

## **Rethinking materials for a sustainable world**

Our societies will have to build massively in the coming decades to meet the needs of a world population that is expected to increase by 25% by 2050, to reach 9.7 billion - and more than 11 billion in 2100. At the same time, our societies will have to adapt to climate change and profoundly transform our energy system to decarbonize it. Beyond reducing greenhouse gas emissions, it is essential that these infrastructures are as sustainable as possible in order to protect biodiversity and the environment. The responsibility for this objective lies not only in the hands of public decision-makers, architects and engineers, it must also concern materials science researchers. As I will try to demonstrate, this responsibility to rethink materials for a sustainable society must be seen as a positive challenge that gives way to fundamental science and applied science while creating a new dynamic between disciplines, and an integrated vision of the actions and choices we have to make every day.