

Sustainability

MMTC-West User Group

Green Materials & Chemistry User Group

Translate green chemistry from theory into profitable practice

User Group Description:

Customers, investors and other corporate stakeholders are increasingly requesting information on the identity of the chemicals used by Original Equipment Manufacturers (OEMs) in their products and manufacturing processes. This pressure is driven by a demand for the reduction and elimination of chemicals that have negative impacts on human health and ecosystem health throughout the life-cycle of a chemical, material or product – so called “chemicals of concern.” A need for such identification and assessment of chemicals is not only driven by market pressures, but also more stringent, chemical regulations, such as the European REACH regulation.

Furthermore, there is a growing market demand for “greener” materials that have a reduced impact on the environment. This is evident in the increased specification of materials that have recycled and/or bio-based content, are low-emitting, free of chemicals of concern, and are compostable, biodegradable or recyclable at the end of the useful life of the material or products incorporating these materials.

In response, the Green Chemistry movement is accelerating in popularity as a conceptual framework and toolbox for developing safer chemicals and materials as substitutes for chemicals of concern. By definition, Green Chemistry states that the use of a hazardous/toxic chemical in a material, product or process should be seen as a “design flaw;” rather Green Chemistry advocates for solutions that are “benign by design.”

Output/Benefits for joining the Green Materials and Chemistry User Group:

The main challenge thus becomes how to determine if a chemical is a “chemical of concern” or represents a safer alternative? The Green Materials and Chemistry User Group will help its members tackle this question by developing appropriate resources, protocols, case studies and tools around green chemistry, human and ecosystem health end-points, life cycle impact categories, chemical assessment and policy/legislative initiatives.

The Green Materials and Chemistry User Group format will include site visits to manufacturing facilities and/or other destinations that highlight an aspect of green chemistry. Each participating company will also benefit from an individualized site visit and chemical assessment conducted by the facilitating staff.



Targeted Participants

Green chemistry is an innovative tool for all sectors of the economy where chemicals are used – in raw form as part of a formulation, or incorporated into a product. Green chemistry and materials will benefit all who use chemicals in a product, process or for maintenance.

- Participants will include representatives from OEMs, Tier One, Two and Three suppliers of OEMs.
- Independent designers and other OEM service companies interested in reducing the human health and ecosystem health impacts of chemicals used in their products and processes.
- Chemical manufacturers, formulators, suppliers and distributors.
- Chemists and material scientists/engineers

Curriculum

Theory

Session One:	Green Chemistry Principles and Theory
Session Two:	Chemical Policies, Laws and Regulations
Session Three:	Understanding Risk, Hazard and Exposure
Session Four:	Environmental Marketing Claims
Session Five:	Chemical and Material Assessment Tools – Part 1
Session Six:	Chemical and Material Assessment Tools – Part 2
Session Seven:	Case studies and product assessment

Practice

1. Each participating company will benefit from an individualized site visit and chemical assessment conducted by the facilitating staff.
2. Three field trips to companies, organizations or institutions that showcase green chemistry and materials.

Faculty

William Stough, Facilitator and Clinton Boyd, Ph.D., Faculty, Sustainable Research Group

Cost

\$3,250 – Up to three members from a company may participate

To Register

Please contact MMTC-West at The Right Place:
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