SHORT CV ELVIRA FORTUNATO (2016)

PERSONAL INFORMATION

<u>Fortunato, Elvira,</u> Nationality: Portuguese; Date of birth: 22 July 1964 Research ID; ORCID; Google Scholar (h-index = 56, from GS)

EDUCATION

Habilitation in Microelectronics & Optoelectronics, FCT-UNL (2005); **Ph.D**. in Microelectronics and Optoelectronics. FCT-UNL (1995); **MSc** in Semiconductor Materials FCT-UNL, (1991); **Engineering** Diploma in Materials Science & Physics UNL (19987).

CURRENT POSITIONS

Full Professor at FCT-UNL, (2012-...); **Director** of the Associate Laboratory I3N (The only Portuguese research centre (1998-...) classified as Exceptional in the Advanced Materials and Nanotechnologies area in the last national evaluation); **Invited Professor** at Universidade Federal de Lavras, Brazil (2013-...).

PREVIOUS POSITIONS

Associate Professor, FCT-UNL, Portugal (1998-2011); Assistant Professor, FCT-UNL, Portugal (1995-1998)

SELECTED AWARDS

2016 Blaise Pascal Medal by the European Academy of Sciences in the area of Materials Science.

- 2016 Finalist for the European Inventor Award 2016 with Prof. Rodrigo Martins with the work on paper electronics.
- 2015 Selected by the Portuguese President of Republic to be the President of the National Day (10 June) with the duty to speak about Science, Innovation and New Opportunities.
- **2014** Gold Medal from the Municipality of Alcanena/Portugal; Honourable Mention in the area of Research by FCT-UNL/Portugal; Honourable Mention in the area of Extension by FCT-UNL/Portugal.
- 2012 Scientific Prize of City of Almada, 1st edition/Portugal; Prize Green Awards, Lab-on-Paper/Portugal; Prize Innovation with the work solar tiles, Energy Live Expo, Lisbon/Portugal
- 2011 Nominated Körber European Science Award 2011 (short list 8), Koerber Foundation/Germany.
- **2010** Order of "Infante D. Henrique, attributed by the President of the Portuguese Republic/Portugal; JID best paper award 2010 from Korean Information Display Society; Gold Mercury Sustainability Personality of the Year/Italy.
- 2009 Unanimous congratulatory vote by the Portuguese Parliament for her scientific career; The Research and Technology 2008-09 award, from the Rotary 1960 District/Portugal; Person of the Year 2009, Association for Multimedia and Digital Society/Portugal; 1st place in "Green Awards 2009" for the paper transistor work; Elected honorary member of the Rotary Club of Almada/PT; EU Women Inventors & Innovators Network: Transparent Electronics and Paper-e/Finland; Doctor Honoris Causa by Galati University/Romania; IDTechEx Printed Electronics USA 2009 Academic R&D award/USA.
- **2008** Prize "Seeds of Science" in the field of Science and Engineering/Portugal; Professional of the Year 2008, by the Rotary Club of Costa Caparica/Portugal; Innovation 2008 prize, from Exame Informática magazine/Portugal.

INSTITUTIONAL RESPONSIBILITIES

<u>Vice-Chair of the High Level Group-SAM from EC (2015-...)</u>; Deputy Director of FCT-UNL (2014-...); Coordinator of Research Centers of FCT-UNL (2006-...); Member of the Executive Board of the Materials Science Department (2009-...); Coordinator of the Doctoral Programme in Nanosciences and Nanotechnology, FCT-UNL (2009-...); Member of the Scientific Committee of the PhD Program in Biomaterials (UFLA, Brasil) (2014-...). Participation in several academic examination referees board (PhD juries in and abroad Portugal).

COMMISSIONS OF TRUST

Nominated by the Presidency House for the committee of Portuguese Orders of Honour (2011-2016 and 2016-2020); **Member of the:** EC advisory board of: CONNECT Forum (2013-2015); H2020 ad hoc AG Spreading Excellence and Widening Participation (2013-2015); <u>Trustees of Luso-American Development Foundation/Portugal-USA (2013-2020)</u>; Social Council of Universidade Lusíada/Portugal (2014-2018); Scientific Council of the TICE.PT/Portugal (2009-...); Scientific Council for Exact Sciences and Engineering from FCT-MEC (2008-2012); grant panel in Nanotechnologies from FCT-MEC (2013-2014) and in Materials Science and Engineering, FCT-MCTES (2004-2011); **Monitor** FP7 604391 GRAPHENE (Unit C4 Flagships -GRAPHENE pool, 2014-2020); Scientific Council of "Fundação Francisco Manuel dos Santos" (2012-...); National Scientific and Technological Council (CNCT). (2012-2016); **Co-Editor** of Europhysics Letters (EPL) (2011-...); **Associate editor** of Pysica Status Solidi Rapid Research Letters, Wiley since 2007 (2007-...); **Guest editor** in: Journal of Non-Crystalline Solids (2006; Thin Solid Films (2007, 2008); Physica Status Solidi a) (2008-Wiley) (2008). **Evaluator of projects** and research centres from different Research Agencies (USA National Science Foundation; Romanian Agency for Quality Assurance in Higher Education; Program Thalis Greek Ministry of Education; Swedish Foundation for Strategic Research; Swiss National Science Foundation; Fonds National de La Recherche Luxembourg; European Science Foundation; Science Foundation Ireland; Technology Foundation from Netherlands; National centre from Poland, Agency for Science, Technology and Research, Singapore.

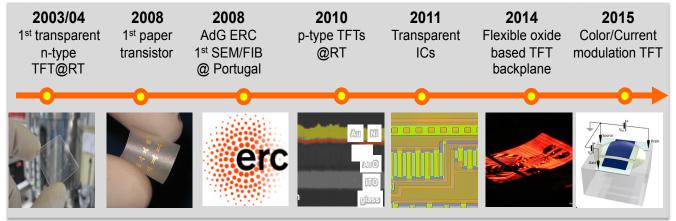


MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Member of the Portuguese Engineering Academy (2009); 1990 – Member of the Portuguese Professional Engineering Association (1990); Member of the: Materials Research Society (1987); Portuguese Materials Society (1990).

OTHER ACHIEVEMENTS

As can be taken from my CV I have a fruitful career, translated in: creating <u>new scientific concepts</u>; to <u>innovate technology</u>; coordinating multidisciplinary research; teaching and supervising research (17 Postdocs, 11 abroad; 27 PhD, 9 abroad; 35 master students, 10 abroad); coordinating or being direct responsible of national and international projects (37, from which my group earned a total budget of 12.4 M€, where 75% corresponds to International funding, including the advanced ERC grant obtained in the first edition); to disseminate and communicate science and to contribute for a new policy for science and technology, inside <u>Portugal</u> or <u>abroad</u>, as can be taken from my involvement in commission of trusts and Academic associations. This is translated in chairing large <u>conferences</u> (7), organizing symposia in key areas (12), to publish more than 500 papers, granted 49 patents (from which I would highlight the ones we share with <u>SAMSUNG</u> and <u>ETRI</u>) and 20 pending,



covering the fields of <u>advanced functional materials</u>, <u>energy</u>, <u>biotechnology/life sciences</u>, <u>microelectronics</u>, <u>optoelectronics</u>, electronics, with publications in top 10. This broad range of activities in which <u>my research team</u> is involved is inline with my philosophy that more and more science requires multidisciplinary and interdisciplinary teams, covering not only the area of science and technology, but also the social/humanities, once we must know/determine the impact of what we do and how citizens see and accept research. This makes my laboratory to acquire a world-class reputation. Concerning science I pioneer world wide transparent electronics and paper electronics. The sketch above shows the main milestones related to such achievements that make me to be heard by the world scientific community, well translated by more than 50 plenary talks and 30 contributions in summer schools open to students and citizens I gave in the last 10 years (for instance, in 2015 I was invited to give more than 20 plenary/invited talks and to be involved in 4 <u>summer schools</u>) for specialised and non specialised audience. In line with this international recognition I have to mention my talk at the <u>Falling Walls Conference</u> held in Berlin, a one-day scientific conference with the objective to show to a broad audience the research work of international top scientists coming from different fields, as humanities, economics, laws, science and technology. Moreover, this vision of science as a whole and made to serve the society, makes me to be attracted by <u>media</u> to give my opinion about how science and technology could be move as a way to serve citizens for the next paradigm of economic growth knowledge based (going from <u>creativity</u> to <u>innovation</u> concepts) and so contributing to promote <u>progress of countries</u>.

Connect to my vision of future and to my ERC grant, I would like to highlight that <u>in 2011 the Nanofabrication Laboratory was</u> <u>inaugurated by the President of the Portuguese Republic</u>, and selected by ERC as a <u>success story</u>. This laboratory is now a reference not only in Portugal but also in the world since then our experimental capacity was dramatically improved specially in the area of nanocharacterzation and nanofabrication. **This is a unique structure build with competitive funds in Portugal**. Besides the media impact at an international and national level, I got several social and scientific awards (see part A), not only connected to the specified field of my research but also due to my commitments to bring science and technology to all as it is the case of belonging to the Portuguese Academy Engineering, getting the Honoris Causa degree from Galati University, to be honoured with the Order of Infante D. Henrique by Portugal (degree: "grande oficial"), to get the Gold Medal from the Municipality of Almada and Alcanena, and, above all, to be be selected in 2015 by the president of Portugal to be the chair of the National day of Portugal having as topic Science and Technology, the highest distinction to which a Portuguese can strive for; to be selected by the Presidency House as a member of the committee of Portuguese Orders of Honour connected to science and technology.

I also would like to highlight that I have a strong experience in public communication of science, translated in several public interventions for a multifaceted public, as it was the speech <u>Commemorative Session of the Day of Portugal</u>, for the Portuguese worldwide diaspora, involving more than 20 million citizens worldwide; data analytics and visualization, as taken from my involvement as member of the Portuguese Council of Science and Technology or in the Horizon 2020 advisory boards, which also includes legislative processes dealing with the strategy and vision of future, going from ideas to practical things.