CEOC-- Centre for Research on Optimization and Control

with support of ***Mathematics Department of University of Aveiro***

invites all interested to participate in

Mini-Course

"Numerical issues in semi-infinite programming and applications"

by Professor **Sven-Ake Gustafson**, Professor emeritus in Applied Mathematics, University of Stavanger, Norway

November 19-20, 2008

The course will last 2 days and will consist from 4 lections:

Lection 1. Representing real numbers in a computer. Very simple examples of semi-infinite programs including global optimization. CI

Lection 2. Duality results in semi-infinite optimization. Approximation by means of discretisation.

Lection 3. Semi-infinite programming in numerical analysis: approximation, quadrature and convergence acceleration.

Lection 4. Applications to air pollution control and the treatment of integral equations in the petroleum industry.

The course is destined to researches, doctor and master students interested in Optimization, numerical analysis and computation.
During the course the existing Fortran codes for different classes of Applied Optimization will be presented but many results will be illustrated by means of hand computation. The students will be invited to write their own codes.

The mini-course is free. All interested are invited to subscribe by sending an e.mail to CEOC ceoc@mat.ua with copy to Tatiana Tchemisova, tatiana@ua.pt

The program of the mini- course:

19 of November: 15.00-16.00 **Lection 1.**
                         16.00-16.30 *Coffee-break*
                         16.30-17.30 **Lection 2**

20 of November: 15.00-16.00 **Lection 3.**
                         16.00-16.30 *Coffee-break*
                         16.30-17.30 **Lection 4**

The mini-corse will take place in Sala Sousa Pinto of MathematicsDepartment of University of Aveiro

About the lecturer:

Professor Sven-Ake Gustafson actually is Professor emeritus in Applied Mathematics , University of Stavanger, Norway

Prof. Sven-Ake Gustafson is a known specialist in theory and methods of Linear, Nonlinear and Semi-Infinite, his research interests lying also in Numerical Analysis, Global Optimization, Optimal Design, Numerical Approximation, Functional Analysis and applications.

Prof. Sven-Ake Gustafson is the author of about 100 of high-level scientific publications including several books and monographs. He has developed a number of computer codes for numerical optimization and applications. Prof. Sven-Ake Gustafson has participated in numerous scientific events, realized a lot of scientific visits and gave a number of lectures and courses. The results of his investigation were presented in different international conferences and seminars.