and a positive public perception of science and technology, particularly among the youngest members of our society. Scientists do not always supply the general public with accessible information. Thus, it is important to create a favourable climate for scientists to spend part of their time spreading their ideas and informing the public about their ongoing research, and equally important to promote wider

and more rigorous media coverage in the area of science and technology.

We must make it more attractive for students to pursue careers in scientific research, putting special emphasis on intellectual freedom as an intrinsic value for nourishing the critical spirit that accompanies research, and, even more important, we must rethink the existing working conditions and salary arrangements that could well diminish the value of scientific research. Last but not least, beyond the practical usefulness of science, we should favour the generation of interest, enthusiasm, motivation, eagerness, and a sense of scientific wonder and challenge. This thirst for knowledge is the driving force behind scientific and technological progress, which, in turn, is a necessary condition to gain competitive advantage, exploit innovation, and contribute to the wellbeing of future generations.

In an effort to bridge the existing gap between science and society, a good number of outstanding scientists have been gathered this year in San Sebastian, Basque Country (Spain), in a so-called AtomByAtom conference oriented to explain to the general public the reality, challenges, and implications of an important and timely branch of science and technology: nanoscience and nanotechnology.

For further information, visit: www.atombyatom.nanogune.eu



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