



WCLM 2025 panelists (from left): David Winkler, Peter Mahaffy, Elizabeth Hall, Dorothy Phillips, Helen Pain, Paul Anastas, and Omar Yaghi.

Restoring Trust in Science: A Global Imperative

report by Neil Gussman

In an era dominated by digital media, artificial intelligence, and information overload, the credibility of science is under unprecedented threat. Eihud Keinan, President of the International Union of Pure and Applied Chemistry (IUPAC), warned that the vulnerability of science has escalated into a global crisis—so severe that it now ranks alongside climate change, public health, and food security as one of the greatest challenges facing humanity.

At the heart of this crisis lies a toxic mix of scientific misconduct, widespread misinformation, and systemic manipulation. From fabricated studies and unethical research practices to the proliferation of over 18,000 predatory journals, the integrity of scientific communication is eroding. Digital platforms amplify this decay, spreading conspiracy theories, pseudoscience, and AI-generated disinformation that distort reality and polarize societies.

The situation is worsened by cyberbullying of researchers, AI-powered bots manipulating public discourse, and the rise of echo chambers that reinforce ideological biases while undermining objective evidence. These dynamics disproportionately affect marginalized communities, further fueling mistrust in science and democratic institutions.

In his talk Keinan called for a collective scientific response—not just to diagnose the threats but to

actively restore public confidence. He urges the scientific community to reaffirm the fundamental human right to participate in and benefit from science, as enshrined in Article 27 of the Universal Declaration of Human Rights (1948).

As seven leading voices in global chemistry gather for the World Chemistry Leadership Meeting (part of IUPAC2025) on July 15, to share insights and propose actions, the message is clear: trust in science is not a given—it must be earned, protected, and promoted. And it begins with transparency, education, ethical rigor, and inclusive access to scientific progress for all.

Can the “Right to Science” Restore Public Trust?

by Dorothy J. Phillips, American Chemical Society, 2025 President

Our world is increasingly shaped by misinformation. Declining trust in science poses a serious challenge. Dorothy J. Phillips, 2025 President of the American Chemical Society, believes that restoring this trust may begin with something long overlooked: the “Right to Science.”

Recognized in Article 27 of the Universal Declaration of Human Rights (1948) and elaborated in Article 15 of the International Covenant on Economic, Social and Cultural Rights (1966), the Right to Science affirms that everyone has the right to access scientific knowledge, education, and the benefits of progress. Yet despite being enshrined in international law for over