Market insights take company into the blockbuster drug market

NIST MEP Technology-Driven Market Intelligence

The Asset/Benefits

Asset: Prime Synthesis developed a new, functional, controlled porosity glass (CPG) for enhanced drug processing. The new media is potentially suitable to a wide range of purification applications and selective screening of biologics.

Benefits: The new product has two to three times the binding capacity, greater alkali resistance, and higher fidelity adsorption compared to commercially available media.
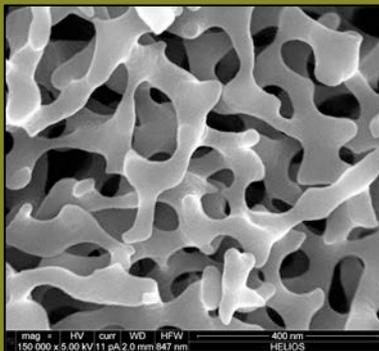
Prime Synthesis, Inc.

Photo Credit: SEM imaging performed at NIST in collaboration with A. E. Vladar, B. Ming, and J. A. Dagata, Semiconductor and Dimensional Metrology Division

Project Outcomes

- Profiled global bio-pharma market and value chain in detail, identifying best regions for growth and partnering.
- Characterized key aspects of market:
  - New product pipelines and regulations
  - Projected growth and size
  - Key players and customers.
- Identified purification step as key industry "bottleneck" for which new product offers novel solution.

Key Questions

- What are the drivers and structure for the biologic materials purification market?
- Who are the leading competitors and end customers for purification media?
- Is the technology suitable for the biologic purification market?
- Would users adopt a new media?
- What are the key regulatory and performance criteria?
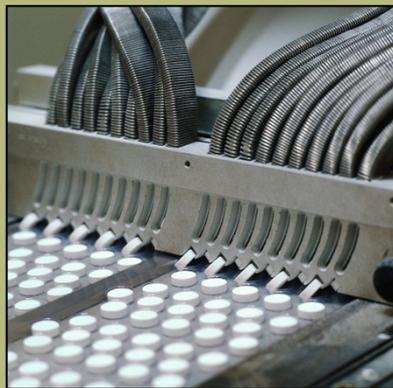
Project Impact

As a result of this project, the client:

- Learned that opportunity were greater than expected in the production of billion-dollar blockbuster drugs.
- Developed a much more assertive approach to the marketplace.
- Adjusted partnering strategy; now citing $24 million opportunity in new $100 million market.
- Sourced $150,000 in new funding and created new technology and patents.

"A magnificent job of characterizing the new biochemical processing market … we got input on the new application from 10 of the leading experts in the industry."

– Marc Rothstein, President, Prime Synthesis

DVIRC