



BAOSTEEL-AUSTRALIA
JOINT RESEARCH AND DEVELOPMENT CENTRE

BAJC PROJECT PROPOSAL GUIDELINES 2024

CONTACT INFORMATION

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Closing date: Friday 6th September 2024

Application must be submitted to BAJC to admin@bajc.org.au in **WORD FORMAT**
by Friday 6th September 2024.

Application submitted after the deadline date or not using the BAJC Funding Application Form
may be declined.

GENERAL INFORMATION

BACKGROUND

Baosteel Australia Joint Research and Development Centre (BAJC) is a joint venture between Baoshan Iron and Steel Co., Ltd., also known as Baosteel, and five Australian universities - The University of Queensland, The University of New South Wales, Monash University and University of Wollongong and Deakin University. Baosteel is one of the most competitive steel manufacturers in the world located in Shanghai, a core subsidiary of China Baowu Steel Group Corporation (the world's largest steel conglomerate). BAJC is located in School of Chemical Engineering, the University of Queensland. Baosteel provides funding for BAJC to conduct fundamental research and joint industrial technology research, aiming to develop innovative science and technologies in areas of interest to Baosteel and aligned with the research capacities of the participant universities.

BAJC has been successfully operated over 10 years since 2011. BAJC is managing the Baosteel funded projects, including organizing the project application. In 2024, Baosteel will provide funding support up to \$2,000,000 for research projects on a competitive basis. The approved projects in 2024 will be commenced on 1 January 2025.

RESEARCH PRIORITY THEMES

Baosteel Funding Program 2024 will address research areas that deliver the highest R&D impact for Baosteel to reduce the commercial risk and validate environmental and technical performance in innovative science and technologies. BAJC aims to support research strengths of participant universities through collaborative research work, to meet the sustainable and strategic needs of both Baosteel and participant universities.

The priority themes for projects to be commenced on 1st January 2025, are:

1. Advanced Steel Materials and Processes
 - Basic sciences and technologies for the design, characterization, surface engineering and application of advanced steels.
 - Advanced technologies to reduce costs, improve quality of products and enhance energy efficiency for ironmaking, steelmaking, hot rolling and other associated processes.
2. Novel Green Steel Technologies
 - The green and efficient utilization of fossil fuels for decarbonization in steel industry.
 - Application of hydrogen and biomass for replacement of fossil fuels in ironmaking and steelmaking.
 - Novel technologies of energy transition replacing carbon and/or carbon associated chemical energy with electric and other renewable energies.
 - Other energy-saving and environment-friendly technologies for steel production.
3. Digital and Smart Controlling and Optimizing Technologies for Steel Industry
 - Novel and advanced numerical simulation and modelling of metallurgical processes.
 - Digital design of materials (e.g., alloys, light metals etc.) and intelligent prediction and characterization of the mechanical properties of the materials.
 - Smart industrial software and programmable logic controller (PLC) used for steel industry.
4. Non-steel Materials
 - Design and processing technologies for light metals (Al, Ti, Mg).
 - Other advanced non-steel materials.

The projects will be funded by the Baosteel Funding Program 2024 in two streams:

- The first stream comprises research projects that are driven by the existing or future opportunities and challenges identified by Baosteel (or the parent companies of China Baowu Group).
- The second stream comprises seed funding of up to \$50k for one year for exploratory projects to test early-stage concepts in the priority areas. There may be opportunities for such exploratory projects to be adopted as a research project in future funding rounds of BAJC, subject to the outcomes from the exploratory projects.

RESEARCH PROJECT PROPOSAL

The selection of application follows a two-stage application process - Expression of Interest (EOI) and full Proposal. This Guidelines are for the invited full Project Proposal application 2024.

The full proposals should be developed based on built ties between research teams in Baosteel and participating universities. All proposals will be evaluated by a selection of committee within Baosteel. If necessary, Baosteel will seek comments from the Technical Advisory Panel (TAP) and the Independent Expert Reviewers who are recommended by TAP. Baosteel may also arrange interviews with the research team consisting of CIs and PIs if necessary.

If the project proposal is selected and a scope of budget is agreed with Baosteel, the proposal will be recommended to BAJC Board for approval of funding.

Projects generally will be funded over three-year timeframes (except for so-called seed project that will be supported only one year), which may start from 1st January 2024. As required by Baosteel, each project must have a RHD student participating in the project throughout the funding period. The nominated RHD student should be supported with a full scholarship from the participating university or has a top-up funding to match the full scholarship by any funding other than BAJC Project Fund.

Eligibility for BAJC project funding requires that:

- Proposals must be submitted by a lead (or the first-named) Chief Investigator (CI);
- Lead CIs of current BAJC projects may be included in proposals as Associate Investigators (AIs);
- Both CI(s) and AI(s) must be from one of the participating institutions of the BAJC;
- Proposals must include Partner Investigator(s) (PIs) from Baosteel and certified by the PIs;
- A lead (first-named) CI may only hold ONE on-going BAJC project at any time;
- One lead (first-named) CI can only submit ONE proposal.

RESEARCH PROJECT BUDGET

- A project budget is required in the format specified in the project proposal (separately issued).
- The amount of funding support from Baosteel to an individual research project is around \$100k - \$150k AUD per year.
- Uncommitted Baosteel funding of the project, if it is approved, may be used to apply additional funding opportunities, such as ARC Linkage grant.
- The funding must be applied in accordance with the project budgets for the purpose of carrying out the project.
- The funding must NOT be applied to the purchase or upgrade of capital equipment without prior written approval of the Centre Board.
- The project budget must provide justification of budgeted costs.
- The Centre Board may approve the project budget recommended by Baosteel.

For budgeting purposes, please be advised that the funding rule on overheads may vary depending on the funding sources and policies in the different participating universities. Typically, the participating universities will charge appropriate overheads from BAJC supported projects. The overhead is not applicable in a Linkage project, in which,

BAJC funding being the industry contribution to the project (the overhead component of BAJC Baosteel funding budget becomes available as project fund).

The actual amount of Baosteel funding available for leveraging may vary, depending on the scheme funding rules. It generally only available to the **uncommitted** part of Baosteel funding at the time the leveraged project granted.

The decision of utilizing BAJC project funds for leveraging purpose is at the discretion of the project lead CI, who is responsible for project in compliance with the granting agency rules and the BAJC Agreement.

BUDGET GUIDANCE

Please follow below guidelines for reference (exceptional situations require full justification):

Personnel: The standard base rates for personnel for Baosteel cash funding may be considered as follows:

1. Baosteel Postdoctoral Research Fellowships: Base salary A\$96,273 at Level A06 in 2024 and upwards (refer to UQ academic staff salaries)
2. Baosteel Research Assistants: Base salary A\$64,963 at HEW 3-1 in 2024 and upwards (refer to UQ Professional research staff salaries)
3. Baosteel Research Technicians: Base salary \$64,963 at HEW 3-1 in 2024 and upwards (refer to UQ Professional research staff salaries)
4. Baosteel PhD scholarships at A\$35,000 in 2024 (2024 rate) (refer to UQ Graduate School Scholarships)
 - Excluding scholarships, on-costs of 30% should be applied to the base salary. These contribute to e.g., payroll tax, workers' compensation, leave loading, long-service leave, non-contributory and contributory superannuation. Items such as extended leave and severance pay are NOT included.
 - Excluding scholarships, 40% indirect cost should be applied to the total personnel cost of the project (including base salary plus related on-costs). These contribute to the office space, information technology services, research and finance administration and utilities cost.
 - The Personnel cost may be subject to increments or indexation in accordance with the university's policy.
 - Excluding scholarships, the budget for Personnel cost therefore is subject to the following calculations: base salary \times FTE amount \times annual increment \times 1.3 (on-cost) \times 1.4 (indirect cost).

Capital equipment: The BAJC fund generally is not for sourcing capital equipment. Expenditures for capital equipment (more than \$5,000) are to be made with the express written permission of the Centre Board.

Operating and other costs: BAJC Baosteel Funding provides for these costs below:

1. 40% indirect cost should be applied to the total operating and other costs.
2. The budget for Operating and other costs is therefore subject to the following calculation: operating and other costs \times 1.4.

Travel: BAJC Baosteel funding provides limited support for travel directly associated with research projects. This cost should be included in the project budget:

1. Travel and fees for general conferences are not supported.
2. Travel to attend the BAJC workshops/meetings at Baosteel is supported up to a maximum of \$8,000 per year for the whole project team.
3. Travel for the specific purpose of conducting the project is supported, e.g., to access equipment at Baosteel or elsewhere.
4. A travel for primary CI to present the Project Closure Workshop at Baosteel is supported, including the return economy airfare and associated costs. The Project Closure Workshop is compulsory to close the project when the project is completed and will be conducted within 3-5 months following the accomplishment date of project.
5. 40% indirect cost should be applied to the total travel costs.
6. The budget for Travel cost is therefore subject to the following calculation: travel cost \times 1.4.

For clarity, the indirect cost budgeted is not available for the CI's use for the performance of the project.

CONTRIBUTIONS TO THE PROJECT TOTAL COST

BAJC Baosteel Funding will provide project funding towards to meeting the budgeted costs of approved projects. Participating Universities may make cash or in-kind contributions towards to the total cost of the project. Cash contributions by participating universities will need to be allocated to BAJC for subsequent distribution.

BAJC Funding Budget Calculator is provided for reference and convenience in preparing the project budget separately. All in-kind contributions must be reflected in the approved project budget.

Possible in-kind contributions are shown in the following Table, which may not be all-inclusive. The primary objective supporting the in-kind contributions from the Participating Universities and Baosteel is to ensure that the available support is adequate for the successful completion of each project and that the Participating Universities contributions are in accordance with the relevant project budget, aims and research plan contained in the relevant project.

In-kind contributions are essential to the conduct of a project, which stands for the support of participant institutions and is also recognized in evaluating the total value of cash and in-kind contributions to account for the commercialisation income shares for Baosteel and any participating universities. Generally, the value of in-kind contributions should reflect current market values.

In-kind contributions to a project may include scientific liaison and management, direct technical support, or unique access to reagents or equipment.

It is desirable to receive BAJC project funding that at least one RHD student participating in the project throughout the funding period. The nominated RHD student should be supported with a full scholarship from the participating university or has a top-up funding to match the full scholarship by any funding other than BAJC Project Fund. Examples are, a scholarship provided by the university, or leveraged funding e.g., ARC Linkage Program, or overseas scholarship. This funding where appropriate may be counted as in-kind contributions by the Participating University to the relevant Project.

In-kind Category	Accepted	Not Accepted
<i>Access to unique databases</i>	<i>Incremental costs of access</i>	<i>Cost of collecting the database</i>
<i>Analytical and other services</i>	<i>Internal rates</i>	<i>Commercial rates</i>
	<i>Incremental cost of providing service</i>	
<i>Equipment</i>	<i>Contributed – Used</i> <i>- fair market value</i> <i>- company book value</i> <i>- price for internal transfers</i>	<i>List or discounted list price</i> <i>Rental equivalents exceeding accepted values had the equipment been donated or sold</i>
	<i>Contributed - New</i> <i>- selling price to most favoured customer (if stock item)</i> <i>- cost of manufacture (if one of a kind)</i> <i>- cost of purchase</i>	<i>Development costs</i>
	<i>Lent</i> <i>- rental equivalent based on depreciation</i> <i>- rental rate equivalent to highest-volume user</i>	
	<i>Sold</i> <i>- difference between discounted price and selling price to most favoured customer</i>	
<i>Materials</i>	<i>Unit cost of production for commercial products</i> <i>Selling price to most favoured customer</i> <i>Price for internal transfers</i> <i>Cost of production of prototype and samples</i>	<i>Development costs (unless they are an integral part of the proposed project)</i>

In-kind Category	Accepted	Not Accepted
Salaries	The direct salary cost of the researchers engaged in the project 30% on-costs, based on the direct salary 60% overhead based on the direct salary	External charge-out or consultant rates Costs relating to administrative support since overhead has been included in salary costs
Contributed software	Copying costs Licensing cost Documentation cost Cost of training and support of software Cost of equivalent commercial product (where donated software is not commercially available)	Development costs
Travel	Travel costs associated with fieldwork Travel costs to meet with university personnel & by BAJC participant staff Conference travel for university staff	
Use of facilities	Internal rates for logistical support and travel allowance for university personnel working on university premises or on fieldwork. Internal rates for use of specialized equipment by university personnel or use of process or production lines Internal rates for value of lost production resulting from down time	Use of equipment by university personnel. Space for BAJC Participant activities outside the scope of the specific Proposal Equivalent commercial rates
Background IPR	The value agreed by the parties in a project proposal or otherwise in writing.	N/A

ASSESSMENT

Assessment of project proposals is undertaken by Baosteel through a selection committee consisting of industrial experts and Baosteel's representatives of BAJC Technical Advisory Panel (TAP). Baosteel may seek recommendations from TAP and/or independent reviewers. Baosteel may also arrange an interview with the team consisting of CIs and PIs if necessary. Independent Reviewers if applicable will be invited by Baosteel through BAJC with recommendations from TAP. Baosteel make recommendations to BAJC Board through below process:

- assess if a project proposal satisfies the eligibility criteria set out in the Funding Guidelines;
- identify if any other possible issues that may influence the project not being approved for funding;
- seek external expert assessment (under confidentiality) when it is necessary;
- rank proposal based on its content, assessors' reports, and response to assessment reports;
- provide assessments and available funding amount to projects.

Value for money outcome is a key consideration in the evaluation of project proposals. In addition, the following factors are important considerations in the evaluation of project proposals:

- outstanding proven performance
- evidence of active cooperation
- state-of-the-art facilities
- stable team

The assessment criteria are shown in below table:

Assessment Criteria	Maximum Score
(a) Innovation and strategic alignment with Research Priority Themes: The extent to which the proposed research is innovative and strategically aligned	25%
(b) Approach and methodology: The extent to which the project is proposed with a solid theoretical and technical base	25%

(c) Deliverable and achievable outcomes: The extent to which the application is well planned with clear milestones and will deliver clear and achievable outcomes with high Technology Readiness Level (TRL)	20%
(d) Research team and associated track records The relevance and quality of the track record of the Project Leaders, particularly outcomes made from past BAJC project if applicable.	20%
(e) Value for money The extent to which the requested funding is justified and provides value for money against deliverables and TRL.	10%

POST-SELECTION FEEDBACK

Unsuccessful applicants for project funding may seek feedback from Baosteel via BAJC management.

Detailed scoring information will NOT be provided. BAJC may provide quality feedback on why a project proposal is not successful in terms of major assessment bands (position relative to other applications).

Unsuccessful applicants may re-submit their proposals in next funding calls.

POST-PROJECT

BAJC intends to publish end of project summaries from the research in the form of non-technical summaries of the project results for public release.

A full *Project Closure Report* is required from project Chief Investigators. Confidential information which forms part of the *Project Closure Report* may be attached as a separate confidential annex. All confidential information will remain confidential to recipients.

All publications arising from this project will require written consent from the Centre prior to submission for publication, subject to the *BAJC Publication Procedures Manual* (refer to the BAJC website <http://www.bajc.org.au>).

PROJECT PROPOSAL SUBMISSIONS – TERMS AND CONDITIONS

Ownership

Applicants acknowledge that physical title in all project applications (EOI, Project Proposals and approved Projects) become the property of the Administering Organisation once application lodged. BAJC may copy, amend, extract, or otherwise deal with all or any part of a submission for the purpose of conducting the processes associated with project selection including preparation, evaluation or execution processes and any other of its management processes.

Innovative research ideas that may be contained within an EOI or Project Proposal remain the property of the applicants unless the project is approved, and the submission of a proposal does not entitle the Centre or any recipient of the proposal through the assessment process to have any rights to exploit the content of such proposal.

Acknowledgment and disclaimer

BAJC, its officers, employees, advisors and agents:

- make no express or implied representation or warranty as to the currency, reliability or completeness of the information contained in the calls;
- make no express or implied representation or warranty that any estimate or forecast will be achieved or that any statement as to future matters will prove correct; and

- to the extent permitted by law, expressly disclaim all liability arising from the project application process (including, without limitation, due to information contained in or omitted from calls for project proposals, or otherwise provided to an applicant).

It is the responsibility of applicants to obtain all information necessary or convenient for the preparation of their submissions. In lodging a submission, each applicant acknowledges that it has not relied on any express or implied statement, representation, or warranty as to the truth, accuracy or completeness of the information contained in a call for project proposal submissions, or otherwise provided to an applicant by the BAJC.

Applicant's costs

All expenses and costs incurred by an applicant in connection with a project application submission, including (without limitation) preparing and lodging a submission, providing the BAJC with further information, attending interviews and participating in any subsequent negotiations, are the sole responsibility of the applicants.

No contract

Nothing in a Call for Project Proposals submission or the lodgement of a submission in response to it can be construed to give rise to any contract or associated obligations or rights, whether express or implied. No contract will be created until a formal written contract is executed between the relevant parties and the applicant.

Reservation of BAJC's rights

The BAJC reserves the right, at any time:

- to alter, amend or vary a project proposal call and the process outlined in a project proposal call
- if the BAJC considers that it is in the public interest to do so, to suspend or terminate a project proposal process or any part of it
- to require additional information or clarification from any applicant or anyone else, or provide additional information or clarification to any applicant or anyone else
- to negotiate or not negotiate with any one or more applicants, and discontinue negotiations at any time
- to allow, or not allow, the successful applicant to enter into the proposed contract in the name of a different legal entity from that which provided a response to the call for project proposals
- to select and negotiate with more than one applicant
- to add to, alter, delete or exclude any of the requirements to be provided by the preferred applicant under the call for project proposals.

For the avoidance of doubt, the BAJC may exercise its rights under this clause and elsewhere in a *Call for Project Proposals* at any time and in its absolute discretion.

AMENDMENTS TO THIS PROPOSAL GUIDELINES

The Funding Proposal Guidelines may be amended by BAJC from time to time, subject to the Baosteel approval.