

ABSTRACT TEMPLATE: CHECKLIST AND INSTRUCTIONS

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Company name--- Alagene ---- * Website----- alagene.co.il ----- *

VP R&D name----- Neta Agmon -----*

CATEGORY: Biotech *

SESSIONS

- Frontiers in Biochip and Bio-Devices; Advancing Technological Systems with Cutting-Edge Biology

Molecular Precision: Alagene's Role in Building the Biological Core of Biochips

Alagene specializes in the design, development, and optimization of biological systems for advanced biotechnological applications. For bio-chip technology, Alagene offers a comprehensive suite of services focused on engineering the biological recognition elements critical for chip functionality. Leveraging its expertise in synthetic biology, microbial strain development, and high-throughput screening, Alagene can develop custom biological components such as engineered enzymes, peptides, or whole-cell biosensors that respond selectively to target molecules or environmental signals. These components can be tailored for integration into microfluidic or lab-on-chip platforms, enabling sensitive, specific, and scalable detection systems. Alagene's modular Design-Build-Test-Learn (DBTL) pipeline ensures rapid iteration and optimization of biomolecular performance, while downstream processing capabilities support the production and purification of high-quality biological inputs. Through close collaboration and agile development, Alagene provides robust and innovative solutions to support the advancement of next-generation biochips in diagnostics, environmental sensing, and defense applications.

Executive Summary / core technology / pipeline

Alagene is a Synthetic Biology company specializing in microbial engineering and protein production for FoodTech, biopharma, and beyond. Our **Modular Synthetic Biology Platform** integrates computational strain design, high-throughput screening, precision fermentation, and downstream processing to deliver scalable, cost-effective biomanufacturing solutions. Backed by a seasoned team and strong partnerships, Alagene accelerates the development of high-performance biological systems, supporting a wide range of applications in industrial biotech and enabling flexible, client-tailored solutions.

Business Strategy

Alagene leverages its microbial platforms to deliver tailored R&D services and develop biological solutions. Through our Innovation Lab, we plan to accelerate new applications and platform-driven innovation. Commercialization is pursued via strategic partnerships and licensing across FoodTech, biopharma, and biotech markets.

What's Next?

Platform Expansion

- Extend microbial strain portfolio to new hosts and protein classes
- Optimize internal tools and models for industrial process development

Innovation Lab

- Launching an internal Innovation Lab to accelerate platform applications and construct new biotech concepts

Strategic Collaborations

- Partnerships and co-development with key players

Commercial Focus

- Grow client base and commercialization of select biological assets

Funding Plans

- Raising capital to support the Innovation Lab