

Job Description for Professional Posts

Reference:NA2024/12

Position and Grade:	Associate Molecular Biologist, P2
Organizational Unit:	Insect Pest Control Laboratory Insect Pest Control Section Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture
Duty Station:	Seibersdorf
Type/Duration of Appointment:	FT – JPO, 1 year

Organizational Setting

The Department of Nuclear Sciences and Applications implements the IAEA's Major Programme 2, "Nuclear Techniques for Development and Environmental Protection". This Major Programme comprises individual programmes on food and agriculture, human health, water resources, environment and radiation technologies. These programmes are supported by laboratories in Seibersdorf, Monaco and Vienna. The Major Programme's objective is to enhance the capacity of Member States to meet basic human needs and to assess and manage the marine and terrestrial environments through the use of nuclear and isotopic techniques in sustainable development programmes.

The Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture assists Member States of the Food and Agriculture Organization of the United Nations (FAO) and the IAEA in using nuclear techniques and related technologies to improve food security, alleviate poverty and promote sustainable agriculture. The Joint Centre consists of five Sections, each with an associated laboratory (located in Seibersdorf, 45 km south-east of Vienna), in the areas of: animal production and health; plant breeding and genetics; insect pest control; soil and water management and crop nutrition; and food and environmental protection.

The Insect Pest Control Section and Laboratory assist Member States with the development, dissemination and transfer of sterile insect and related environmentally friendly technologies for the area-wide integrated suppression, containment or eradication of major insect pests affecting crops, livestock and human health.

Main Purpose

The Associate Molecular Biologist will be assisting, under the supervision of the Genetics and Molecular Biology Group of the Insect Pest Control Laboratory (IPCL), activities related to the isolation and characterization of selectable markers suitable for the development of genetic sexing strains for SIT target insect pest species.

Role

The Associate Molecular Biologist is: (i) a researcher on insect genetics and molecular biology for the development and characterization of genetic sexing strains for SIT applications; (ii) an analyst to statistically analyse the data generated and (iii) a writer of scientific papers for submission to peer reviewed journals.

Partnerships

The Associate Molecular Biologist will work under the supervision of the Head of the Insect Pest Control Laboratory and the Leader of the Genetics and Molecular Biology Group, and s/he will collaborate with the other members of the Insect Pest Control Laboratory (IPCL) (staff, visiting scientists, interns, and fellows), with the members of the IPC Section, and with staff of the Department of Technical Cooperation.

Functions / Key Results Expected

- Designs and implements relevant experiments.
- Conducts laboratory research on the isolation and characterization of selectable markers.
- Conducts laboratory research on the development and characterization of genetic sexing strains.
- Evaluates data and performs statistical analysis.
- Contributes to peer-reviewed publication and reports documenting R&D findings.
- Contributes to the development of protocols.
- Assists with other activities of the IPCL in relation to CRP and TC projects on SIT.

Competencies and Expertise (do not revise or edit)

Core Competencies		
Competence	Occupational Role	Behavioural Indicator
Communication	Individual Contributor	Communicates orally and in writing in a clear, concise and impartial manner. Takes time to listen and understand the perspective of others and proposes solutions.
Achieving Results	Individual Contributor	Takes initiative in defining realistic outputs and clarifying roles, responsibilities and expected results in the context of the Department/Division's programme. Evaluates his/her results realistically, drawing conclusions from lessons learned.
Teamwork	Individual Contributor	Actively contributes to achieving team results. Supports team decisions.
Planning and Organizing	Individual Contributor	Plans and organizes his/her own work in support of achieving the team or Section's priorities. Takes into account potential changes and proposes contingency plans.

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Functional Competencies		
Competence	Occupational Role	Behavioural Indicator
Analytical thinking	Associate	Gathers and analyses information, identifying critical relationships and patterns among data and proposes workable solutions.
Technical/ Scientific credibility	Associate	Acquires and applies new skills to remain up to date in his/her area of expertise. Reliably applies knowledge of basic technical/ scientific methods and concepts
Knowledge sharing and learning	Associate	Actively seeks opportunities to learn by formal and informal means; learns from others, adopting and sharing best practice

Expertise	
Expertise	Description
Insect Pest Control	Knowledge on the sterile insect technique for insect pests

Education, Experience and Language Skills

- University degree in biology, genetics, molecular biology, or a related field. An advanced degree in insect genetics and molecular biology, or a related field would be an asset.
- Minimum two years' experience in insect genetics and molecular biology required.
- Excellent oral and written command of English. Knowledge of other official IAEA languages (Arabic, Chinese, French, Russian and Spanish) would be an asset.

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