Sr. Lead Process Development Engineer

USI - Headquarters - Dexter, MI and international assignment in the UK

Opportunity Overview: USI has been developing a revolutionary new technology with a partner which has the potential to dramatically reduce the cost of oils used for both fuels and chemical feedstocks. The technology is based upon both renewable and low-cost/abundant raw materials.

Position Overview: This full time position offers a uniquely qualified, skilled and energetic chemical or biochemical engineer the opportunity for a key role in developing and commercializing this proprietary technology. The role combines both technical leadership in a matrixed project environment and a significant amount of hands-on practical activity in translating the research into a robust and reproducible pilot scale al with an eye toward planning for commercial scale. The ideal candidate will be a player/coach with excellent written and oral communication skills and a track record of success in de-bugging, problem-solving, developing and designing chemical and biochemical processes from a research to pilot plant to commercial scale.

The successful candidate must have the demonstrated ability and desire to work as a hands-on member of the team in chemical engineering and bioprocessing including developing and carrying out experimentation from lab to commercial scale and mass, energy and techno-economic modeling. In addition, the role requires a track record of success in motivating and training others to independently and successfully design, implement and analyze experiments.

Role and responsibilities: The immediate focus of this role is to develop a full mass, energy and techno-economic model of a plant cell biology system, to define and execute a series of robustness measurements to define scale parameters, and to use the data and models as the basis for commercial operations to be scaled throughout the US. The role includes the identification and management of qualified external resources as well as the development and protection of any potential concomitant intellectual property.

The successful candidate will:

- Develop, oversee and carry out a detailed experimental plan, in conjunction with colleagues and partners in the UK and US to develop and validate mass and energy balances and a techno-economic model for a multi-stage plant cell biology process over the next 4-5 months.
- Define external analytical and engineering resources required to aid in the development of all models – both in the US and UK.
- Document all work and write and submit reports, presentations, patent applications and/or scale-up documentation.
- Lead and contribute directly to hands-on experimentation at the laboratory to pilot level to commercial level.
- Report to an International Steering Committee which is chaired by two CEOs (one being USI).

Skills: The successful candidate *must* possess the following:

- BS or MS in chemical engineering, , bioprocessing engineering, cellular bioprocess engineering or directly related discipline with 8+ years of technical and group leadership experience including at least 5 years in an industrial scale up environment.
- A minimum of 5 years experience in successfully managing people as well as technical projects in an industrial biofuels, bioprocessing, or biotech environment. Example industries include renewable fuels, agricultural products and processing, biorefining.
- In-depth knowledge of chemical, physical chemical, aligned analytical and bioprocessing techniques – including demonstrated skills in the development of mass, energy and technoeconomic models and their role is translating processes from research to commercial scale.
- The ability to develop detailed engineering drawings to complement the process modeling and to act as the basis for scale up documentation.
- Demonstrated ability to identify, manage and incorporate the findings of qualified external technical resources to achieve the mission.
- Experience in team building and team leadership in a matrixed industrial, technical/business environment.
- Accomplishments in both engineering and management as evidenced by a track record of products and processes scaled from research through to commercial.
- The ability and desire to both lead and contribute hands-on on a daily and ongoing basis.
- Excellent oral and written communication skills
- Demonstrated experience and a track record of technical and project management success in a team environment.

Location/salary: The position will be based in Dexter, Michigan, but with an immediate deployment to the UK for up to 5 months and most likely include up to 80% travel for the first year. A competitive salary, benefits and all international travel expenses are offered to the qualified candidate. For immediate consideration email your resume and salary requirements to careers@teamusi.com.

USI's facilities combined with the capabilities of its researchers deliver science and technology that are directly related to the nation's alternative energy and chemical feedstock future. Building upon a history of over 15 years of custom separations development, and the implementation and operation of systems at over 2000 client sites, USI is providing the ethanol biofuels and algae industries with an array of services to help monetize fuel production strategies.

Thank you for your interest in USI and our future as a leader in alternative energy.