

Interview with Javier García-Martínez

Are there any parts of the Declaration you would like to revise?

The Declaration was developed by a relatively small group of experts, primarily from within the chemistry community. Moving forward, it is important to broaden the conversation and include a wider range of perspectives.

This includes not only different regions and sub-disciplines within chemistry, but also voices from outside the field, such as social sciences, economics, policy, industry, and civil society.

At this stage, however, I would not prioritize revising the text itself. The focus should instead be on implementation. The real value of the Declaration lies in its ability to inspire action, not in continuous refinement of wording.

There is also an opportunity to strengthen collaboration with other initiatives working toward similar goals, in order to increase coherence and impact.

How do you promote the Declaration?

Since its launch, I have promoted the Declaration through multiple channels, including invited lectures, publications, webinars, and international conferences.

It has been presented in academic and professional forums, where it has served as a catalyst for discussion on the future of chemistry and its societal role.

I have also published several articles that connect its vision to ongoing developments in research, education, and policy, helping to translate its principles into broader scientific discourse.

In my teaching, I have integrated the Declaration directly into coursework. Students engage with its five core commitments and explore questions related to sustainable design, waste elimination, and systems thinking across value chains.

Importantly, these discussions are linked to real-world examples from research and industry, demonstrating how abstract principles can be implemented in practice.

What are your suggestions for how SUCCeSS should continue promoting the Declaration?

SUCCeSS has already made a significant contribution by creating a platform for interdisciplinary dialogue, particularly through the Nobel Symposium on Chemistry for Sustainability, from which the Declaration emerged.

The fact that nearly 2,000 individuals have signed it demonstrates that it has already achieved global resonance.

Looking ahead, I would encourage even greater ambition, particularly in three areas.

First, a stronger shift from awareness to implementation. SUCCeSS is well positioned to develop practical tools such as guidelines, case studies, and educational modules that translate the Declaration into action.

Second, deeper cross-sector collaboration. The transition toward sustainable chemistry requires active engagement from academia, industry, policy, and society, working together in more integrated ways.

Third, a more global perspective. The Declaration should be connected to other international initiatives to avoid fragmentation and accelerate progress through alignment and shared purpose.

Tell us about your background and why you chose green chemistry.

My career has followed an unconventional path across academia, entrepreneurship, and international scientific leadership.

After my postdoctoral work at MIT, I co-founded Rive Technology to commercialize catalysts designed to improve efficiency and reduce CO² emissions in the chemical industry. The company was later acquired by W.R. Grace, which continues to develop and scale these technologies globally.

This experience demonstrated the real-world impact that chemistry can have when scientific innovation is aligned with societal needs.

Later, as President-elect of IUPAC, I had the opportunity to help place ethics, sustainability, and responsible chemistry at the center of the organization's mission. This led to the development of the IUPAC Guiding Principles of Responsible Chemistry.

In parallel, my academic research has focused on catalytic materials designed to improve efficiency, selectivity, and sustainability in chemical processes, with applications ranging from CO² reduction to biomass conversion and plastic upcycling.

There was no single moment when I chose green chemistry. Rather, it emerged naturally from the convergence of my experiences in science, innovation, and leadership.

Today, I see it as the natural way to define the role of chemistry in society: enabling solutions that are both scientifically advanced and socially responsible.

Professional and personal vision for the future

I am deeply concerned about the current global trajectory, particularly the lack of effective coordination in addressing urgent environmental and societal challenges.

The COVID-19 pandemic demonstrated the extraordinary capacity of science to respond rapidly when mobilized effectively. However, this lesson has not been fully translated into sustained global cooperation.

Instead, we are seeing increasing fragmentation, geopolitical tension, and declining trust in science. These trends risk slowing progress at a time when acceleration is essential.

The challenge ahead is not only to generate knowledge, but to ensure its translation into scalable, real-world solutions aligned with societal needs.

This requires stronger international collaboration and renewed commitment to shared goals. Organizations such as IUPAC and initiatives like the Stockholm Declaration play an important role in this effort.

Ultimately, the future is not predetermined. It will depend on the choices we make today, and on our ability to act collectively with urgency and purpose.

Connection to SUCCeSS

I have followed the work of SUCCeSS for several years and have been closely engaged with its activities.

In 2022, I delivered a seminar at Stockholm University titled Chemistry for a Sustainable World, which marked the beginning of deeper engagement with the community.

In 2023, I participated in the SUCCeSS Fall Summit, where I presented work on catalysis for green chemistry under the theme Reimagining Chemistry for Circularity. The event brought together researchers, industry representatives, and policymakers in a highly interactive format focused on impact and implementation.

That meeting became an important stepping stone toward the Nobel Symposium and ultimately the Stockholm Declaration.

I strongly share SUCCeSS's mission to reimagine the role of chemistry in society and accelerate the transition toward sustainability through science and collaboration.

The Declaration represents a shared vision of this transformation, and I see SUCCeSS as a key platform for advancing it globally.

At its core, the Declaration is a call to action. It emphasizes that scientific progress alone is not enough, and that meaningful change requires collective effort across disciplines and sectors.

For this reason, I encourage scientists, educators, students, industry, and policymakers to engage with and support its implementation. In a fragmented world, collaboration is not optional—it is essential.

