



Senior Propulsion System Engineer - H/F – Permanent Position

****PRESENTATION****

ION-X is a start-up aiming to develop and commercialize a groundbreaking space propulsion technology for nano and micro-satellites.

The result of over 10 years of development within a leading-edge laboratory in this field, our technology offers exceptional performance and promises significant commercial opportunities. Our team of about twenty members has already conducted numerous tests on prototypes in our laboratory, confirming the disruptive potential of our technology and securing strong expressions of interest from European partners.

A first demonstration of our engine in orbit is scheduled for early 2025.

****DESCRIPTION****

We are looking for a motivated and talented Senior Propulsion System Engineer to take a critical role in driving the design, development, and lifecycle management of our electric propulsion systems.

As Senior Propulsion System Engineer, you will be responsible for setting ION-X's products specifications and ensure smooth execution from concept to product delivery phases. This role combines hands-on technical leadership with product management responsibilities to align the propulsion system roadmap with market needs and mission requirements.

Joining a dynamic and innovative environment, you will work closely with ION-X management and the technical teams based in Palaiseau (*in 2025, ION-X will move closer to Paris, yet still in the South of the Paris Area*).

You will lead the system activities, manage key stakeholders, and ensure that the propulsion system meets performance, reliability, and cost goals, ultimately delivering a product ready for spaceflight.

Your main responsibilities will include:

System activities coordination:

- Provide technical specifications for our propulsion products.
- Oversee the system architecture, simulation, and testing to deliver optimized performance.
- Ensure seamless integration of propulsion systems into satellite platforms by working closely with cross-functional teams (mechanical, electrical, thermal, and software).
- Drive validation and verification activities, including ground testing and environmental qualification for space applications.

Product Management:

- Define product requirements and specifications in collaboration with customers and internal stakeholders.
- Monitor and support the product roadmap with market trends, customer needs, and technological advancements.

Missions & Projects Management :

- Act as the primary technical point of contact for customers, presenting technical solutions and supporting commercial discussions.
- Coordinate the delivery of all development & product data packs.
- Drive missions studies & analysis in coordination with the sales department in order to answer customers' requests.

****PROFILE REQUIRED****

Must-Have Qualifications:

- Master's or PhD in Aerospace Engineering, Mechanical Engineering, or a related aerospace field.
- 5+ years of experience in propulsion system engineering, with a focus on electric propulsion (e.g., Hall Effect thrusters, ion thrusters, gridded ion or similar technologies).
- Proven expertise in developing flight-ready propulsion systems, including validation and qualification for space applications.
- Solid knowledge of spacecraft systems and integration processes.
- Decent understanding of high-voltage power electronics and propellant management systems.
- Experience with system modeling and analysis tools (e.g., ANSYS, COMSOL, or similar).
- Demonstrated ability to manage product development lifecycles, from initial concept to delivery.
- Strong interpersonal skills with experience working with cross-disciplinary engineering teams.
- Excellent communication and stakeholder management skills, with the ability to present technical and business concepts effectively.
- Proficiency in French language written & oral (min. C1).

Nice-to-Have Qualifications:

- Solid understanding of electrospray, plasma physics or ion emission.
- Experience working in cleanroom environments and conducting environmental testing (e.g., thermal vacuum, vibration testing, radiation testing campaign).
- Familiarity with New Space trends and small satellite platforms.

You are autonomous, detail-oriented, pragmatic, and proactive. You thrive in team environments and appreciate the opportunity to grow within an entrepreneurial and innovative setting.

****ROLE HIGHLIGHTS****

- Unique opportunity to contribute to the development of one of the most efficient space propulsion systems ever launched into orbit.
- Be part of an exciting entrepreneurial journey within a passionate team, based in one of the most advanced research hubs in France.
- A constant challenge with daily opportunities to learn, grow, and develop your skills.

To apply, please send your CV to:
Emmanuel Plier, COO
contact@ion-x.eu

