

**Royce Materials 4.0 Feasibility & Pilot Scheme Application Form**

The *Royce Materials 4.0 Feasibility & Pilot Scheme*aims to offer short-term funding for research, development, and innovation (RD&I) projects developing novel digital techniques and technologies that have the potential to enable transformative step changes in materials research capability.

We are seeking proposals for feasibility studies to develop digital tools, protocols, and methods to accelerate materials discovery and testing, including but not limited to:

1. Materials Informatics – Stimulating and encouraging the development of Materials Informatics, which use data-centric approaches for the advancement of materials science, as a field of endeavour which could emulate the successful role Pharmaceutical and Chemical Informatics have had in creating a driver for accelerated change in discovery and data practices and developing new methods and protocols for those sectors.
2. New Computational, Data Science and Mathematical protocols – the development of new algorithms and computational frameworks are essential for Materials Science, accelerating the analysis of the number of potential chemical element combinations to develop new materials, and this new field of application will stimulate new science and opportunities for innovation.
3. Cyber-Physical Systems and Automation – to accelerate high throughput discovery and understanding of new materials we need to develop the capacity to connect the digital and physical worlds in a manner that is more responsive, assistive, and intelligent than at present.

**We emphasise our flexibility as to the exact nature of the areas in which these funds can be applied** and encourage you to [contact us via email](mailto:Patrick.hackett@manchester.ac.uk), if you have any questions or suggestions as to the fit of your proposal/concept and wish to discuss its eligibility.

We are looking to support up to 15 feasibility and pilot projects for early-stage technology development. The total cost of each project may be up to £100k, with available funds totalling £450k. Projects will be funded at a minimum of 80% full economic cost (FEC) and must be completed by 31st March 2022.

The call is open to higher education institutions, research technology organisations, and businesses of all sizes.

Funding is intended to cover the costs of the lead investigator and supporting staff in undertaking research to deliver results that would provide the basis for a future full grant proposal and will therefore primarily cover staff time, supporting consumables, and travel. Equipment and infrastructure investments are eligible, where they enable future research projects. Collaborative projects where part of the costs is met from other sources (e.g. industry) are welcome.

Before completing this application form, please ensure you have had confirmation from your institution of the project costings. There is no opportunity for delayed claims, postponements, or deferral of successful projects beyond 31st March 2022.

Applications will be reviewed and ranked by a group of at least 3 expert assessors. Rankings will be based on:

* Alignment with the 3 topic areas identified above;
* The evidencing of the provision of value for money;
* Ability to complete by 31st March 2022;
* Potential to enable transformative step changes in research capability;
* Contribution to the development of best practice and potential to enable culture change.

The highest ranked projects will be funded, up to the total budget of £450k.

For any queries regarding this call, please contact [Patrick.hackett@manchester.ac.uk](mailto:Patrick.hackett@manchester.ac.uk)

**APPLICATION FORM**

**Please send applications to** [**Patrick.hackett@manchester.ac.uk**](mailto:Patrick.hackett@manchester.ac.uk) **by 4pm on 22nd November 2021.**

NB: As applications will be anonymised, applicants are asked to ensure that there aren’t any specifically identifying remarks in the “Investigation details” section of the form below.

|  |  |
| --- | --- |
| **Applicant details** | |
| Name of organisation: |  |
| Name of applicant: |  |
| Applicant job title: |  |
| Email address: |  |
| Organisation website: |  |
| Organisation address: |  |
| Type of organisation: | (HEI/RTO/Microbusiness/SME/Large Enterprise) |

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| **Investigation details** | | |
| Please provide a description of the project you wish to undertake (max. 500 words). This should include what the project aims to investigate, why this is important, what outputs and IP (if any) are hoped will be generated, and why this should be undertaken now. | | |
| Provide an outline of how you intend to deliver your project, including discussion of resource availability and identification of the main risks. (max. 300 words) | | |
| What industry/sectors does your organisation work in or with? What benefit may the project have in the sector, and the wider economy, in either a direct or indirect fashion? (max. 300 words) | | |
| **Budget Request** | | |
|  | 100% FEC  (Incl. VAT) | **Applied for amount (ie 80%, 60%, 40% FEC)** |
| Total cost of requested equipment: | £00,000 | £00,000 |
| Staff time: | £00,000 | £00,000 |
| Funding to be provided from other sources – if applicable: | £00,000 | £00,000 |
| **Total requested from Royce**: | £00,000 | £00,000 |
| **With re. staff time:** please list the time and expected cost for requested named or new staff   |  |  |  | | --- | --- | --- | | **Name (or grade if unknown)** | **Start & finish date** | **Cost (100% FEC)** | |  |  |  | |  |  |  | | | |
| **With re. to equipment:** please list each piece of equipment being purchased and its cost   |  |  |  | | --- | --- | --- | | **Equipment** | **Description** | **Cost (100% FEC)** | |  |  |  | |  |  |  | | | |
| **Provide details of how you will ensure the requested budget is fully spent by the deadline**  - Key milestones identified in receiving and commissioning the platform  - Description of management approach and resource to ensure completion by 31st March 2022 | | |

*It is an expectation that organisations successful in applying to the scheme will work with Royce to produce publicly available case studies (commercially sensitive information notwithstanding) to highlight the types of projects which are routinely undertaken, and which produce a positive outcome for both your organisation and Royce.*

*Applications that are rejected or unsuccessful will be deleted following notification to the applicant of either outcome and in line with standard retention schedules.*