The ADAMA Center for Novel Delivery Systems in Crop Protection MSc and PhD Fellowships

Background

The world population, which currently numbers more than 7 billion people, is facing a growing challenge: ensuring a safe, equitable, available, nutritious and inexpensive food supply. The crop protection industry has an important role to play in addressing this challenge globally, through effective solutions to pests and diseases that damage crops and reduce yields.

The plant protection industry is increasingly turning to the development of new solutions in formulation and smart delivery of active ingredients - that is, not only the development of the active ingredients themselves, but also technologies to deliver them to the plant in a more efficient and effective way while minimizing impact on soil and groundwater and other life forms.

The ADAMA Center for Novel Delivery Systems in Crop Protection was initiated by Tel Aviv University, and in support by a donation from the ADAMA Company, with the goal of enhancing the training of young scientists in relevant academic fields that will enable them to become the future researchers and experts in crops protection and provide them with the tools to meet the local and global challenges in the field. For this purpose, the ADAMA Center is establishing an interdisciplinary and integrated program of teaching and research infrastructure that will provide participants with advanced knowledge and hands-on experience in aspects of chemistry, biology and engineering related to novel technologies for smart delivery in crops protection.

Through this Call, the ADAMA Center is now enrolling new students for the academic year of 2022/2023.

Eligibility

Outstanding graduate students (MSc and PhD level) from Tel Aviv University with research and educational background that are relevant to the core interests of ADAMA Center (as detailed below) are eligible to apply.

Relevant research fields include (but are not limited to): formulation technologies, agro-chemistry, plant physiology and plant protection, drug-delivery and development, pharmacology, surface science, soft matter, polymers and nanoparticle science.

Relevant educational background includes BSc in Chemistry, Materials or Biomedical Engineering, Pharmacology, Biology and Biotechnology.

The program is currently enrolling only MSc students in their 1st year and that have completed not more than one semester of their studies or PhD students, which started their studies after October 2020.
Selection process, Benefits and Obligations

Applicants will be selected on the basis of relevance of their academic background and research to the core interests of the ADAMA Center and their academic excellence.

Selected applicants (ADAMA Center Fellows) will be awarded a fellowship for the duration of their degree at a level of 100% scholarship (in accordance with TAU scholarship definitions and regulations).

ADAMA Center Fellows will have the opportunity to participate in workshops organized by ADAMA (at TAU, in ADAMA facilities or in those of relevant companies) that will include seminars, tours (in R&D labs and production facilities) and hands-on training on advanced research instruments.

ADAMA Center Fellows will assent to the following requirements:

- Participating in Formulation Chemistry course: *The Basics of Agrochemical Formulations Work* (0351-4110, 2 academic points, ADAMA Center course).
- Participating in *Formulation Chemistry Practical Lab course* (0351-4107, 2 academic points, ADAMA Center course).
- Participating in one additional course from the ADAMA Center selection of TAU courses including (but not limited to): Formulation Approaches in Crops Protection (0411-3250, a course designed especially for the ADAMA Center training program), Design, synthesis and applications of smart polymers (0351-4430-01), Physical chemistry of polymers (0351-4201-01), New frontiers in drug release (0116-5942-01), Dynamics of liquids (0351-4055-01), Plant-pathogen interactions (0455-3424-01), New frontiers in nanotechnology (0103-5060-01), Introduction to Surface Science (0581-5121), Drug-Eluting Biomedical Devices (0553-5332), Additional courses may be offered in the future.
- Participating in the Annual Meeting of the ADAMA Center.
- Acknowledging the financial support from ADAMA Center in any research publication (paper, poster, presentation) throughout the support period.

Application materials and submission instructions

Application materials must include:

- Applicant’s CV, including publication record (up to 2 pages).
- List of courses and grades from previous and current degrees
- A short description of the applicant’s research (or research plans), its relevance to smart technologies in crops protection and how would the applicant benefit from participation in the program (0.5-1 page).
- An Agreement Form signed by the applicant’s academic supervisor (the Agreement Form can be found at the end of this document).
Application materials should be submitted to: adamacenter@tauex.tau.ac.il

The application email title should state “Application, ADAMA Center enrolment 2022-2023”

Application deadline: October 18th, 2022.

Scholarship announcements are expected by the end of October 2022.

For questions, please email: adamacenter@tauex.tau.ac.il
Academic Supervisor Agreement Form

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By signing this form, I confirm that Mr./Ms. __________________ is under my academic supervision and is a MSc/PhD student.

I understand and agree to the requirements of the program.

Date:                          Name:                          Signature:

adamacenter@tauex.tau.ac.il | Tel Aviv University, Tel Aviv 6997801, Israel