
CSIR Advanced Materials and Manufacturing Call for Expression of Interest

EXPRESSION OF INTEREST: COLLABORATION OPPORTUNITY IN METAL INJECTION MOULDING TECHNOLOGY

The Council for Scientific and Industrial Research (CSIR), through its Advanced Materials and Manufacturing (AMM) impact area within the CSIR Future Production: Manufacturing cluster, invites Expressions of Interest from small, medium and micro-sized enterprises (SMMEs), as well as established industries, to engage in manufacturing activities related to product development and/or prototyping based on Metal Injection Moulding (MIM) technology.

Background

The AMM group has established capabilities in advanced materials processing and development, with a focus on high-value manufacturing processes involving specialty metals and alloys. Among the group's established capabilities are design and analysis, advanced casting and powder metallurgy technologies. These capabilities are supported by fully equipped metallurgical analysis and mechanical testing facilities.

Metal Injection Moulding (MIM) is one of the group's key technology platforms and represents a fast-growing commercial segment within the global powder metallurgy market. The CSIR Metal Injection Moulding facility integrates tooling design and manufacturing with the production of complex metal parts to high precision and a wide range of metallic alloys (<60g) that can be processed via the MIM process. The MIM process also enables geometric freedom, allowing multiple parts to be redesigned as a single component where feasible, thereby reducing part count, assembly requirements, and overall manufacturing complexity. MIM components offer high dimensional accuracy and excellent surface finish, making the technology suitable for medium-to-high volume production in industries such as:

- Automotive;
- Defence;
- Medical devices;
- Aerospace;
- Electronics; and
- Jewelry.

The CSIR has successfully demonstrated the manufacturing of prototype MIM components using well-known industrial alloys, including:

- Stainless steels (17-4 PH and 316L); and
- Titanium alloys (Ti6Al4V, Ti6Al7Nb).

Prototype parts developed to date include:

- Commercial fishhooks;
- Dental implant holders;
- Corporate cufflinks and tie-clips;
- Pressure actuators for firearm assembly; and
- Bicycle brake calipers.



a) Commercial Fishhooks



b) Dental implant holder



c) Surgical scissors



d) Bicycle brake calipers



e) Turbo charge impeller



f) Tensile test specimens

Figure 1: CSIR produced MIM prototype components

These developments showcase the potential for MIM to support product development and local manufacturing.

Intent of the EoI

The CSIR seeks to identify and partner with SMMEs that:

- Are interested in adopting MIM technology or expanding into MIM-based manufacturing;
- Have ideas for potential products suitable for localization using MIM, and potential market access;
- Require technical support for prototyping MIM products and scaling up processes; and
- Aim to localize production of current products, reduce imports and achieve sustainable manufacturing.

The long-term objective is to drive **local industrialisation, grow advanced manufacturing capabilities** and create jobs through the commercialization of CSIR-developed MIM technology and associated capabilities.

This call does **not** include direct financial support or equipment procurement for enterprise development. However, it does offer:

- Access to the CSIR's technical capabilities in MIM;
- Prototyping support for products of interest; and
- Guidance on MIM technology commercialization or localization.

Submission requirements

Interested SMMEs should submit:

- A brief company profile;
- A description of intended MIM product(s) and their application(s);
- Motivation for participation and expected outcomes; and
- Any relevant experience or available manufacturing capacity.

To apply, please complete the attached EoI form and provide the following supporting documentation:

- PDF versions of completed forms;
- Curricula Vitae (CVs) of relevant company personnel;
- Broad-Based Black Economic Empowerment (BBEEE) certificate/affidavit;
- Proof of compliant tax status; and

- Proof of Companies and Intellectual Property Commission (CIPC) registration.

Supporting documentation must be emailed to: mseerane@csir.co.za.

Please use the following naming convention for attached documents:

Application	CVs, certificates and so forth
Name of Enterprise_EOI- May 2026	Name of Enterprise_CV Jane Doe_Aug 2026, Name of Enterprise_CIPC Proof of Registration_Aug 2026

Selection criteria: A

Criterion	What will be assessed	Weight (%)
Product opportunity	<i>Potential of the proposed product for localisation, import replacement or new product development using MIM.</i>	35
Market potential	<i>Evidence of customer demand, identified market or commercial opportunity in South Africa or export markets.</i>	25
Innovation and technical fit	<i>Suitability of the proposed product for MIM technology and the level of innovation.</i>	15
Capability and team	<i>Relevant technical, manufacturing, engineering or business expertise within the enterprise. Previous MIM experience is not required.</i>	10
Growth and job creation	<i>Potential to create employment, grow the business and contribute to local industrialisation.</i>	5
Transformation	<i>Contribution to inclusive economic participation in line with national transformation objectives, including B-BBEE and designated</i>	5

Exclusionary criteria:

- Applicants must be registered with the CIPC, and proof of registration must be provided.
- Applications not accompanied by CVs will be excluded;
- Applications not accompanied by a B-BBEE certificate will be excluded;
- Applications not accompanied by proof of tax-compliant status will be excluded;
- Applications sent to any email address other than mseerane@csir.co.za will be excluded;
- Closing date for applications: **30 September 2026, 16:30**. No late submissions will be considered; and

- If confirmation of receipt of the Eol is not received within 72 working hours, the application has not been received and will not be eligible.

For more information, please contact: (NB: email subject title: Eol: CSIR MIM Technology)

Contact: Mandy Madigoe (MIM Technical Specialist)

Email: mseerane@csir.co.za

Tel: +27 12 841 2547 / Cell: +27 72 890 4469

Successful applicants may be invited to attend a detailed interview

Closing date for applications: 30 September 2026

Expression of Interest (Eol) form

Please email PDF versions of completed submission forms to: mseerane@csir.co.za

Company name				
CIPC registration number				
Contact person(s)	Name and surname: Position in company:			
Contact details	Email: Landline: Cell number: Physical address: Postal address:			
Ownership arrangement		Demographic		Gender
		Black	White	M F
Years in business				
Annual revenue (if any)				

Number of current employees	Permanent		Temporary	
Applicable manufacturing sector (e.g., automotive, medical, aerospace, etc)				
B-BEEE status level			Attach certificate/affidavit	
Date of application				
1. Describe your core business and whether you are currently manufacturing and/or selling products				
Core business:				
Current status of manufacture and scale of manufacturing:				
2. Describe your understanding of the potential market for the MIM process and related components				
3. Please attach short resumes/CVs (one page each) of key personnel in your company				

10. MANDATORY DOCUMENT CHECKLIST	Mark with an X
CIPC registration document	
B-BBEE certificate or affidavit	
CVs of key team members	
Proof of compliant tax status	