connoratechnologies **Re-inventing Thermosets** Rey Banatao, PhD

What if we could



EVERYTHING?

CLEANING UP THE PAST

GRINDING

2444

PYROLYSIS

DESIGN FOR THE FUTURE

RECYCLE

REVERSE

CONNORA TECHNOLOGIES: 4-28-2015

REMOVE pool

RELEASE



THERMOSET COMPOSITE MATERIALS







THE COST OF PERMANENCE 10-40% Manufacturing Waste

2015

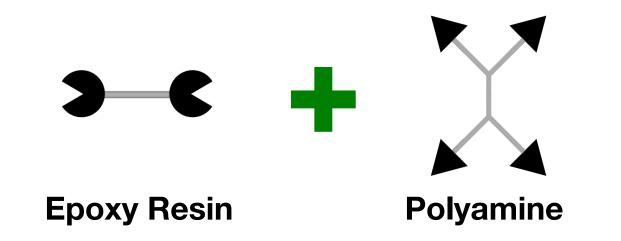


Overcoming Permanence



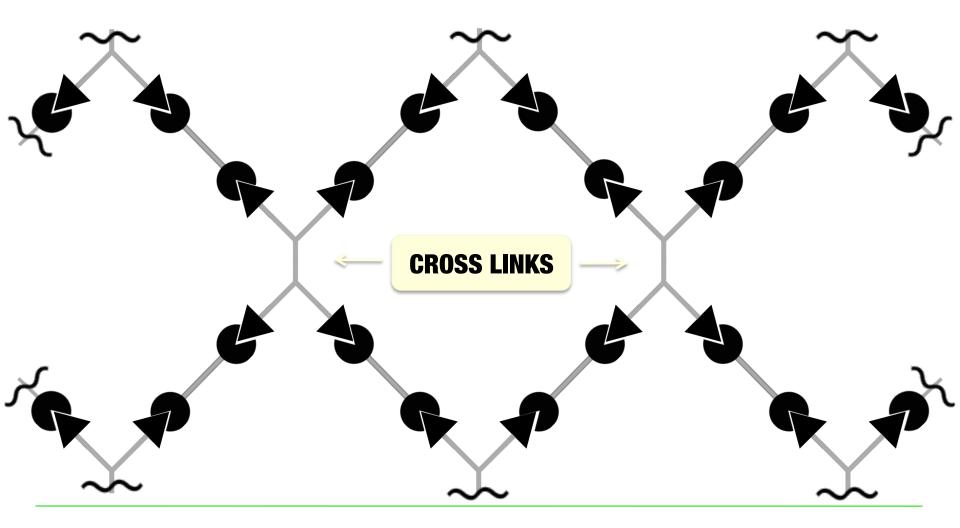
"Connora has redesigned thermosets to be **Recyclable from the start**"

EPOXY THERMOSETS ARE MADE BY REACTING:



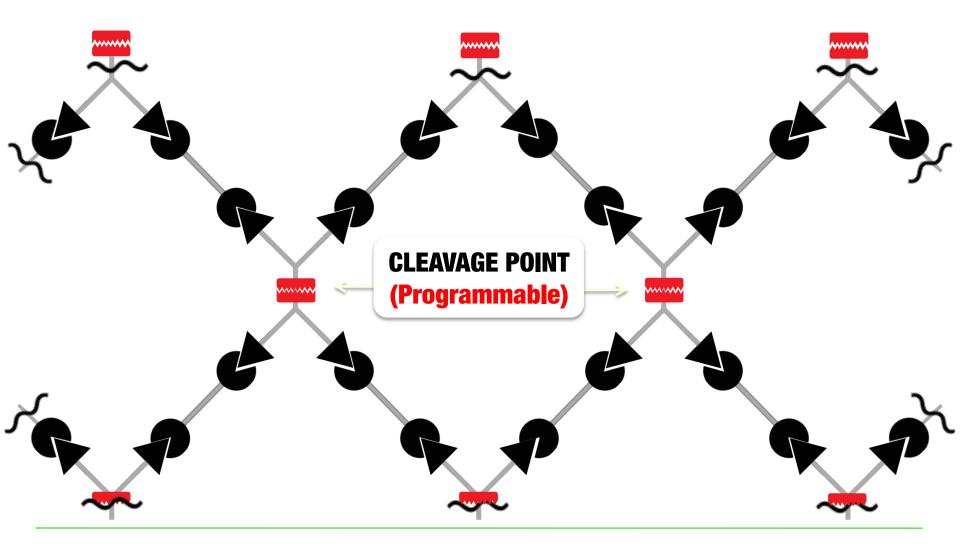
CONVENTIONAL EPOXY

IRREVERSIBLE BONDS MAKE TRADITIONAL THERMOSETS PERMANENT



'RECYCLAMINE' TECHNOLOGY

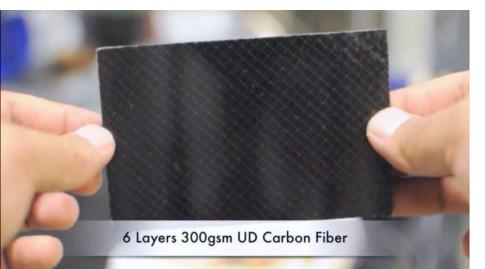
CONNORA' S CLEAVABLE BONDS ALLOW THERMOSETS TO COME APART



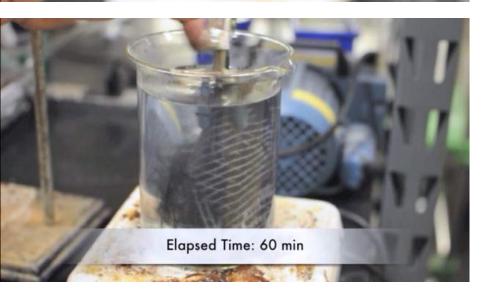


8% ↓Carbon Fiber (@ 20% waste)
\$5,000 Carbon Fiber per Car (500 lbs @ \$10/lb)
\$400 Savings per Car
\$7 M Savings per Line/yr (~17k units)

LOW ENERGY RECYCLING

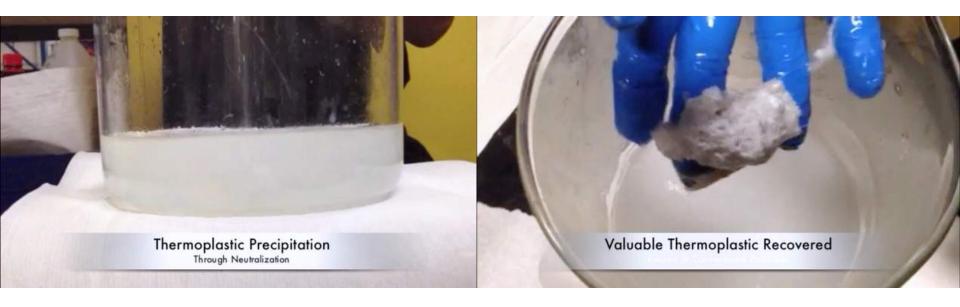








LOW ENERGY RECYCLING



#MAKETHINGSBETTER









CLOSED LOOP MATERIALS PROOF-OF-CONCEPT

#MAKETHINGSBETTER



