

CALL FOR MAS CDT I I / ASMIT 20 WEEK MSc RESEARCH PROJECT PROPOSALS 2016

Molecular Analytical Science Centre for Doctoral Training

MAS students carry out two 10 week research projects during their MSc. AS:MIT MSc students carry out a single 20-week project. (Note that the project durations also include write-up time.)

A key objective of these projects is to immerse each student in a research environment which addresses innovative Analytical Science. We particularly welcome collaborative projects between Industry and University.

The Project selection committee, comprising the MAS CDT management team and industry representatives, will vet the scientific remit of all proposals. In 2016 there will be an emphasis on the innovative Analytical Science aspects of projects. The proposals will also be assessed for the following qualities:

1. high quality research within MAS CDT's remit
2. good industry partnership
3. strategic scientific development for Warwick
4. technical training provided
5. originality
6. feasibility
7. adventure

Industry Partners:

All projects must have a Warwick lead supervisor but can be developed in collaboration with an industry partner. Note that part but not all, of a project can be spent at an industry partner, with costs funded by the industry partner. Academics can also submit proposals without industry involvement but priority will be given to those with an industry partner.

Proposals can be with existing MAS Industry partners (AstraZeneca, Crystal Precision Optics, Diamond Light Source, Jasco (UK), JEOL Resonance, Linear Diagnostics, Lubrizol, Pfizer, Syngenta, University Hospitals Coventry and Warwickshire NHS Trust, DSTL, MedImmune and Unilever). Other partnerships can be explored – please contact [Nikola Chmel](#) or [Steven Brown](#) to discuss.

Academics can submit a maximum of **2 proposals** (this is only if there is an industrial co-supervisor on at least one of the projects, otherwise only one proposal can be submitted), but can only supervise 1 project per session.

The MAS PhD proposal call for 2016 will come out in the Summer term. In order to submit a PhD proposal, the lead supervisor must have submitted a mini-project proposal in 2016. Please note that we envisage at least 70% of PhD projects to have industry funding; while there can be some projects without industry funding, these PhD projects that are presented to the students will be chosen primarily to ensure a wide range of analytical science, and also a Warwick academic can only supervise one non-industry funded PhD student across all 5 cohort years.

Session times:

Mini project 1 will run from 18th April 2016 – 1st July 2016 (including annual conference 15th – 19th May 2016)

Mini project 2 will run from 4th July – 9th September 2016

AS:MIT projects will run from 18th April 2016 – 9th September 2016

Students will choose the projects they will undertake. Specifically, they will select 4 projects, of which at least 2 must have industry co-supervision; in addition, students will not be permitted to choose 2 projects focusing on the same analytical science method/ approach. If more than one student chooses a project, the industry co-supervisor will be involved in the selection process, or if there is no industry supervisor, priority will be given to the student with the highest average module mark available at that time.

Mini-project supervisors who do not have a permanent university post or who are on probation must identify an academic member of staff who has agreed to mentor them by providing support and advice. The mentor also needs to agree to meet with the student briefly on a weekly basis.

Students who did their undergraduate degree at Warwick cannot work with a supervisor with whom they have worked previously, e.g. on a final year project or URSS project.



Fig 1: MAS CDT research and training themes – www.warwick.ac.uk/mas/aboutmascdt/

Project Components for MAS CDT students:

- One project has to have a substantial “quantitative” component (e.g. mathematical modelling, calculation, extensive data analysis), the other a substantial experimental (i.e., laboratory based) component
- An individual student must choose projects offered by two different supervisors.

Project 1 will be assessed by:

- A poster plus flash presentation during the annual conference 15th – 18th May 2016
- A 2,000 word technical report

Project 2 will be assessed by

- A thesis in the format of a full research paper (6,000 words)
- An oral presentation during the new student induction week

AS:MIT projects are assessed by

- A thesis (ca. 10,000 words)
- An oral presentation
- Practical performance

Mark breakdown:

- project execution, as assessed by the supervisor 35%
- written work (as assessed by supervisor and one other independent marker): 40%
- poster/flash presentation 25%

Students are advised that mini project deadlines are very strict and penalties will be imposed for late submission.

- Each student will be allocated a total mini-project consumables budget of £450 in the first instance to cover the consumables for both mini-projects. In special circumstances, an application may be made to the MAS Management Committee for additional consumables support.
- Supervisors whose project is chosen will be required to mark 2 other projects.

Deadline: Submission mini project proposals **Monday 1st Feb 9am.**