

## ACS Change Drivers

In 2017, the ACS Board Committee on Strategic Planning partnered with Foresight Alliance on the Futures Project with the goal of making ACS environment scanning and futures forecasting more robust. The main drivers for this were concerns about missing trends or themes, especially weak signals, and a desire for improved balance between internal discussions and external input. The output of this project was the development of eight “Change Drivers” (listed below, in no particular order) for ACS that identify where relevant change is taking place and the implications for ACS strategy. Ultimately the research is designed to raise awareness of external factors throughout the volunteer and staff leadership, as well as specifically informing the annual revision of the ACS strategic plan.

### Conferences and Events Reimagined

Conferences and events need to adapt the meeting experience to embrace new modes of learning, improve the personalization of meeting programs, and create new opportunities for meaningful engagement—especially to attract Millennials.



### Chemistry's Changing Workforce

The chemistry workforce is facing potentially significant change and disruption as demographics shift, diversity increases, and the continuing rise of automation makes itself felt. At the same time, uncertainty about immigration could spark a brain drain as foreign students return to their home countries or never arrive in the US.



### Globalization of Chemistry

The center of balance of global science is gradually moving from the Atlantic to the Pacific Rim, as Asian science continues to grow in scale and sophistication. Asia is funding a growing portion of the world’s R&D, driven by economic growth and rising technological aspiration.



### New Models of Information Delivery and Discovery

Digitization of information has swelled the amount of scientific information generated. The rise of new digital tools for sharing and searching information are changing how science is conducted and how information is shared.



### Chemistry's Interdisciplinary Future

Chemistry has been highly successful in its embrace of interdisciplinarity, and is developing deeper links to fields like energy, climate change research, agriculture, and advanced materials.



### Automating Chemistry

Advanced analytics and artificial intelligence (AI) systems are increasingly capable of automating lab work, synthesizing research literature, and creating complex computational molecular models—all far more productively than human researchers.



### Greening Chemistry

The chemical industry is positioning itself as innovative and proactive when it comes to environmental issues, by developing non-hazardous or climate-friendly alternatives to conventional chemical ingredients.



### American Petrochemical Resurgence

Fracking has helped turn the US back into a global energy superpower and transformed it into a low-cost petrochemicals producer. This has triggered a wave of new investment in chemical-production facilities, with significant new capacity coming online over the next few years.