

CURRICULUM VITAE

Name: Carlos António Abreu Fonseca Varandas

Date of birth: August 29th, 1951

Nationality: Portuguese

Academic degrees: “Agregação” in Physics Engineering, IST/UTL, June 1996

Ph.D. Degree in Physics, IST/UTL, April 1984

Graduation in Electrotechnical Engineering, IST, 1974

Professional Career: Full Professor, IST, since February 2000

Associate Professor, IST, July 1987

Assistant Professor, IST, April 1998

Assistant, IST, April 1974

Monitor, IST, April 1972

Main scientific area of research: Nuclear Fusion

Other scientific areas of interest: Digital Instrumentation

Teaching activities: Responsible for the following courses:

- “Radiofrequency Systems and Diagnostics” and “Implementation and Management of Large-Scale Experimental Facilities”, for the Technological Physics Engineering, from 2000/01;
- Experimental Physics V, for the Technological Physics Engineering course, from 1988/89 to 1999/2000;
- Advanced Experimental Techniques and Control and Data Acquisition, for the Master on Physics, since 1989/90;
- Coordinator of the Master on Physics, from October 1993 to December 1998;
- Participation in the examination panels of 17 Master thesis and 10 Ph.D. thesis.

Research activities:

- Scientific Coordinator of the Associated Laboratory on Plasma Physics and Engineering, from January 2002 to April 2007;
- Head of the Research Unit of the Contract of Association EURATOM/IST, from 1991 to April 2007;
- Scientific Coordinator of Centro de Fusão Nuclear, from 1991 to April 2007;

- Director of the project “Tokamak ISTTOK”, from 1990 to March 2007;
- Member of Ad-Hoc Groups for the evaluation of the W7-X project (in 1995), for the assessment of the Interim (in 1995), Detailed (in 1996) and Final (1997) Design Reports of the International Thermonuclear Experimental Reactor;
- Member of the Working Group on Campaign-Oriented Exploitation of the JET Facilities, from March 1998 to March 1999.

Management of the Community Fusion Programme:

- Member of the Scientific and Technical Committee of the EURATOM Treaty, since November 2004;
- Member of the Delegation of the European Union to the ITER Negotiations;
- Member of the Steering Committees of the Bi-Lateral Agreements between EURATOM and the Governments of Japan, Russian Federation and United States of America, since 2002;
- Chairman of the Steering Committee of the European Fusion Development Agreement, since February 1999;
- Chairman of the “Fusion Technology Steering Committee – Implementation”, from October 1996 to February 1999;
- Member of the “Fusion Technology Steering Committee-Planning”, (presently, “Group of Chairpersons”), since October 1996
- Portuguese Delegate to the Consultative Committee for the Specific Research and Training Programme on Nuclear Energy Fusion” (CCE-FU), since October 1991;
- Portuguese Delegate to the JET Council, from October 1991 to December 2001.

Management of Instituto Superior Técnico:

- Vice-President for Administrative Affairs, from January 1999 to June 2000;
- Member of the Coordination Commission of the Scientific Council from March 1988 to February 1990, from October 1995 to July 1997 and from September 2002 to July 2006;
- President of the Pedagogic Council from March 1986 to February 1988;
- President of the Directive Board from October 1979 to February 1980;
- Member of the Directive Board from April 1978 to February 1980.

Management of IST Units:

- President of the Physics Department, from September 2002 to July 2006;

- President of Centro de Fusão Nuclear, from March 1991 to April 2007;

Management of other Institutions:

- President of the Safe Committee of the Portuguese Research Reactor, since February 2003;
- Vice-President of Instituto Tecnológico e Nuclear, during 1995.

Organization of Scientific Meetings:

- Chairman of:
 - o Local Organizing Committee of the “20th IAEA Fusion Energy Conference”, to be held in Vilamoura, 1-6 November 2004;
 - o Programme Committee of the “29th EPS Conference on Plasma Physics and Controlled Fusion”, Montreux, June 2002;
 - o Local Organizing Committee of the 28th EPS Conference on Controlled Nuclear Fusion and Plasma Physics (Funchal, June, 2001).
 - o Local Organizing Committees of the Workshop on Diagnostics (Lisboa, April 1999);
 - o Local Organizing Committee of the 2nd IAEA Technical Committee Meeting (TCM) on Control, Data Acquisition and Remote Participation on Fusion Research (Lisboa, July 1999);
 - o International Organizing Committee (IOC) of the 19th Symposium on Fusion Technology (SOFT) (Lisboa, September 1996);
- Member of:
 - o Programme Committee of the “31th EPS Conference on Controlled Nuclear Fusion and Plasma Physics”, S. Petersburg, June 2003;
 - o International Organizing Committee of the 20th SOFT (Marseille, September 1998) and 21st SOFT (Madrid, September 2000);
 - o 1st (Prague, July 1998) and 2nd (Maastricht, June 1999) ICPP Satellite Meetings on Role of the Electric Fields in Plasma Confinement and Exhaust;
 - o Programme Committee of the 1st IAEA TCM on Data Acquisition and Remote Participation on Fusion Research (Garching, July, 1997).

Membership in editorial teams of scientific journals:

- Member of the Editorial Board of Plasma Physics and Controlled Fusion, from January 1997 to July 2005;

- Referee of Fusion Engineering and Design, Vacuum, International Journal of Electronics and Plasma Physics and Controlled Fusion.

Supervision of post-graduation students:

- Supervisor of eleven Master thesis;
- Supervisor of six Ph.D. thesis

Publications:

- Co-editor of four special issues of scientific journals, with conference proceedings;
- Co-author of about seventy papers in international journals;
- Co-author of eighty-nine contributions in proceedings of scientific meetings with referees.