IPG Photonics is the leading developer and manufacturer of high-performance fiber lasers and amplifiers for diverse applications in numerous markets. IPG Photonics' diverse lines of low, medium and high-power lasers and amplifiers are used in materials processing, communications, entertainment, medical, biotechnology, scientific and advanced applications. Our products are displacing traditional technologies in many current applications and enabling new applications for lasers.

IPG's highly vertically-integrated development and manufacturing capabilities enable the Company to meet customer requirements, accelerate development, manage costs and improve component yields, while maintaining high performance and quality standards.

IPG is a global company with manufacturing facilities in the U.S., Germany, Russia and Italy, and regional sales offices in China, Japan, Korea, Taiwan, India, Turkey, Brazil, Mexico, Singapore, Spain, Poland, Czech Republic, Canada, and the United Kingdom. The Company sells its products globally to OEMs, system integrators and end users in a wide range of diverse markets that have the in-house engineering capability to integrate IPG's products into their own systems.

The Crystal Growth Engineer will be responsible for process development of new and old crystalline materials from melt. Utilize past experience with various crystal growth techniques such Czochralski, TSSG, Bridgeman, Kryopoulos, etc… for continuous process improvements striving for efficient process and reliable high quality product.

- Drive and direct several projects aimed to develop growth of novel optical and non-linear optical materials from melt.
- Capability to design and build respective equipment. Good understanding of relevant process controls and modelling principles.
- Assist, support and expand current production lines of non-linear single crystals i.e. non-linear borates.
- Routine evaluation and analysis of existing process controls that affect crystal quality. Making data driven decisions for the continuous improvement of the growth processes and ultimately the crystal product.
- Oversee the preventative maintenance of various furnaces and control equipment
- Comprehensive ability to trouble shoot equipment related issues.
- Drive starting material processing and analysis.
- Periodic review and reporting to team and upper management.
- Ability to manage/direct technicians

Requirements:

- Prefer 5 years of relevant crystal growth experience
- B.S. in Engineering Sciences or higher
- Hands-on experience in equipment design and operation

- High energy, self-motivated, positive attitude with strong communication skills and ability to interface effectively with coworkers of different backgrounds at every level of the company.
- Strong attention to detail.
- Must have ability to work effectively and take initiative with little continuous direct supervision.
- Must have a positive, professional, energetic, can-do attitude, impeccable work ethic.
- Ability to multitask and to handle multiple priorities in a fast-paced manufacturing environment.
- Excellent organizational skills

This position must meet Export Control compliance requirements, therefore a “US Person” as defined by 22C.F.R. §120.15 are required. “US Person” includes US Citizen, lawful permanent resident, refugee, asylee. License exception Technology and software under restriction (TSR) defined in 15 CFR 740.6 may permit person from Country Group B. https://www.bis.doc.gov/index.php/documents/regulation-docs/452-supplement-no-1-to-part-740-country-groups/file