NanoDTC PhD+Midi project proposal 2021

**This form consists of two parts – one for a PhD project, and another for a midi project.** The two projects don’t have to be connected, but the midi should be designed to give the student some good experience of research techniques and methods used in the group(s) / project. Our aim is to allow students to test out and refine PhD project ideas through the experience and the knowledge gained in the midi project, so that they can progress more rapidly onto their PhD.

The midi project is 13 weeks long (runs May–Jul) and will require well defined goals and adequate supervision. If the midi and PhD projects are on very similar topics, please ensure that specific goals are added to the midi proposal which can be evaluated during the 1st year viva held in July/Aug 2021.

The PhD project also needs to contain specific goals, particularly for the first year so that students and project assessors can form a good estimate of the nature of the work expected.

Please complete **both** sections and upload this form to [Moodle](https://www.vle.cam.ac.uk/course/view.php?id=161592) by **Tuesday, 23rd Feb 2021**.

The combined PhD +PhD proposals will be assessed by the NanoDTC external advisory board and the approved ones will be made available to our students to choose from. In some cases the external advisory board may request revisions to the proposals to align them more strongly to the NanoDTC criteria which include: fit to the NanoDTC research themes and / or application areas (see <http://www.nanodtc.cam.ac.uk/research> ), appropriate scope and ambition and interdisciplinarity.

During the midi project, students will have an opportunity to develop and extend a PhD proposal. This is likely based on the PhD proposal outlined on this form, but students will have an option of choosing a different PhD project if it turns out (based on their experience) that the project is not strongly aligned to their interests and abilities. We expect that the final PhD project will emerge from extensive supervisor-student discussions around July. Remember these are highly motivated, trained and capable students, so you can be ambitious!

Please note that all NanoDTC projects require an academic co-supervisor from another department/discipline in addition to the main PI. Please email the NanoDTC Deputy Director [Dr. Karishma Jain](mailto:kj259@cam.ac.uk) if you need assistance with this. A third academic co-supervisor may also be added if appropriate.

**Industry supervisors** may be added as a third supervisor if applicable. Please note that industry collaborations will require a formal contract to be set up after the student confirms their interest in continuing for a PhD (expected in June 2021), along with a financial contribution from the industry partner, part of which will be for offsetting studentship costs, and part towards research costs for the PhD. Please email the NanoDTC Deputy Director [Dr. Karishma Jain](mailto:kj259@cam.ac.uk) for further details.

## Proposed Midi project title

|  |  |
| --- | --- |
| First academic supervisor (Principal Investigator)  Name:  Email:  Department: | 1st daily supervisor (PDRA or PhD student)  Name:  Email:  PDRA or PhD student?  If PhD student, please indicate if completed CPGS/1st year exam: |
| Second academic co-supervisor (from another discipline / department)  Name:  Email:  Department: | 2nd daily supervisor (PDRA or PhD student)  Name:  Email:  PDRA or PhD student?  If PhD student, please indicate if completed CPGS/1st year exam: |
| 3rd academic supervisor / Industry Supervisor (if applicable)  Name:  Email:  Department / Company Name: | |

## Is this Midi Project related to the PhD project?

|  |  |
| --- | --- |
| Yes (briefly mention how) | ☐ |
| No | ☐ |
| Other (please explain) | ☐ |

## Project Outline (Max 500 words, please include a diagram):

Daily Supervision is paid at approximately ½ hr per full time day and is normally shared between the 1st and 2nd daily supervisors (approx. 80:20 split).

## Proposed PhD project title

## Abstract (1 figure + max 200 words)

|  |
| --- |
| First academic supervisor (Principal Investigator)  Name:  Email:  Department: |
| Second academic co-supervisor (from another discipline / department)  Name:  Email:  Department: |
| 3rd academic supervisor / Industry Supervisor (if applicable)  Name:  Email:  Department / Company Name: |

## Relevance to Nano and the Research Themes of the Centre

Please summarise briefly how this project is relevant to the nano research theme of our centre:

# PhD Project description

Please continue in the space below to provide a 1½-2 page outline of the PhD project (suggested headings are provided). Please include relevant figures where appropriate.

### Broad Aims and Vision (novelty):

### List of potential targets/goals:

### Brief Background (what has been done before):

### Draft Work-programme (what, where, how it might work):

### *Please include some specific goals, particularly for the first year so that students and project assessors can form a good estimate of the nature of the work expected*

### Interdisciplinarity and Opportunities:

### Supervision strategy and back-up paths:

### *Please provide some details about Supervision strategy and back-up paths.*

### *If there is an industry supervisor or industry collaboration is proposed, please provide details of how it is expected to work*

### References (only main ones):