

SUMMARY



Surname: Manuel	Given Name: Castro
Date of birth: 03/27/1958	Place of birth: Caracas, Venezuela
Profession: Industrial Engineer	Nationality: Spanish
DNI: 36.025.191 S	Languages: Spanish, English and French
NRP: 3602519168 A0500	Married to: Carmen
e-mail: mcastro@ieec.uned.es	Daughters: Marta and Iria
Phone: 34-913-986-476	Fax: 34-913-986-028
Other activities: squash, padel, ski, travel	
Knowledge area: Electronics Technology (UNESCO 3307)	

Manuel Castro took a first degree in Industrial Engineering in 1983 at E.T.S.I.I. (Industrial Engineering School) of the Polytechnic University of Madrid been specialized in Electrical Engineering (Electronic and Control), and a doctorate (PhD) in Industrial Engineering at the same University, with the study of technical and social impact of solar renewal central electric grid integration.

From 1984 to 1988 he teaches different courses of electronics in the Electronic Engineering Division of the Industrial Engineering School of the Polytechnic University of Madrid. He teaches basic and general electronics, analog and digital electronics, instrumentation as well as microprocessors in the Electronics and Control Engineering degree and basic electronics in non-specialist degrees. He joined the Electrical and Computer Engineering Department (DIEEC) of the Spanish University for Distance Education (UNED) in 1984 to teach analog and digital electronics in the Industrial Engineering degree and to participate in technical research and development. From 1989 to 2002 Dr. Castro is Associate Professor of this Department, complementing his researching activities with doctoral courses and other teaching activities, as are courses at UNED's Open Education Programs and others outside the UNED, and working as system integration consultant for different companies as Euro Four and Micromouse, being Professor on 2002.

From 1988 to 1993 Dr. Castro joined Digital Equipment Corporation in Madrid, Spain, sharing the working time dedicated to the University. During this period Dr. Castro had been involved as Senior System Engineer from 1988 to 1991 and from 1991 to 1993 as Senior Technical coordinator, basically in the Finance Group, having a strong relationship in the technical definition and selling of highly integrated solution (systems, components and networks) for the different large accounts of the Finance Group (BBV, Banesto, Popular, Privanza, etc.).

Since 1993 Dr. Castro comes back to the University in full time. He was working in different projects of R&D in the different Spanish and European Community initiatives, serving from basic research (1981) to project manager and responsible from 1997. He acts as Research and Doctorate Vice-director of the UNED's Industrial Engineering School in 1995 and 1996, as UNED's Computing and Communication Service Department director from 1996 to 1999, and as Academic Vice-director of the UNED's Industrial Engineering School from 1999 to 2002. From 2002 to 2004 he serves as Vice-Rector of New Technologies at the UNED. Since 2005 serves as Head of the Electrical and Computer Engineering Department of the Spanish University for Distance Education.

Dr. Castro speaks Spanish, English and French, and is member of the professional associations: IFAC, ISES, vice-president of the board member of AEDES (Spanish Section of ISES), NYAS, ACM and Senior Member of IEEE. Since 1996 he is included in the Who's Who in the World, since 1997 in the Who's Who in Science and Engineering and in the 2000 Outstanding Scientist of the 20th Century. The next pages include a resume of the activities developed and focused during his professional career.

Current job title:

- Full Professor in Electronics Technology at the Electrical and Computer Engineering Department of the Spanish University for Distance Education.

Details of education:

- Higher Bachelor at Coya Institute, Vigo, Spain, 1975.
- Industrial Engineering (Electrical Engineering and specialized in Electronic and Control) degree (ETSII/UPM, Madrid, Spain), 1983.
- Doctor (PhD) in Industrial Engineering, (ETSII/UPM, Madrid, Spain), 1988.

Career to date:

2002-now, Full Professor, at ETSII/UNED, Madrid, Spain.

2005-now, Head of the Department at DIEEC/UNED, Madrid, Spain.

2002-2004, Vice-Rector of New Technologies at ETSII/UNED, Madrid, Spain.

1999-2002, Academic Vice-director at ETSII/UNED, Madrid, Spain.

1997-1999, Director at Computing and Communication Service Department, at UNED, Madrid, Spain.

1996-1997, Research and Doctorate Vice-director at ETSII/UNED, Madrid, Spain.

1993-now, Engineering and Computing Consultant, Madrid, Spain.

1989-2002, Associate Professor, at ETSII/UNED, Madrid, Spain.

1988-1992, Senior System Engineer, at Digital Equipment Corporation, Madrid, Spain.

1986, Digital Equipment Corporation external teacher qualification, Madrid, Spain.

1983-1989, Lecturer, at ETSII/UNED, Madrid, Spain.

1984-1989, Lecturer, at ETSII/UPM, Madrid, Spain.

1983, Basic researcher fellowship at DIE/UPM, Madrid, Spain.

1981-now, Research and projects development, Madrid, Spain.

Honours and Awards:

- Extraordinary award of Ph Degree Thesis, 1988, ETSII/UPM, Madrid, Spain.
- VIESGO 1988 Award (best Doctoral Thesis in Electrical Engineering Applications) to the best Doctoral Thesis for scientific research in electrical industrial process applications of electricity
- 1997 UNED's Social Board Award for the Best Didactic Materials in Experimental Sciences for the "Physic Elements for Computer Science".
- 1999 UNED's Social Board Award for the Best Didactic Materials in Experimental Sciences for the "Circuit Simulation Guide".
- 2001 Award for the "Innovative Excellence in Teaching, Learning & Technology" from the "Center for the Advancement of Teaching and Learning".
- 2003 IEF (International Energy Foundation) Fellow.
- 2006 UNED's Social Board Award Accesit for the Best Didactic Materials in Experimental Sciences for the "Basic Electronic Materials Simulation, Examples and Practices".
- 2008 IEEE Fellow.

Quality criteria and evaluation:

- Three research six year periods (all presented).
- Four teaching five year periods (all presented).
- Positive evaluation on the UNED's specific complement.

Research subjects:

- Electrical and Electronic Engineering:
 - Electronic Engineering.
 - Electrical Engineering focused to Renewable systems.

- Energy Sources and Technology:
 - Alternative and renewable sources of energy. Solar energy.
 - Energy conversion systems.
- Computers and Information Technology:
 - Technology-Enhanced Learning.
 - Multimedia systems. Distance learning technology and tools.
 - Digital systems and technology.
 - Simulation modeling.
 - Computer communications networking. Internet. Electronic Commerce applications.
 - Computer Science and technology. Advanced processors and simulation.
- Communications:
 - Data communications systems and networks. Simulation.
 - Signal processing, signals and communication electronics.

Main publications:

- US-Spain evaluation of the Solar One and CESA-I receiver and storage systems, Ed. Sandia National Laboratories, 1989.
- Micro: aprendizaje de microprocesadores, vol. 1 and 2. Ed. Marcombo, 1994 and 1996.
- Elementos de física para informática, U. D. 3. Ed. UNED, 1995.
- Problemas resueltos y prácticas por ordenador de elementos de física para informática. Ed. UNED, 1996.
- Simulación y electrónica analógica. Problemas y prácticas. Ed. RA-MA, 1998.
- Edificios Fotovoltaicos. Técnicas y Programas de Simulación (con CD-ROM). Ed. Progenisa, 2004.
- Electrónica Digital. Introducción a la Lógica Digital: Teoría, Problemas y Simulación. Ed. RA-MA, 2002.
- Electrónica General: Teoría, Problemas y Simulación. Ed. UNED, 2005.
- Electrónica General: Prácticas y Simulación. Ed. UNED, 2005.
- Electrónica Digital: Prácticas y Simulación. Ed. UNED, 2006.
- "Technology Innovation and Integration in Distance Learning", IEEE Press, Melecon Conference, Tel Aviv, May 1998.
- "Enhancing the Performance of a Virtual Campus for DE: Impacts and Achievements", EDEN Conference, Bologna, Italy, June 1998.
- "Modernising through Technological Applications – UNED", Mega Universities Summit Conference, South Africa, November 1997.
- "An Experience in UNED on Building up a Virtual Campus", The Virtual campus: Trends for Higher Education and Training Working conference at IFIP, Madrid, November 1997.
- "Examples of Distance Learning Projects in the European Community", in "IEEE Trans on Education". November 2001.
- "Grid-Connected PV Buildings: Analysis of Future Scenarios", ISES 2001 Solar World Congress, Adelaide, Australia, December 2001.
- "Experiences with Fuzzy Logic and Neural Networks in a Control Course". En "IEEE Trans on Education". Mayo de 2002.
- "On-line Energy Analysis in PV Buildings Connected to the Utility Grid", IEEE IECON 28th International Conference on Industrial Electronics, Control and Instrumentation, Sevilla, November 2002.
- "University Study Evaluation of Use of Web Platform in Distance Learning", IEEE FIE Frontiers in Education Conference, Boston, USA, November 2002.
- "Software Modelling of Grid-Connected Photovoltaic Buildings". En "Progress in Photovoltaics: Research and Applications". Junio de 2003.

- “Towards an European Global Higher Education Area: Its Effects in Spain”. En “The Interface - IEEE ES y ASEE ECED”. Noviembre de 2004.

Summary publications, R&D projects and courses:

- More than *twenty* books, ten of them including multimedia CD and tools.
- More than *ten* articles in indexed international journals.
- More than *twenty* articles in Spanish journals.
- More than *forty* papers in international peer-to-peer reviewed conferences and workshops.
- More than *thirty* papers in Spanish reviewed conferences and workshops.
- More than *thirty* research and developing projects, sponsored by different companies and public agencies.
- More than *fifty* technical conference attendances, most of them international ones.
- More than *forty* courses and seminars taken.
- More than *seventy* courses and seminars given.
- Direction of *seven* Doctoral Thesis and 6 more developing. Direction of *one* Master Thesis.
- Direction of more than *thirty five* end term projects in Industrial Engineering and 8 more in developing.

Membership of Associations, Institutes, congress and workshops organization:

- IEEE (Institute of Electric and Electronic Engineering) fellow since 2008. Senior Member since 1993. Member since 1987.
 - Member of the Chapters Committee of the IEEE Education Society. Form October of 2003 to October of 2004.
 - Vice-Chair of the Chapters Committee of the IEEE Education Society. Since October of 2004.
 - Election as Member at Large of the Administrative Committee (AdCOM) of the IEEE Education Society. October of 2004.
 - Member at Large of the Administrative Committee (AdCOM) of the IEEE Education Society. Since January of 2005 to now (election since December of 2006).
 - Founder Chairman of the Spanish Chapter of the IEEE Education Society, founded with 120 (160 now) members. Past Chairman since 2008.
- ISES (International Solar Energy Society) Member since 1984.
- AEDES (Asociación Española de Energía Solar) Member since 1992.
 - Board Member of AEDES (Asociación Española de Energía Solar) from 1992 to 2000.
 - Vice-president of the Board Member of AEDES (Asociación Española de Energía Solar), since 2000.
- IFAC (International Federation of Automatic Control) Member since 1988.
- ACM (Association for Computing Machinery) Member since 1997.
- NYAS (New York Academy of Sciences) Member since 1997.
- Chairman in more than *thirty* international conferences, and in more than *twenty* Spanish ones.
- Technical reviewer on journals and conferences (international and Spanish).
- Vice President of the Editorial Committee of the Electronic Journal IEEE-RITA (Latin-American Learning Technologic Journal)
- Technical and Organizing Committee in the Spanish TAEE conferences (1998, 2000, 2002, 2004, 2006).
- Technical and Organizing Committee in the Spanish CIES conferences (1995, 2000, 2004).
- Co-Chair and organizer of the international conference ICECE 2006.
- International Chairman (Europe) and Organizing Committee in the IEEE FIE Frontiers in Education (2000, 2001, 2002, 2003, 2004, 2005, 2006) (USA).