

# pharma

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**TCG GreenChem Inc.,**



**COMPANY  
OF THE YEAR**

**TCG GreenChem Inc.,**



*The annual listing of 10 companies that are at the forefront  
of providing CMO services and transforming businesses*

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# TCG GreenChem Inc.,

## The Drug Development Engine

### Accelerating Molecules to Medicines™



Joe Armstrong,  
COO and Head of Business  
Development at TCG  
GreenChem Inc

Dr. Chris H. Senanayake,  
Founder, CEO, and  
CSO of TCG GreenChem

**T**he pandemic highlighted the vulnerability of global pharmaceutical drug supply chains in responding quickly to increased demand and dynamic market changes while maintaining existing requirements. Furthermore, several countries have created policies that incentivize national companies to secure their supply chains internally and restrict exports of raw materials and Active Pharmaceutical Ingredients (API) for even generic medications. That said, as pharmaceutical drug production requirements become more complex, biopharma companies seek collaborative partners with specialized scientific expertise to address their needs in the early stages of the development process. These strategically outsourced partnerships



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will enable biopharma companies to accelerate time-to-market and optimize the total cost ownership of efficient operations across their supply chains. TCG GreenChem is uniquely positioned to take advantage of this paradigm shift as a strategic component of the pharma supply chain. “We aim to catalyze the development of novel, effective, and affordable drugs to treat unmet medical needs of patients through the application of innovative science, technologies, a global talent pool, and deliver value to all our stakeholders,” says Founder, CEO, and CSO of TCG GreenChem, Dr. Chris H. Senanayake. The company provides innovative CDMO services with a unique modus operandi in the space of supporting pharmaceutical R&D through collaborations with a select group of technology and cGMP manufacturing companies to meet today’s regulatory and supply-chain challenges.

TCG GreenChem provides clients a clear opportunity for accelerated CMC Development by supporting the drug lead selection and decision process in the early stages. The company employs a “First Time Right” synthesis of the API with the appropriate polymorphic form and properties that allow acceleration of IND, enabling toxicity studies and CMC requirements for Phase I clinical studies. With its contribution of a steeper process learning curve, TCG GreenChem facilitates cost-effectiveness and early market entry in the drug development timeline.

“While other CDMOs use existing chemistry and processes, our core strengths in science and technology are reflected in the design and development of novel sustainable and ideal synthetic routes for complex APIs,” states Joe Armstrong, COO and Head of Business Development at TCG GreenChem Inc. The company’s senior leadership team has in-depth technical experience and a seasoned track record of developing and manufacturing architecturally complex intermediates and APIs for hundreds of new chemical entities (NCE). In addition, sustainability and green manufacturing goals are also at the heart of TCG GreenChem technology platforms, such as catalysis and continuous flow chemistry, to enable companies to increase production while optimizing time, energy resources, and capital more efficiently than traditional expansion.

TCG GreenChem Inc., (the US subsidiary of TCG Lifesciences Privet Limited which was founded by Swapan Bhattacharya, Managing Director, 2001) was conceptualized

in 2019 by Dr. Chris H. Senanayake (Founder and CEO & CSO) and Dr. Joseph D. Armstrong, III (COO), former senior pharmaceutical executives for Boehringer Ingelheim Pharmaceuticals, Sepracor Inc, and Merck & Co. “Our mission was to establish an innovative contract development and manufacturing organization, to partner with the pharmaceutical, biotechnology, and generic industries in delivering integrated, accelerated, and economical services by utilizing green and sustainable technologies with a global footprint,” elaborates

Dr. Senanayake. Under the strategic guidance of Dr. Purnendu Chatterjee (the Chairman and Sponsor of TCG GreenChem Inc), TCG GreenChem has continually grown to adapt to the ever-changing needs of the pharmaceutical and biotech industry. TCG and its subsidiaries have a strong talent pool of approximately 1,200 scientists with 300+ PhDs from highly reputed domestic and international institutes.

Currently, TCG GreenChem is at the forefront of the iCDMO space, not only because of its technologies and scientific acumen but its broad network within academia, government bodies, and pharmaceutical partners. The company partners with the Medicine for All Institute (M4ALL) – VCU (established by Professor Frank Gupton), the Bill and Melinda Gates Foundation, and Phlow corporation to make life-saving

drugs available to all those in need from its two headquarters based in Princeton South, New Jersey, and Richmond, Virginia. In addition, the company also has an FDA-approved facility in Hyderabad (Clininvent) India with a pilot plant and commercialization suites for APIs. The synergistic relationship between TCG Lifesciences located in India and TCG GreenChem, in the USA is crucial in enabling it to offer its clients a cost arbitrage without compromising on quality or speed for drug development. For the future, TCG GreenChem aims to maintain its lead being at the forefront of CDMO innovation and leverage cutting-edge technologies in analytics, catalysis, flow chemistry, microfluidics, and CMC expertise to design processes for clients and partners. As stated in its vision and mission statement, TCG GreenChem’s passion for innovation and unique model of collaboration will continually help clients gain competitive advantage through a “First-Time-Right,” “Stronger IP Position,” “Speed to Market,” and “Security of Supply.” 



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