

CEM launches the world's first large-scale, automated microwave peptide synthesizer.



- Automated synthesis of up to 1 kg crude peptide per batch
- Rapid cycle times, 5x faster than conventional reactors
- Fully verifiable and traceable software and instrumentation
- Seamless method transfer from R&D to production scale

(Matthews, North Carolina) May 21, 2019 – CEM Corporation is proud to announce the release of the world's first ever large-scale, automated microwave peptide synthesizer. The system, named [Liberty PRO](#), provides for the unprecedented synthesis of up to 1 kg of crude peptide per batch utilizing reaction vessel sizes up to 15 liters. The Liberty PRO provides unmatched purity, speed, and waste reduction for large-scale synthesis of standard and difficult peptides of any length.

The Liberty PRO provides the latest in engineering and chemistry advances for peptide synthesis, ensuring the highest quality and batch-to-batch reproducibility. Key features include uniform microwave energy, fully verifiable fluidic deliveries, NIST traceable internal temperature monitoring, and optimized dual-mode mixing with overhead mechanical agitation and N₂ mixing. The software complies with 21 CFR Part 11 and offers complete audit trail traceability, run history and method reports. The software can be equipped with user access levels and password protection for full cGMP compatibility. A complete package of cGMP regulatory documentation is available, including Installation and Operation Qualification (IQ/OQ), extractable and leachable testing reports, functional and software design specifications (FDS/SDS), and factory acceptance testing (FAT).

“We believe the Liberty PRO can lower the cost of making peptides at large scale. It offers improvements in synthesis purity, time, and overall waste production at larger scales. Additionally, compared to conventional approaches, microwave synthesis allows for methods to be rapidly optimized at the R&D scale before ultimately scaling up with the Liberty PRO,” says Jonathan Collins, Vice President of Business Development at CEM.

In the last year, CEM has already installed several Liberty PRO systems worldwide. These systems are being used in cGMP settings for the synthesis of pharmaceutically relevant peptides.

About CEM

CEM Corporation, a private company based in Matthews, North Carolina, is a leading provider of laboratory instrumentation. The company has subsidiaries in the United Kingdom, Germany, Italy, France, and Japan, as well as a global network of distributors. CEM designs and manufactures systems for life sciences, analytical laboratories and processing plants worldwide. The company's products are used in many industries including pharmaceutical, biotech, chemical and food processing, as well as academic research.

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