

ARBOR PHOTONICS

		Contact:	Tom Sosnowski
Position:	Optical Engineer		
Description	See below	email:	Tsoz@arborphotonics.com

The position of Optical Engineer will be a key member of the product development team with primary responsibility for the design, implementation, documentation and transfer to production of optical systems for state-of-the-art high-power fiber lasers. Key objectives for this position are:

1. **Develop high-power, ns, 3C fiber laser system with MOPA architecture.**
2. **Develop optical subsystems and components that are ruggedized, hard-wired and compatible with high average and peak powers.**
3. **Translation of designs into laser prototypes, document as required and assist in transfer to production.**
4. **Develop and characterize new 3C fiber designs that continue to expand its capabilities.**
5. **Contribute expertise to proposal writing and execution of advanced development activities associated with government or other customer sponsored projects.**

In this position, you will be part of a focused team headed by a VP of Engineering. The team will drive technology and design choices to create competitive advantage in product performance, cost and time to market. A strong technical background and experience developing state-of-the-art industrial-grade laser and fiber-optic products is preferred. We're seeking a highly motivated individual who is comfortable and excited about working in a start-up environment.

Qualifications:

- Ph.D. in Electrical Engineering or Physics with a concentration in optics and 3+ years of industrial experience in an R&D environment.
- M. Sc. with 7+ years of industrial experience will be considered.
- 2+ years of hands-on experience with high power fiber lasers and components including: dual-clad fiber lasers and amplifiers, pump combiners, LMA fiber, photonic crystal fiber, high-brightness pump diodes, combiners and isolators.
- Familiarity with standard fiber laser laboratory equipment including: optical spectrum analyzers, power meters, high-speed oscilloscopes, mode quality measurement tools, cleavers, splicers, recoaters, and polishers.
- Demonstrated understanding of the physics that limit fiber laser performance: SRS, SBS, SPM, surface and bulk damage, and thermal mechanisms.
- Experience with component evaluation and selection for prototype and production systems.
- Must be able to work effectively with suppliers.

Preferred:

- Experience with waveguide/fiber simulation software, raytracing software and Matlab.
- Experience with US government contracts and research programs.
- Experience with femtosecond lasers.
- Experience with lifetime and reliability measurements.