

PROFESSOR COSTAS D. MARANAS

Short CV for the Nomination of “STRATIS V. SOTIRCHOS” 2007 Memorial Lectureship

DR. COSTAS D. MARANAS is Professor at the Department of Chemical Engineering, The Pennsylvania State University.

Costas was born in Greece, on November 11, 1967. He received his Dipl. Ing. in Chemical Engineering from the Aristotle University, in 1990. He earned his PhD in Chemical Engineering from Princeton University in 1995.

In 1995 Costas joined the Department of Chemical Engineering of the Pennsylvania State University at the rank of Assistant Professor. In 2004 he reached the rank of Full Professor.

Professor Maranas’ research tackled a wide range of problems that span projects from the analysis of scheduling and supply-chain optimization to the molecular design of polymers to studies of DNA recombination and protein engineering to the analysis of gene additions and deletions in complex metabolic networks. In each of these areas, his research has not only broken new ground in the application of optimization methods to novel problems it has also led to major new insights into the behavior of these complex systems. Professor Maranas’ research has pushed the boundaries of and redefined the state-of-the-art in these areas. His works have already become standard authoritative references in the field, and they are likely to have a prolonged and lasting impact for many years to come. In a long standing collaboration with Professor Stephen J. Benkovic (Chemistry), Professor Maranas created a totally new theoretical and computational framework that successfully explained many of the experimental results generated by Professor Benkovic’s group, providing the first opportunity to actually predict and design approaches that could be used to develop new protein structures with desired biochemical and biophysical properties. He has authored more than 80 peer-reviewed papers including several papers in the Proceedings of the National Academy of Science, the Journal of Theoretical Biology, Biophysical Journal, Protein Engineering, and the American Institute of Chemical Engineers Journal. He has been an invited speaker at numerous universities and companies, he’s given plenary lectures at several major international meetings, and he is highly active in a number of professional societies.

The Stratis V. Sotirchos Memorial Lectureship 2007 Citation is as follows:

***“For contributions in the application of systems approaches to problems
in protein and biological networks analysis and reengineering
as well as real option concepts in R&D planning”***