CALL FOR EXPRESSIONS OF INTEREST

TECHNOLOGY VALIDATION AND COMMERCIAL TRIALS OF LIPID-BASED MICROENCAPSULATION TECHNOLOGY FOR LACTOFERRIN

CLOSING DATE FOR APPLICATIONS: 31 AUGUST 2026

The Council for Scientific and Industrial Research (CSIR) is seeking partners to conduct technology validation, commercial trials and license a benign encapsulation technology for lactoferrin using supercritical carbon dioxide, in a solvent-free, low-temperature environment. Co-development for product differentiation can also be undertaken where necessary. The technology is designed to enhance the therapeutic benefit of lactoferrin by achieving the following:

1. **Increased shelf-stability** (reduced losses),
2. **Targeted release** (enhanced efficacy, differentiated claims)
3. **High loading** (20 wt%, ~90% efficiency for lower formulation cost)
4. **De-risked platform** (validated on sensitive bioactives (probiotics)

The technology is suitable for application in nutraceuticals and dietary supplements, functional foods and beverages, animal health (including gut health and immune support) and where specialised protection and targeted release are required.

The CSIR has both a laboratory and a pilot-scale encapsulation facility (maximum capacity of 20 kg/day), for formulation development and optimisation as well as toll manufacturing for field trials.

The final product (encapsulated sensitive active) is in powder form (particle size: 40 – 60 μm), ready for integration into existing product lines. The licenced technology will enable tailored solutions for specific performance criteria.

WHO CAN APPLY?

Entrepreneurs/organisations that:

- Have the resources and motivation to commercialise the technology;
- Have relevant industry knowledge and experience;
- Have demonstrated good business acumen and strategy; and
- Are willing to invest financially or are able to source funding from either the public or private sectors.

WHAT TO SUBMIT?

All submissions should:

- Provide a brief description of the company's core business;
- Demonstrate relevant industry knowledge and experience;
- Briefly describe the applicant's suggested approach for the commercialisation of the
- Technology; and
- Demonstrate the applicant's willingness to invest financially or source funding for
- commercialisation, should that be required.

APPLICANTS MUST ALSO ATTACH:

- Audited/independently reviewed financial statements;
- A valid tax clearance certificate for companies operating in South Africa;
- A valid BBBEE certificate;
- Brief CVs (one page preferred) of the team members who will drive the commercialisation of the product(s); and
- Company registration documents.

Failure to provide the required documents or motivation may negatively affect the assessment of the application.

FOR MORE INFORMATION, PLEASE CONTACT: ONKEMETSE MOSETLHE

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