

Gamma Technologies Announces Strategic Partnership with Gotion Illinois



WESTMONT, Ill. --Gamma Technologies (GT), the leading provider of multi-physics systems simulation software, today announced a strategic partnership with Gotion Illinois, a market-leading energy storage solutions innovator that is also based in Illinois. Gotion Illinois is focused on innovating and delivering the next generation of battery technology, and its Illinois facility reflects that ambition at scale, spanning raw material intake to EV, data center-ready battery solutions to turnkey energy arbitrage and renewable-supported systems on an industrial scale. The collaboration pairs Gotion Illinois' global project experience, rapid US growth and technology-forward roadmap with GT's simulation and productivity platform, enabling faster, more accurate, and more collaborative battery design across the full development lifecycle.

Gotion Illinois' U.S. manufacturing footprint represents one of the most ambitious battery buildouts in the country, spanning raw material processing through finished, deployment-ready battery systems for electric vehicle, data center, and countless commercial and industrial applications. As Gotion Illinois scales this Gigafactory, the company is standardizing on GT-AutoLion to give its manufacturing, design, R&D, chemistry, thermal, controls, and battery engineering teams a single, trusted source of truth, improving speed, efficiency, and cross-team alignment at every stage of cell, module, and pack development.

"Working with Gamma Technologies gives our teams a shared, accurate platform we can rely on from raw material selection all the way through pack-level validation," said Dr. Nitesh Gupta, Battery Research and Simulation Engineer at Gotion Illinois. "The ability to de-risk our global supply chain, optimize and size our systems early, and verify performance well before physical testing has

fundamentally changed how quickly and confidently we can move from concept to production."

Across Gotion Illinois' engineering organization, GT-AutoLion is being used for a range of critical design and validation workflows:

- **Battery Pack Safety Analysis:** GT-AutoLion can capture the decomposition of different species during thermal runaway. Gotion Illinois' cell team will be scaling this model into different thermal management topologies to evaluate propagation risks.
- **Design of Experiments and Model Calibration:** Gotion Illinois will leverage GT's productivity tools, including streamlined case setup and DOE capabilities, to evaluate how cell design parameters, such as electrode loading, impact key performance indicators like power density, while also simplifying model calibration.
- **Pack Thermal Management and Integration:** Gotion Illinois' pack design and integration team is using AutoLion to evaluate different thermal management topologies and incorporate components, including compression pads, busbars, and interconnects, as models scale from cell to module to pack.
- **Mechanical-Electrochemical Coupling:** Gotion Illinois will explore how different mechanical boundary conditions can impact cell, module, and pack performance.
- **Next-Generation Chemistries:** Gotion Illinois will be utilizing GT-AutoLion's material database to evaluate emerging chemistries like sodium-ion and solid-state batteries.
- **Tool Consolidation:** Among the most significant benefits Gotion Illinois has identified is the ability to consolidate multiple point tools into a single, unified simulation platform, reducing complexity and improving consistency across teams.

"Gotion Illinois' scale is remarkable, the sheer volume of raw material coming in, and the EV and data center-ready battery solutions going out, is unlike anything being built from the ground up in the U.S. today," said Dimple Shah, CEO of Gamma Technologies. "What makes this partnership so meaningful is how Gotion Illinois is using our platform: as a shared language across manufacturing, design, R&D, chemistry, thermal, controls, and battery engineering teams. From material selection and global supply de-risking to early verification and holistic validation, GT was built to give teams exactly this kind of speed, accuracy, and trust, and we're proud to support Gotion Illinois as they scale."

GT-AutoLion enables Gotion Illinois to evaluate design trade-offs earlier in the development process, reduce reliance on costly physical prototyping, and give distributed engineering teams a consistent, validated foundation for decision-making,

from raw material and cell design through module, pack, and system-level performance.

About GT-AutoLion

GT-AutoLion is Gamma Technologies' physics-based battery simulation software, widely used by cell manufacturers and OEMs to design next-generation battery cells and to develop and validate control strategies. Built on an electrochemical, multiphysics foundation, GT-AutoLion models the internal behavior of lithium-ion cells and beyond, giving engineers detailed insight into performance, degradation, and safety before physical prototypes exist. The platform spans a range of modeling fidelities, from fast, system-level representations to detailed multi-dimensional cell models, and includes built-in materials data, swelling and mechanical modeling, and physics-based aging and degradation prediction. GT-AutoLion also integrates directly with Gamma Technologies' broader GT-SUITE system-level modeling environment, as well as third-party tools such as Simulink, enabling engineers to move from cell-level design to full battery pack and system validation, including thermal management and battery management system (BMS) calibration.

About Gotion Illinois

Gotion Illinois | www.gotionillinois.com is operating an over \$2 billion advanced lithium-ion battery manufacturing campus in Manteno, Illinois, supporting the electric vehicle and energy storage industries, and overall economic development across America. The facility is expected to create more than 2,000 high-quality American manufacturing jobs while strengthening domestic battery production, localized supply chain resilience, and developing next generation chemistries and advanced manufacturing in the United States.

About Gamma Technologies

Gamma Technologies (GT) | www.gtisoft.com develops and licenses GT-SUITE, the industry-leading multi-physics CAE simulation platform. GT-SUITE offers a comprehensive library of physics-based modeling templates covering fluid flow, thermal systems, mechanics, electrics, magnetics, chemistry, and controls, supporting the full product development cycle from early concept to final validation.

GT-SUITE is used to simulate a broad range of engineering systems across industries, including automotive, transportation and mobility, marine, defense, power and energy, data centers, HVACR, and aerospace.

Gamma Technologies has integrated artificial intelligence and machine learning into the simulation workflow through GT Intelligence Studio, enhancing model creation,

enabling automated analysis, and improving engineering productivity across the entire GT-SUITE ecosystem.