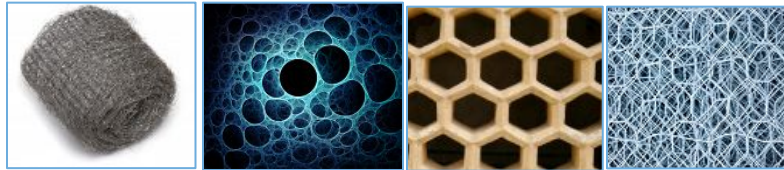


Novel Catalytic Reactors

- Ceramic-based catalyst pellets in a fixed bed have been the norm for heterogeneous catalytic reactors for nearly a century.
- As the workhorse of the chemical process industry, conventional fixed beds are simple and pragmatic, yet suffer from known flaws:
 - ✗ Mass or heat transfer limitations
 - ✗ Poor thermal and mechanical properties
 - ✗ Having reached a performance plateau where further improvements are incremental.
- Washcoated substrates have been developed to eliminate the shortcomings of ceramic catalysts.
- These substrates come in various forms and shapes: ceramic or metallic foams, stackable metallic structures, honeycombs, wire mesh, and composite materials.
- Metallic porous structures such as foam and wire mesh can be cut and shaped as conventional pellets to offer the same ease of loading/unloading in tubular catalytic reactors.



- We specialize in novel catalyst technologies and will guide you through the process of selecting the right technology for your system.
- The benefits are multiple:
 - ✓ Reduced mass transfer resistance by applying a thin layer of catalyst coating
 - ✓ Maximized productivity
 - ✓ Reduced system pressure drop
 - ✓ Improved heat transfer, eliminating hot spots
 - ✓ High energy efficiency

Contact Us

Telephone: (905) 510 0719

Email: info@greentwirlenergy.com