

CENTER FOR GREEN CHEMISTRY AND GREEN ENGINEERING AT YALE

The mission of the Center for Green Chemistry and Green Engineering at Yale is to advance sustainability by catalyzing the effectiveness of the Green Chemistry and Green Engineering community. Green Chemistry and Green Engineering represent the fundamental building blocks of sustainability. Working in these disciplines, chemists and engineers are creating the scientific and technological breakthroughs that will be crucial to the future success of the human economy.

The Center for Green Chemistry and Green Engineering at Yale works to stimulate and accelerate these advances. Guided by four core operating principles – (1) Insist on scientific and technical excellence and rigor, (2) Focus on generating solutions rather than characterizing problems, (3) Work with a diverse group of stakeholders, and (4) Share information and perspectives broadly – we seek to accomplish four key objectives:

- Advance the science
- Prepare the next generation
- Catalyze implementation
- Raise awareness

The center concentrates on five focus areas:

Research The center supports and advances research in Green Chemistry and Green Engineering (GC&GE), a critical component to building the community, designing and discovering innovative solutions, and achieving a sustainable future. The center serves as a catalyst to both Yale and the greater GC&GE communities for discipline-specific and cross-disciplinary research collaborations focused on key areas of GC&GE within science, technology, and policy for sustainability.

Policy and outreach The center engages in policy, communication, and outreach initiatives that raise awareness of – and support for – GC&GE. In this dialogue the center engages with a wide network of stakeholders, including NGOs, industry, academia, and government, as well as local communities and the general public.

Education A robust educational program is an essential element of the center. Center activities are focused on educating undergraduate and graduate students in the principles and practice of GC&GE. The center also serves the wider academic community by providing opportunities for faculty training and by developing and disseminating GC&GE curriculum materials.

International collaborations GC&GE are rapidly spreading through both industrialized nations and the emerging economies. In all regions, the center engages with the network of scientists, engineers, policy makers, business people, and public health and environmental experts focused on sustainability science on behalf of the greater good.

Industrial collaborations GC&GE can only provide meaningful impact on the challenges of global sustainability when implemented on a large scale. For this reason,

collaboration with industry is a key part of the center's work. Direct engagement creates a dialogue that informs industry of the latest research breakthroughs in the field of sustainable science and technology. Likewise, such engagement informs academic researchers on industry's most important concerns. This dialogue facilitates a direct line for implementation of these innovations.