

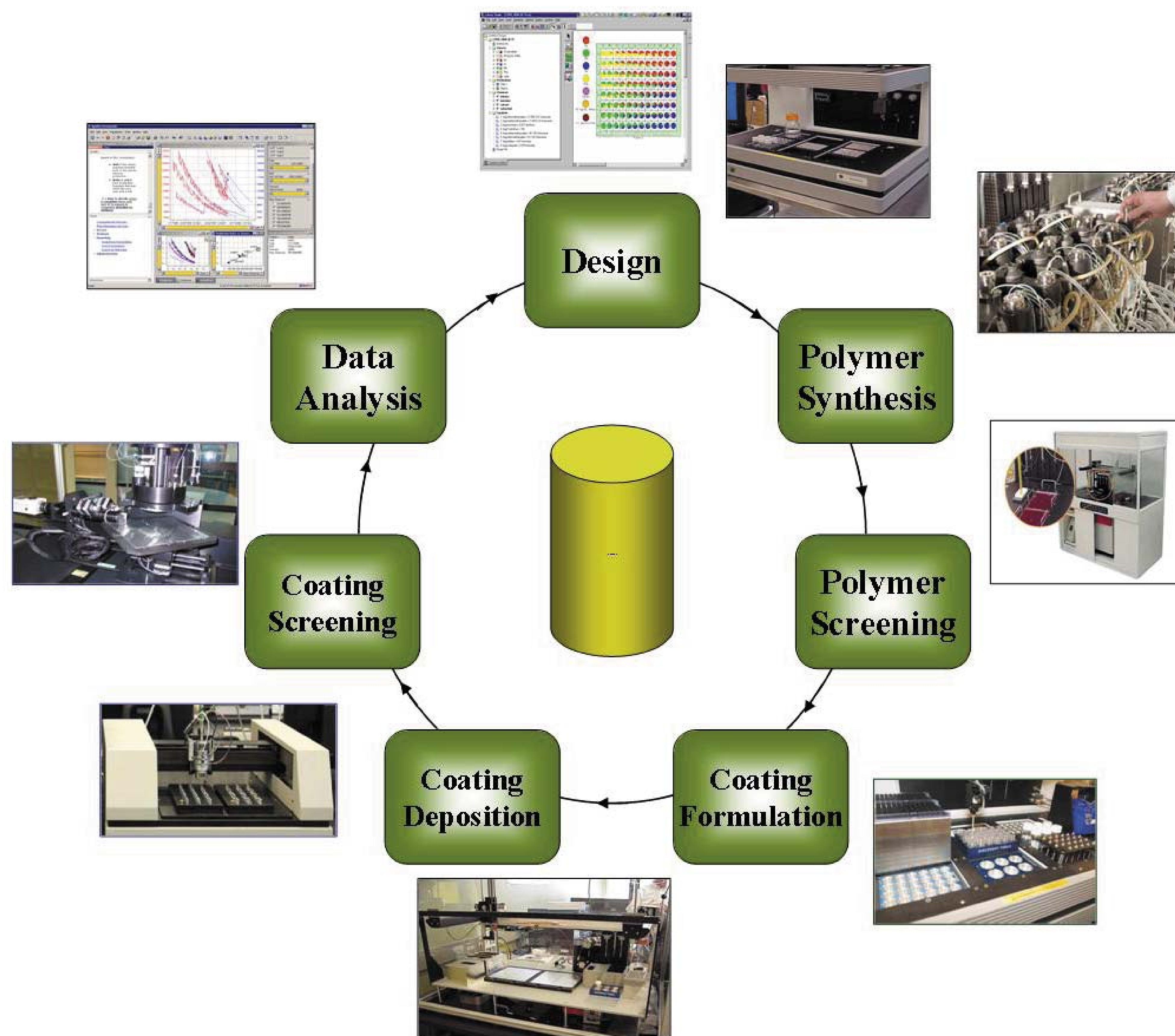
NDSU Department of Coatings and Polymeric Materials Research Capabilities

Biomass and
Dioproducts
Initiative

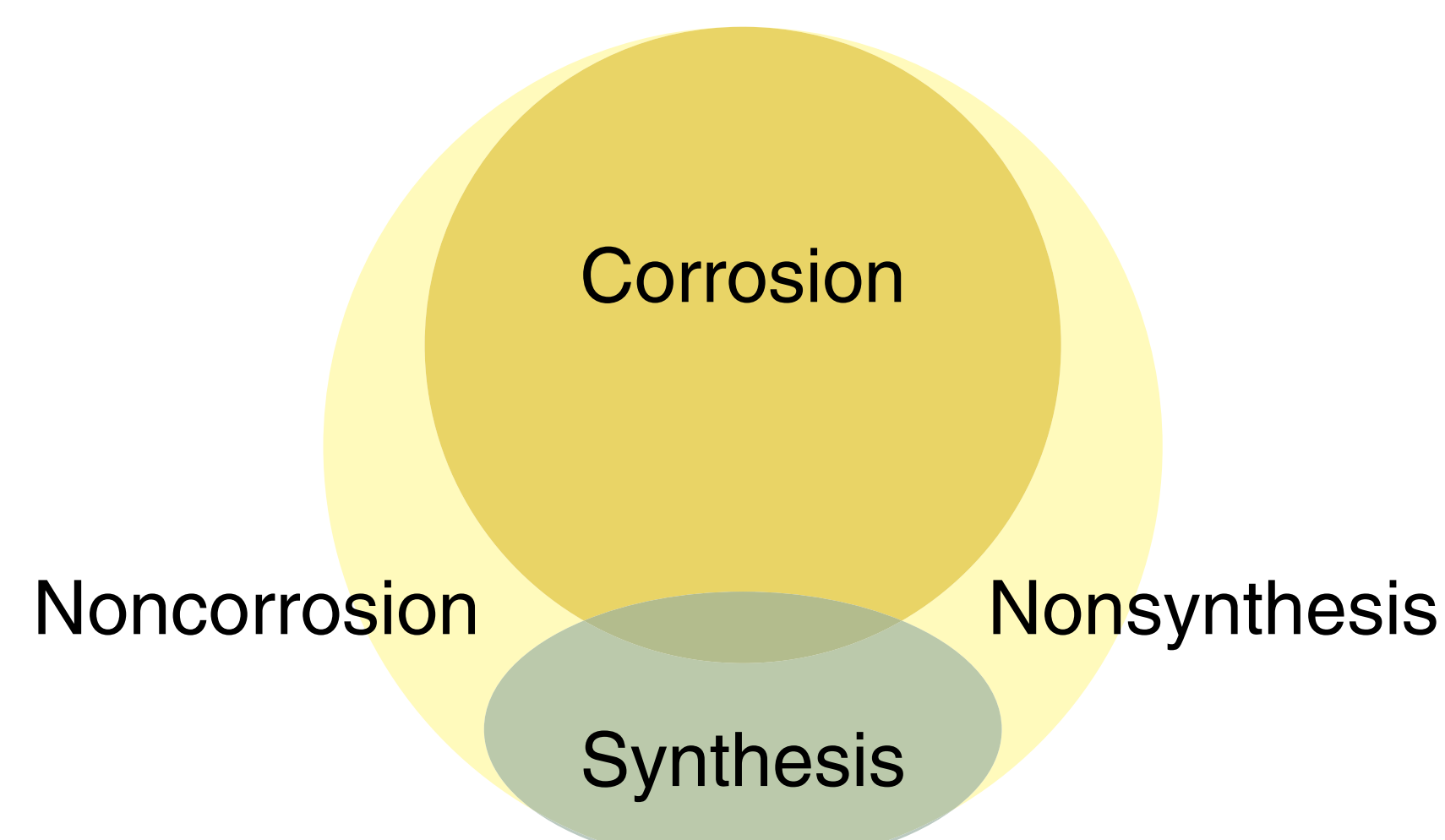
High-throughput Methods

Accelerate the process of experimentation

NDSU has the most comprehensive high-throughput laboratory in the world for polymer and coatings research.



Overview of Research



60+ years of industrial experience in research and development and management

We are all involved in more than one category of research.

We all make and characterize materials (usually polymeric, for coatings) and polymer-composite systems (usually coatings) from the nano to macro scales.

Selected Current Projects

- Anti-fouling coatings for ships
- Magnesium-rich anti-corrosion primers
- Polymer templates for spintronic devices
- Corrosion sensors
- New functional monomers
- Modified cysteines
- Durability of polymers
- Materials for microelectronic devices
- Smart coating systems

Instrumentation

- UV-vis-NIR, Raman, FTIR spectrometers
- Spectrofluorimeter
- Atomic force and other scanning probe microscopy, optical microscope
- Gas chromatography-mass spectrometry
- Gel permeation chromatography
- Electrochemical instrumentation
- Comprehensive thermal analysis equipment
- Colloid characterization
- Particle size measurement
- Accelerated weathering chambers
- Coating application equipment