

## Electric Propulsion Engineer

Job ID	2414
Contract Type	Permanent
Location	Tokyo
Apply from	Overseas OK (Relocate to Japan)
Work type	Hybrid
Japanese Level	Not required
English Level	Business
Salary	Yearly JPY 5.0 M to JPY 8.0 M
Skills	Mechanical Engineering, Propulsipn
About the company	<p>We are a solution provider with its own SAR (Synthetic Aperture Radar) satellite constellation.</p> <p>It constructs and operates a constellation through the development and operation of small SAR satellites, generating and providing data. Using proprietary data analysis capabilities, we offer data-driven solutions to various global challenges.</p> <p>Our main business activities include the operation of a satellite constellation through the development, manufacturing, and launch of small SAR satellites and related systems. This encompasses the sale of acquired data and the development and sale of data analysis solutions.</p>
Roles and Responsibility	<p>We are looking for a talented and motivated new colleague to join our Software Team. Our team is responsible for the design, development, testing and maintenance of the embedded software running inside our satellites. We are a small team where control engineers and embedded software engineers work closely together.</p> <p>The Onboard Software Team is part of the Satellite System Development Dept. No1, which is responsible for the development of the satellite system.</p> <p><b>Responsibility:</b> Satellite propulsion system analysis, design, testing and maintenance.</p> <p><b>Details of work:</b></p> <ul style="list-style-type: none"> <li>• Conduct mission analysis to size the thrusters and select appropriate suppliers.</li> <li>• Integrate the thrusters into the satellite's Concept of Operations (CONOPS): clarify the nominal operation modes, safe modes, etc.</li> <li>• Work with other design teams (structure, thermal, avionics, operations, etc.) to integrate the thrusters in the satellite design.</li> <li>• Assist the testing and validation of the thrusters during the satellite's Assembly Integration and Testing (AIT) process.</li> <li>• Design the flight software application to control the thrusters: nominal operation, checkout/calibration, Fault Analysis Isolation and Recovery (FDIR). etc.</li> <li>• Work closely with the embedded software engineers to integrate the thruster control application into the rest of the flight software.</li> <li>• Create and maintain simulation models of the thrusters to use in the simulation environment (Model In the Loop Simulation (MILS), Hardware In the Loop Simulation (HILS)).</li> <li>• Take part in the launch campaign: design the checkout procedure and provide support to the Operation team to execute the checkout.</li> <li>• After launch, assist the operation team to monitor and maintain the propulsion system.</li> </ul>

	<ul style="list-style-type: none"> <li>Interact with the supplier to ensure that the correct components are delivered on time, prepare the thruster operation, follow up on any anomaly, etc.</li> </ul> <p><b>Selling points of this role:</b></p> <ul style="list-style-type: none"> <li>Great opportunity for growth as an engineer.</li> <li>See the complete lifecycle of a satellite, from the early design to the launch and in-orbit operation.</li> <li>Work in an international team.</li> <li>Take ownership of the propulsion system both at the hardware and software level.</li> </ul>
Minimum Qualification	<ul style="list-style-type: none"> <li>Bachelor's degree in Mechanical Engineering, Aerospace Engineering, Control Engineering or Electrical Engineering. We will consider an equivalent combination of relevant education and/or experience.</li> <li>At least 3 years of hands-on experience with Spacecraft's electric propulsion systems.</li> <li>Strong knowledge of electric propulsion system design, development, testing and control.</li> <li>Strong analytical and communication skills.</li> <li>Willingness to travel to Synspec's factory (Yamato-city) on business trips several times a year.</li> </ul>
Preferred Qualification	<ul style="list-style-type: none"> <li>Experience with the design, implementation and testing of control algorithms using MATLAB/Simulink/Stateflow.</li> <li>Experience in modeling physical components using MATLAB/Simulink/Simscape</li> <li>Experience in model identification</li> </ul>
Conditions/ Benefits	<p><b>Employment system:</b> Permanent  <b>Location:</b> Kiyosumi Shirakawa, Tokyo  <b>Annual Salary:</b> 5M ~ 8M JPY</p> <ul style="list-style-type: none"> <li>Based on experience, ability, and previous work experience</li> <li>Personnel evaluation system every 6 months</li> </ul> <p><b>Hours:</b> Flextime system</p> <ul style="list-style-type: none"> <li>Core time from 11:00 - 15:00</li> <li>2 days off a week (weekends) including Japanese public holidays</li> <li>10 days of paid time leave granted first year with an increment of 1 day every following year (ex. 11 days in the second year) up to a maximum in accordance with Japan's labor laws.</li> </ul> <p><b>Probation:</b> 3 months  <b>Benefits:</b></p> <ul style="list-style-type: none"> <li>Language learning support (Up to 30,000 yen /month)</li> <li>Employee stock option</li> <li>Job-related learning expenses covered</li> <li>Side business allowed</li> <li>Social insurance and annual medical check</li> <li>Maternity and childcare leave</li> <li>No dress code</li> <li>No smoking on the premises (outdoor or indoor smoking areas available)</li> </ul>
Interview Process	<ol style="list-style-type: none"> <li>Application Screening</li> <li>1st Interview</li> <li>2nd Interview</li> <li>3rd Interview</li> <li>Offer</li> </ol> <p>※ This process is subject to change.</p>
How to Apply	Please send your resume and a cover letter detailing why you believe you are a strong fit for this position to <a href="mailto:asif.matservices@gmail.com">asif.matservices@gmail.com</a>