spe PlastiVan®

changing the perception of plastics one classroom at a time

Braskem

THROUGH LIVELY DEMONSTRATIONS & HANDS-ON ACTIVITIES, PLASTIVAN® IS DESIGNED TO EXCITE STUDENTS ABOUT REAL-WORLD APPLICATIONS OF PLASTICS.

PlastiVan® explains the history, chemistry, processing, and sustainability of plastics in addition to describing the opportunities in science and engineering within the plastics industry.

PlastiVan® educators are skilled in tailoring the presentation to meet the needs and grade-level expectations of each classroom.

HIGH SCHOOL

TOPICS

- History of polymers/plastics
- How your life is impacted by plastics
- What engineers and scientists do
- Major industries that use plastics
- Basic raw materials for plastics
- Fractional distillation of crude oil
- Biopolymers and sustainable materials
- Amorphous and crystalline polymer structure
- Manipulating amorphous polymer chains
- Injection molding and thermoplastics
- Bottle preforms and blow molding
- Thermoset plastics and crosslinking
- Open-and closed-foamed polymers
- Material selection in product design
- Hydrophilic, hydrophobic, & oleophilic polymers
- Crosslinked polymers & non-Newtonian fluids
- Chemical vs. Mechanical Recycling
- Marine Debris – Causes and Solutions
- Recycling in your community
- Single-use item vs. single-use material
- Circular Economy vs. Sustainable Materials Management

Curriculum aligns with Next Generation Science Standards

PROGRAM GOALS

DEMONSTRATE THE BENEFITS OF PLASTICS IN EVERYDAY LIFE

EXCITE STUDENTS ABOUT CAREERS PATHWAYS IN THE PLASTICS INDUSTRY

ENCOURAGE STUDENTS TO RECYCLE AT HOME AND SCHOOL

CHANGE THE PERCEPTION OF PLASTICS ONE CLASSROOM AT A TIME

For more information visit www.PlastiVan.org or contact us at plastivan@4spe.org