



Proceso selectivo para ingreso, por el sistema de acceso libre, en la Escala de Tecnólogos de los Organismos Públicos de Investigación, convocado por Resolución de 21 de febrero de 2023. BOE nº 47 del 24 de febrero de 2023.

Tribunal N°12

**Área Global 9. Tecnología Aeroespacial, Naval y de Defensa
Especialidad T7: Materiales, estructuras y combustibles aeronáuticos. INTA
Segundo Ejercicio de la fase de Oposición**

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CASE NO. 1

The Technology Alert Department is getting started to study materials from flying objects intercepted and confiscated by the Army. In facilities of the highest level and restricted access, it is necessary, among other laboratories, to implement a Laboratory for Microstructural Characterization. The objective of this laboratory is to carry out an exhaustive analysis of the microstructure and composition of the materials of which these objects are manufactured, to evaluate the state of technological development of these manufacturers. It is necessary to define: the facilities in terms of size, distribution, and specific equipment for this purpose. Please, you must establish the essential staff to carry out this activity and its qualification. On the other hand, you must estimate, approximately, the cost of the necessary equipment.

You must set work deadlines based on the flow of operations needed for a complete analysis.

Do you consider any auxiliary equipment to improve work efficiency?

CASE NO. 2

There is a need to set up a laboratory for the physico-chemical characterisation and quality assessment of functional products (fuels, lubricants, hydraulic fluids) purchased, stored and used by a given entity.

In this context, the following points should be developed:

- Location of the enclosure, plans and space requirements and environmental conditions.
- Equipment distribution and service networks.
- Laboratory information management system.
- Staffing requirements.
- Rules and procedures for functioning and operation in accordance with the regulations applicable to this type of product.
- Storage of raw materials and wastes.
- Safety and occupational risk prevention measures.
- Applicable regulations for accreditation of the testing laboratory to achieve high quality standards.