



Verdorex, Inc. | 1-B Gill St, Woburn, MA 01801 USA | +1(857) 600-1131 | hr@verdorex.com

Position

Organic Synthetic Chemist
Woburn, MA

Overview

Verdorex, Inc. is dedicated to reversing climate change through the development and deployment of advanced technology. The company's proprietary electro-swing process, developed at MIT, enables carbon dioxide and other acid gases to be captured with up to 80% less energy and 70% less cost than conventional approaches. Verdorex is backed by institutional investors and based in Boston.

Verdorex seeks an Organic Chemist to join our R&D team. This position reports to the Chief Technology Officer (CTO).

Primary responsibilities

- Build and maintain chemistry R&D infrastructure
- Design and synthesize molecules and polymers with specific physico-chemical properties
- Polymer chemistry: radical polymerization, aromatic coupling, photopolymerization, electropolymerization
- Grafting and conjugation of conductive polymers
- Electrochemical characterization of molecules and polymers
- Develop synthetic protocols for large-scale cost-effective synthesis
- Quality control of chemical products.

Qualifications

- PhD in Synthetic/Organic Chemistry (or equivalent). Some industry experience is preferred
- Advanced organic synthesis skills (encyclopedic organic synthesis knowledge) – multistep synthesis, Schlenk line and air-free techniques, organometallic synthesis, photochemistry, supramolecular chemistry
- Characterization – NMR (1D, 2D, VT), GC/LC-MS, FT-IR, UV-Vis, DSC, TGA
- Purification techniques – large scale purification
- Scale-up (preferred) – some experience in gram to kilogram-scale synthesis
- Polymer experience (preferred) – some experience in polymerization and polymer modification
- Electrochemistry experience (preferred) – some experience in organic electrochemistry and electrochemical techniques

- ChemDraw, NMR analysis software, Excel, MATLAB (or equivalent), some DFT experience.
- Ability to work in cross-functional teams
- Strong oral and written communication skills
- Comfortable working in an evolutionary and dynamic startup environment

Verdox does not and shall not discriminate in employment on the basis of race, color, religion (creed), gender, gender expression, age, national origin (ancestry), disability, marital status, sexual orientation, or military status.

To apply, send your CV to hr@verdox.com and reference the position "Organic Chemist"

For more information:

<http://news.mit.edu/2019/mit-engineers-develop-new-way-remove-carbon-dioxide-air-1025>

<https://pubs.rsc.org/en/content/articlelanding/2019/ee/c9ee02412c>