









Mainstreaming Green Chemistry

Thought starter discussion

Successes in green chemistry

-  Presidential Green Chemistry Challenge
-  ACS Green Chemistry Roundtables
-  Education programs
-  Academic research
-  Industry, Gov't, Academic, NGO partnerships
-  State level green chemistry programs
-  Networks (GC3, Biz-NGO, PSRT)
-  Eco certifications (DfE, Green Seal, Greenguard)

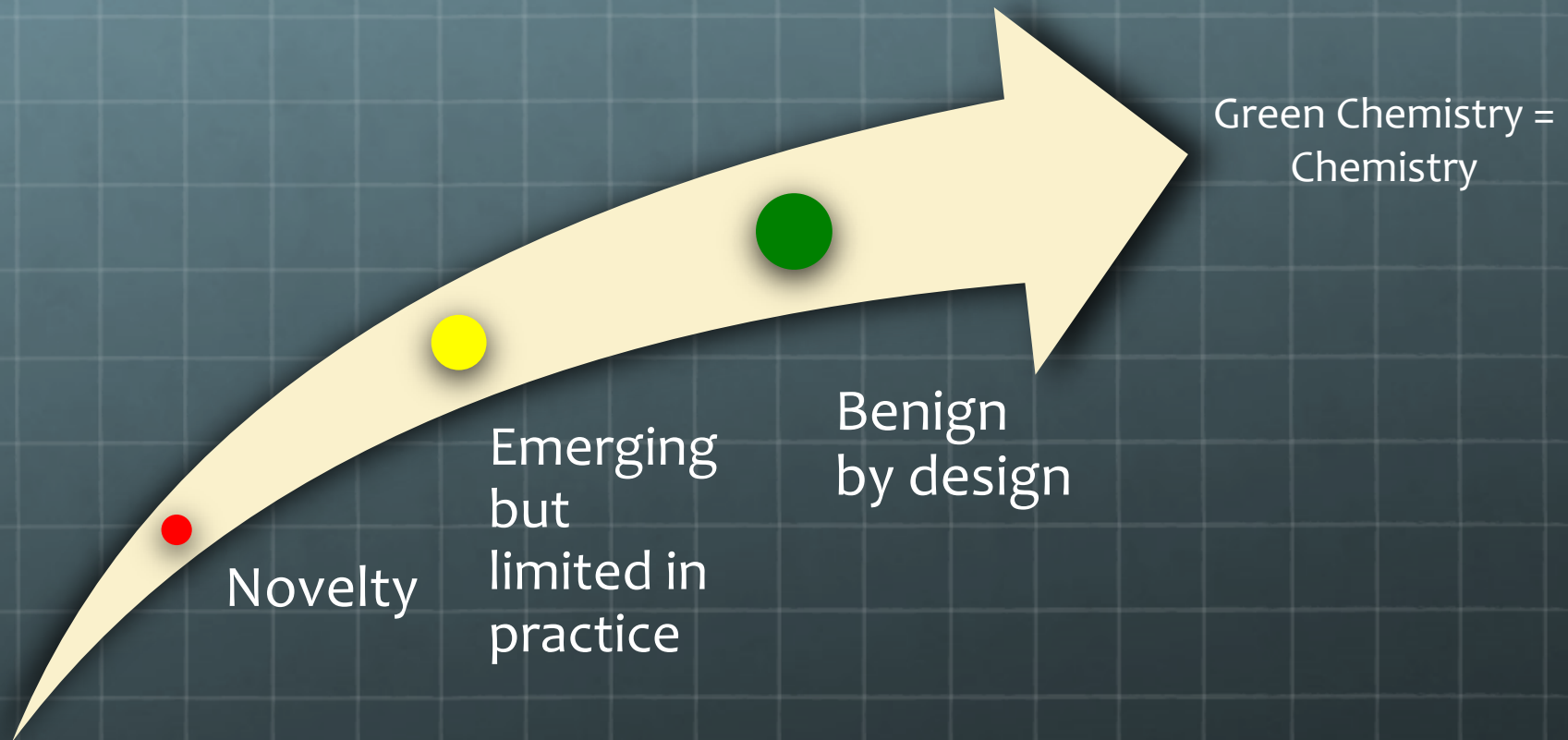
Is Green Chemistry Mainstreamed?

- 🌍 Green Chemistry = Chemistry
- 🌍 Current day use of toxic chemicals
- 🌍 Urgency for finding safer alternatives?
- 🌍 Government incentives?
- 🌍 Innovation culture (toxicity as an attribute)?
- 🌍 Customer demand vs. ability to supply?
- 🌍 Green chemistry economics

Are we all on the same page?

- 🌐 Skepticism/trust
- 🌐 Accepting what is possible today vs. desired
- 🌐 Understanding cost and investment
- 🌐 Customer demands vs ability to deliver
- 🌐 The role of Ecolabels and other certifications
 - 🌐 Should we reward continuous improvement?
- 🌐 The role of Hazard vs risk vs lifecycle
- 🌐 Green chemistry economics




Where is Green Chemistry Today?



Some Current Issues

- 🌐 Alternatives do not exist (extent of research)
- 🌐 Continuous improvement approach is unacceptable
- 🌐 Green costs more (specialty vs commodity)
- 🌐 Lack of government incentives (tax, legislative)
- 🌐 Limited out of the box thinking
- 🌐 Limited collaboration between industry, academia, government & NGO

Holistic Thinking

-  Can green chemistry be approached holistically?
-  Can we develop a holistic framework to address the issues that hold us back?
-  Green chemistry as a journey vs. destination?

Questions for Discussion

- 🌍 What are the most important changes that must occur in the next 10-15 years to “mainstream” green chemistry?
 - 🌍 education, policy, research, incentives, etc.
- 🌍 What are the barriers and challenges that are keeping us from getting there?
- 🌍 For which of these changes is the GC3 most suited to have a meaningful impact?
- 🌍 What goals should the GC3 pursue in the next 3-5 years to help make those changes happen?