

A Turkish SME is seeking project partners from universities, research institutions, or industrial organizations to collaborate on the development of NiCrCo-based alloys for IRASME call

Summary

Profile type

Research & Development Request

Company's country

Türkiye

POD reference

RDRTR20250321004

Profile status

PUBLISHED

Type of partnership

**Research and development
cooperation agreement**

Targeted countries

- **Austria**
- **Brazil**
- **Germany**
- **Czechia**
- **Belgium**
- **Luxembourg**

Contact Person

[Enrico FRANZIN](#)

Term of validity

21 Mar 2025

21 Mar 2026

Last update

21 Mar 2025

General Information

Short summary

The project aims to focus on the development of NiCrCo-based alloys, with an emphasis on alloy design, as well as involvement in production and comprehensive characterization processes.

Potential partners with expertise in materials development, casting or powder production, and characterization techniques (e.g., chemical analysis, microstructural evaluation, mechanical and corrosion testing) are invited to collaborate within the framework of transnational R&D cooperation.

Full description

The IraSME call supports project applications focused on basic research, research and development, and the creation of technologically new or improved products.

A Turkish SME is designing a project aimed at the development of a NiCrCo-based alloy and the laboratory-scale investigation of its properties. These alloys have a wide range of potential applications. The project specifically

targets the development of a high entropy alloy as an alternative to conventional nickel-based superalloys, utilizing computational materials engineering technologies in a numerical modeling environment.

The SME is seeking partners from IraSME participating countries with the capability to carry out casting or laboratory-scale powder production of the alloy.

Advantages and innovations

Alloy development activities will be carried out using computational materials engineering technologies.

-A high entropy alloy will be developed as an alternative to NiCrCo based superalloys.

Technical specification or expertise sought

Infrastructure and knowledge on production (atomization in casting or laboratory performance)

Infrastructure and knowledge on characterization (microstructure and mechanical properties)

Stage of development

Under development

Sustainable Development goals

• **Goal 9: Industry, Innovation and Infrastructure**

IPR Status

No IPR applied

IPR Notes

Partner Sought

Expected role of the partner

The SME is seeking partners from IraSME participating countries with the capability to carry out casting or laboratory-scale powder production of the alloy.

Type of partnership

Type and size of the partner

Research and development cooperation agreement

- SME 50 - 249
- SME <=10
- SME 11-49
- R&D Institution
- University

Call Details

Framework program

Innovation in SMEs

Call title and identifier

IRASME

Submission and evaluation scheme

Anticipated project budget

Coordinator required

No

Deadline for EoI

26 Mar 2025

Deadline of the call

26 Mar 2025

Project duration in weeks

Web link to the call

Project title and acronym

Dissemination

Technology keywords

- **02007010 - Metals and Alloys**

Targeted countries

- **Austria**
- **Brazil**
- **Germany**
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Market keywords

- **08005 - Other Industrial Products (not elsewhere classified)**

Sector groups involved

- **Energy-Intensive Industries**