

**Professor Rodrigo Martins**, Doctor Honoris causa by University of Galati, Romania (2012), member of the European Academy of Science, Member of the Portuguese Academy of Engineering; Director of the Centre of Excellence in Microelectronics and Optoelectronics Process of the Institute of New technologies (CEMOP/UNINOVA, <https://cemop.uninova.pt/>); Head of the group of Materials for Electronics, Optoelectronics and Nanotechnologies of CENIMAT/I3N (<https://www.cenimat.fct.unl.pt/>); Head of the Materials science Department of FCT-UNL from 1988 to 2019) (<https://www.dcm.fct.unl.pt/>). For more details see CV-R. Martins at [CEMOP-Web](#).



**Professor Martins** has published more than 900 papers, cited more than 25,000, holding a h impact factor of 76, (<https://scholar.google.com/citations?user=5FLD1tUAAAAJ&hl=en>), holding more than 55 granted patents in the field of oxides and paper electronics.

Professor **Rodrigo Martins** is the current President of the European Academy of Sciences (<https://www.eurasc.org/>); Current 1<sup>st</sup> vice President of IUMRS (<https://iumrs.org/>) and appointed President of IUMRS (2021-2022); Member of the board of [admission and qualification of the order of engineers from Portugal](#) (2019-2022); Member of the Advisory Board of the IndTech 2020 (<https://www.indtech2020.eu/>) to be organized by the Germany Presidency of the European Union and to be held in Mainz, from 26-28 October 2020, being coordinator of the sessions concerning "Sustainable Materials and Green Deal" and Young Scientists; current member for the Nomination Committee of the KIC Raw Materials (<https://eitrawmaterials.eu/>); Member of the Steering Committee of the European Technology Platform for Advanced Engineering Materials and Technologies, EuMat (since 2014, <http://www.eumat.eu/>); Chair of the European affairs committee of E-MRS (<https://www.european-mrs.com/>); Chair of the Global Leadership and Service Award of IUMRS.

Chair of the Advisory Committee of the BMC Materials Journal, part of Springer nature group (2019, <https://bmcmaterials.biomedcentral.com/>); Member of the Administration board of the Nature partnership journal named npj 2D materials and applications (since 2016), <https://www.nature.com/npj2dmaterials/>; Editorial Board Member of the Journal Progress in Natural Science: Materials International (Elsevier Journal, <https://www.journals.elsevier.com/progress-in-natural-science-materials-international/editorial-board>); Member of the International Advisory Board of the Advanced Electronics Materials Journal, [https://www.onlinelibrary.wiley.com/page/journal/2199160x/homepage/2707\\_edbd.html](https://www.onlinelibrary.wiley.com/page/journal/2199160x/homepage/2707_edbd.html); Member of the Editorial Board of the Journal Nanomaterials (2018, <https://www.mdpi.com/journal/nanomaterials/editors>); Member of the Advisory Panel of Journal of Physics D: Applied Physics (<https://iopscience.iop.org/journal/0022-3727/page/Advisory%20panel>).

Past President of E-MRS (2012-2014); Past President of E-MRS Senate (2014-2016); Member of the Expert Advisory Board of the European program HORIZON 2020, DG Research and Innovation, Advanced Materials, Nanotechnologies, Biotechnologies and Manufacturing (2016/2018); Co-chair of the Energy Materials industry Research Initiative, EMIRI for the period 2015 to 2019, <https://emiri.eu/>; Member of the Nominating Committee of MRS-USA (2014-2017).

#### **Awards and Honors received, singularly and collectively**

**2019**, Science and Innovation prize of Almada Council (2<sup>nd</sup> position); Founder of the collaborative laboratory AlmaScience and its Scientific CEO, the first European Platform devoted to paper electronics: processing, functionalization and building electronics and eco-sustainable diagnostic platforms

**2017** IC3TC2017 (2<sup>nd</sup> International Caparica Christmas Congress on Translational Chemistry 4th -7th December 2017) Award to a Career in Pioneering Science, award established by ProteoMass Society, December 2017, given to Elvira Fortunato and Rodrigo Martins; Best Publicly Funded Project Demonstrator award given by OE-A (Organic and Printed Electronics – Association: OE- Competition 2017 for Multifunctional Demonstrators based on organic and printed electronics) during the LOPEC - Large-area, Organic & Printed Electronics Convention 2017, held in Munich, March 2017 to the EC project iFlexys, Integrated X-ray Sensor Systems; INCM Innovation Prize 2017, for the work Secret paper project;

**2016** Awarded with the Gold Medal of merit and distinction by the Almada Municipality; Named as one of 3 finalist of the European patent Office Research Award 2016 with the work on paper transistor; Tetra Solar, Innovation prize given by Exame Informatica; Honorable Mention in the R&D category of the 8<sup>th</sup> edition of Green Project Awards, with the work Tetra Solar: energy for all.

**2015** Demonstrator award given by OE-A (Organic and Printed Electronics – Association) during the LOPEC - Large-area, Organic & Printed Electronics Convention 2015, held in Munich, February 2015 to the EC project Autonomous Printed Paper Products for Labels & Electronics, A3Ple project.

**2012** Scientific Prize of Cidade de Almada, 1st edition with work Nanotechnologies and Nanomaterials @FCT-UNL, a window of opportunities opened to the world; Prize Innovation with the work solar tiles, Energy Live Expo, Lisbon, March 2012.

### **Landmarks related to scientific activities**

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As the most recent landmark, we have the following key relevant achievements:

- a) The first Portuguese Professor/Researcher to have 6 ERC grants associated to research talents supervised or co-supervised by him and integrating the Scientific team at CENIMAT/CEMOP launched by him and considered an example of international excellency in fields of Nanotechnologies, Advanced Functional Materials and Microelectronics.
- b) Launching the concept of Stem materials together with Pier F. Moretti, Bartosz A. Grzybowski, Vasileios Basios, Elvira Fortunato, Maria Suarez Diez, Olga Speck, as a new area for promoting the design of functional smart materials able to realize complex functions and be able to adapt themselves to the environmental conditions (May 2019).
- c) The work on paper electronics is the editorial of Nature Electronics, from 13 August 2018 (<https://www.nature.com/articles/s41928-018-0128-7>);
- d) Publishing the first scientific paper aiming to exploit, as proof of concept, paper transistor for multipurpose applications: R. Martins et al, in Papertronics: Multigate paper transistor for multifunction applications, Applied Materials Today 12 (2018) 402–414;
- e) **2018**, Administrator of the 1<sup>st</sup> start-up to exploit the paper electronics, NTPE – Research, Development and Commercialization of Transistors, Electronic Biosensors, Paper based Lda; Investigação, Desenvolvimento e Comercialização de Transístores e Biosensores Electrónicos de Papel, Lda”.
- f) **2018** the official launch of the Collaborative laboratory, Almascience, involving the pioneer labs of paper electronics with the paper industry and product end users, mainly connected to security and exploiting smart diagnostics platform commodities.
- g) **2018**, the full recognition by the Academia of his invention on paper electronics, that elected for the [International Physics Olympics, IPhO-2018](#) hold in Lisbon, July 2018, the paper transistor as the device to be tested in the experiments by more than 450 students worldwide. This was also the editorial of Nature journal of 13 August 2018.
- h) **2018**, during the Innofest 2018 Innovation context idea competition to boost printing intelligence, organized by PrintoCent from VTT, a team of Prof. Martins’ young researchers from Uninova/ FCT-UNL won the first prize with the concept idea of Droplet Runners (<http://ouluhealth.fi/oulu-in-the-centre-of-boosting-printed-intelligence-business-at-innofest-2018/>).
- i) Nominated by the European Patent Officer as one of the Inventors of the year 2016 with the paper transistor work (<http://www.epo.org/learning-events/european-inventor/finalists/2016/fortunato.ht>).
- j) To establish the first Portuguese partnership with the Nature group, from which it results in the launch of the npj 2D Materials applications journal in 2016.

Apart from that, it should be also highlight that as representative of the European Materials Research Society in the Initiative for Science in Europe (ISE), Prof. Martins participated in the launch of the European Research Council, under the Chair of José Mariano Gago (Creating a European Research Council. Letter to the editor, Science, August 2004. <http://www.initiative-science-europe.org/pdf/04-Science-Letter-Creating-ERC.pdf>). Moreover, Professor Martins also organized the meeting in January 11<sup>th</sup>, 2007 where Federico Mayor took over from José Mariano Gago as the next ISE Chair, year where Commissioner Janez Potočnik signed and turn effective the creation of the European Research Council.

Prior researching oxides and paper electronics, being one of the pioneers and inventors of their exploitation to build electronics and detection systems, Professor Martins was involved in the R&D of a-Si; H and a-Ge:H, working in the team o Professor W. Spear (the pioneer of the field) and having there met Sir N. Mott. The outcomes of this research lead him to found in Portugal the first research group devoted to these matters, using PEVD techniques, for PV, position sensitive detectors (psd), thin film transistors (TFT), colour detectors and gas sensors (1975-), among other applications.