



Webinar

Nicholas Vonortas (George Washington University)

“An Economic Appraisal of Microgravity Protein Crystallization for Drug Development”

**Tuesday 15 January 2019
14:00 Athens time**

The TECHNIS research group in association with the BENETeC Laboratory at UCRC (University of Crete Research Center for the Humanities, the Social and Education Sciences) are pleased to invite you to a free webinar on Tuesday 15 January 2019 at 12:00 London time (i.e. 13:00 Brussels time, 14:00 Athens time).

The speaker is Nicholas Vonortas, Professor of Economics and International Affairs, Elliott School of International Affairs, George Washington University, USA. The title of the talk is “An Economic Appraisal of Microgravity Protein Crystallization for Drug Development”. This is a report for NASA.

The moderator will be **Dr. Andreas Panagopoulos**, Assistant Professor at the Department of Economics, University of Crete. More information can be found at <http://technisnet.org/current%20seminars.html>.

This webinar is free and open to all. To participate and for further information, please contact **Dr. Andreas Panagopoulos** *at least a day prior to the seminar*. The program used to deliver webinars is called VSee and you can easily download it for free. A very short demo of VSee can be found at <https://www.youtube.com/watch?v=nDb7-Mrz0L4>.

Abstract: A basic mission of NASA is to use the United States’ segment of the International Space Station (ISS), designated a national laboratory, to facilitate the growth of a commercial marketplace in low Earth orbit for scientific research, technology development, observation and communications. Protein crystallization research has long been promoted as a promising commercial application of the ISS for drug development. In this paper we examine the case for microgravity protein crystallization under different private and public investment scenarios. The analysis suggests that sustaining investment is unlikely to come from individual companies alone. Public and private investment must be combined and managed to overcome a number of challenges including the need to integrate microgravity crystallization into the complex system of technologies involved in structure-based drug design. Multiple risks related to transportation costs/frequency, risk for cargo and research crew, and uncertainty about the longevity of the ISS complicate the calculus.