



## Prof. Rui Paulo da Silva Martins

### Curriculum Vitae

Printable Version

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[ Pedagogic Activity ] [ Scientific Activity ] [ PhD Students ] [ Service ]  
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### Age (60) [ TOP ]

**April 30, 1957**, Born in Arroios, Lisbon, Portugal

### Academic Qualifications [ TOP ]

- 27/11/2001      **Habilitation** to Full-Professor, Department of Electrical and Computer Engineering (DECE), Instituto Superior Técnico (IST) / Technical University of Lisbon (TU of Lisbon), Portugal.  
[Synthesis Lesson: *Advanced CMOS Operational Amplifiers for High-Frequency and Low-Power (Low-Voltage) Filters in Analog/Digital Interfaces*].
- 07/02/1992      **Doctor of Philosophy**, DECE, IST / TU of Lisbon, Portugal.  
[Ph.D. Dissertation: *Multirate Switched-Capacitor Circuits and their High-Frequency Applications*].
- 21/06/1985      **Master of Science**, DECE, IST / TU of Lisbon, Portugal.  
[M.Sc. Thesis: *MOS Operational Amplifiers for Switched-Capacitor Filters*].
- 30/09/1980      **Bachelor of Engineering** (5-years), DECE, IST / TU of Lisbon, Portugal.

### Academic Career [ TOP ]

- 16/08/2013      **Current Term**  
[Aug 31 2021]      **Chair Professor**, Department of Electrical and Computer Engineering (DECE), Faculty of Science and Technology (FST), UM (on leave from IST / U of Lisbon).
- 25/01/2011      **Current Term**  
[Mar 23 2022]      **Director**, State Key Laboratory of Analog and Mixed-Signal VLSI, University of Macau (UM), Macao, China. [<http://www.amsv.umac.mo/>]
- 07/2010      **For Life**      **Academician**, Academy of Sciences of Lisbon, Portugal.
- 01/07/2009      31/12/2012      **Founder & Acting-Dean**, Graduate School, UM.
- 01/09/2001      31/08/2002      **Founder & Acting-Head**, Department of Electrical and Computer Engineering, FST / UM.
- 01/09/2008      09/11/2008      **Acting-Rector**, University of Macau (UM), Macao, China.
- 01/09/1997      **Current Term**  
[31/08/2018]      **Vice-Rector (Research)**, University of Macau (UM), Macao, China.
- 17/02/1998      15/8/2013      **Full-Professor**, Department of Electrical and Computer Engineering (DECE), Faculty of Science and Technology (FST), UM (on leave from IST / TU of Lisbon).
- 01/07/1994      31/08/1997

		<b>Dean</b> , Faculty of Science and Technology, UM.
01/01/1994	30/06/1994	<b>Associate Dean</b> , Faculty of Science and Technology, UM.
11/1993	<b>Present</b>	<b>Principal Investigator</b> , <i>Microelectronics</i> , DEEE / FST / UM [UM Key Research Area since 2008, Founder of the <i>UM Analog and Mixed-Signal VLSI Research Lab</i> now a State Key Lab].
01/04/1993	11/10/1994	<b>Director</b> , Centre of Scientific and Technical Research / FST / UM.
16/10/1992	16/02/1998	<b>Associate Professor</b> , DEEE / FST / UM.
07/02/1992	15/10/1992	<b>Assistant/Associate Professor</b> , DECE / IST / TU of Lisbon, Portugal.
28/04/1983	06/02/1992	<b>Lecturer</b> , DECE / IST / TU of Lisbon, Portugal.
01/10/1980	27/04/1983	<b>Teaching and Research Assistant</b> , DECE / IST / TU of Lisbon, Portugal.

**Awards (Self, with Colleagues or Students & from a Team of former Ph.D. Students) [37]**  
**[ TOP ]**

37. Jan 2017 **IEEE Council on Electronic Design Automation (CEDA), Outstanding Service Award 2016, Tokyo, Japan.**
36. Oct 2016 **[Macao Science & Technology Award] Technology Invention – 2nd Prize, “Multi-Standard Wireless and Multi-Physical-Sensing Chips for Functionality Extension of Next-Generation Smart Mobiles”, (Won by Pui-In Mak and R.P.Martins), Macao, China.**
35. Feb 2016 **ISSCC 2016 - Silk-Road Award for a Ph.D. Student from IEEE R-10, (Ka-Meng Lei – Ph.D. Student, 1st Author), in Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2016, pp.474-475, San Francisco, USA.**
34. Nov 2015 **A-SSCC 2015 – Distinguished Design Award/Student Design Contest, (Ka-Meng Lei – Ph.D. Student, 1st Author), in Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2015, pp.19-1-19-4, Xiamen, Fujian, China.**
33. Nov 2015 **TENCON 2015 – Professional Award (Mo Huang – Ph.D Student, 1st Author), in Proc. IEEE Region 10 Conference - TENCON 2015, pp.1-4, Macao, China.**
32. Feb 2015 **ISSCC 2015 – 2 IEEE SSSCS Pre-doctoral Achievement Awards, (Zhicheng Lin & Jianyu Zhong – Ph.D. Students, 1st Authors), in Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2015, San Francisco, USA.**
31. Nov 2014 **2014 Business Awards of Macau – Innovation Excellence Award, “State Key Lab of Analog and Mixed-Signal VLSI”, Macao, China.**
30. Oct 2014 **[Macao Science & Technology Award] Technology Invention – 2nd Prize, “Analog and Radio Frequency Microelectronics Turn-Key Interfaces for Ubiquitous Wireless Connectivity”, (Won by Pui-In Mak Law Man Kay, R.P.Martins), Macao, China.**
29. Sep 2014 **Best Paper Award, in Proc. IEEE European Solid-State Circuits Conference - ESSCIRC'2014, pp.211-214, Venice, Italy.**
28. Feb 2014 **ISSCC 2014 - IEEE SSSCS Pre-doctoral Achievement Award, (Zushu Yan – Ph.D. Student, 1st Author), in Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2014, pp. - , San Francisco, USA.**
27. Jan 2014 **Best Associate Editor for 2012 to 2013 of IEEE Transactions on Circuits And Systems II.**
26. Aug 2013 **Best Paper Award, in Proc. IEEE 5th Asia Symposium on Quality Electronic Design - ASQED 2013, pp.216–219, Penang, Malaysia.**
25. Feb 2013 **[2012 Best Chapter (World) Award] IEEE Solid-State Circuits Society (@ Diamond Jubilee – 60 Years - of ISSCC), IEEE Macau Chapter on SSC, (Won by Chapter Chair Seng-Pan U and Chapter Secretary Sai-Weng Sin, Former Ph.D. Students – Attributed based mainly on the activity of the State Key Laboratory of Analog and Mixed-Signal VLSI)]**
24. Oct 2012 **[Macao Science & Technology Award] Technology Invention – 2nd Prize, “Analog and Mixed- Signal Interface for a Ubiquitous Electronic World”, (Won by R.P.Martins, Seng-Pan U, Pui-In Mak, Sai-Weng Sin),**

Macao, China.

23. Jun 2012 **Student Travel Award**, in *Proc. IEEE Symposium on VLSI Circuits - VLSI 2012*, pp.86-87, Hawaii, USA.
22. Feb 2012 **[China National Award] Second Class Award of The State Scientific and Technological Progress Award**, "The Design & Development of High-Performance Analog & Mixed-Signal IC Technology", (Won by Seng-Pan U, Pui-In Mak, Sai-Weng Sin – Team of former Ph.D., Master and Bachelor Students), Beijing, China. **First-Time a National S&T Award Attributed to Macao]**
21. Nov 2011 **Student Paper Award (Most voted)**, in *Proc. IEEE Asian Solid-State Circuits Conference – A-SSCC 2011*, pp.61-64, Jeju, South-Korea.
20. Oct 2011 **Gold Leaf Certificate**, in *Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2011*, pp.131-134, Macao, China.
19. Oct 2011 **Silver Leaf Certificate**, in *Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2011*, pp.119-122, Macao, China.
18. Oct 2011 **Bronze Leaf Certificate**, in *Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2011*, pp.1-4, Macao, China.
17. Feb 2011 **ISSCC 2011 - Silk-Road Award for a Ph.D. Student from IEEE R-10**, (He-Gong Wei – Ph.D. Student, 1st Author), in **Digest of Technical Papers from IEEE International Solid-State Circuits Conference – ISSCC 2011**, pp.188-190, San Francisco, USA.
16. Jun 2010 **2010 Outstanding Young Author Award**, from IEEE CAS Society (Pui-In Mak – 1<sup>st</sup> author), in **IEEE Transactions on CAS – Part I: Regular Papers**, vol. 56, No.5, pp.933-942, May 2009.
15. Sep 2009 **Gold Leaf Certificate**, in *IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2009*, pp.165-168, Shanghai, China.
14. Sep 2009 **Silver Leaf Certificate**, in *IEEE Ph.D. Research in Microelectronics and Electronics Conference Asia – PRIMEASIA'2009*, pp.117-120, Shanghai, China.
13. Jun 2009 **Certificate of Merit**, *Innovative Entrepreneurship in the Portuguese Diaspora - Award*, Lisbon, Portugal.
12. May 2009 **[2009 World Chapter of the Year] IEEE Circuits And Systems Society, IEEE Macau Joint-Chapter on CAS/COM, Founding Chapter Chair 2005-2008.**
11. Dec 2008 **Certificate of Merit**, in *IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2008*, Macao, China.
10. Jan 2008 **IEEE Fellow**, "For leadership in engineering education".
09. Jun 2007 **Most Favourite Teacher**, elected by the students of DEEE / FST / UM.
08. Jul 2006 **Two Certificates of Merit**, in *IEEE Regional Inter-University Post-graduate Electrical and Electronic Engineering Conference – RIUPEEEEC'2006*, Macao, China.
07. Jul 2005 **Silver Leaf Certificate**, in *Proc. IEEE Ph.D. Research in Microelectronics and Electronics Conference – PRIME'2005*, Volume I, pp.223-226, École Polytechnique Fédéral de Lausanne - EPFL, Lausanne, Switzerland.
06. Jul 2005 **Certificate of Merit**, in *IEEE Regional Inter-University Post-graduate Electrical and Electronic Engineering Conference – RIUPEEEEC'2005*, Hong Kong, China.
05. Feb/Jun 2005 **Award for Second Place / Conceptual Architecture Category**, in *IEEE 52<sup>nd</sup> Edition International Solid-State Circuits Conference - ISSCC'2005* (San Francisco) & *42<sup>nd</sup> Edition of Design Automation Conference – DAC'2005* (Anaheim), California, USA.
04. May 2005 **Certificate of Merit**, in *IEEE International Symposium on Circuits and Systems - ISCAS'2005*, Kobe, Japan.
03. Oct 2004 **Best Paper Award**, in *IEEE / IEE Japan 7<sup>th</sup> International Analog VLSI Workshop – AVLSIWS'2004*, Macao, China.
02. Jul 2004 **Best Paper Award - Second Place**, in *IEEE Midwest Symposium on Circuits and Systems - MWSCAS'2004*, Hiroshima, Japan.
01. Oct 2003 **Best Paper Award**, in *IEEE International Conference on ASIC - ASICON'2003*, Beijing, China.

## Decorations [ TOP ]

- 19/12/2001 **Honorary Title of Value, Decoration** attributed by the Macao Special Administrative Region Government (Chinese Administration), Macao, China.
- 10/12/1999 **Medal of Merit (Class of Professional Merit), Decoration** attributed by the Macao Government (Portuguese Administration), Macao.

## Professional Activity (in the International Scientific Community) [ TOP ]

### Professional Association (Institute of Electrical & Electronics Engineers-IEEE)

- 01/01/2017 31/12/2017 **Chair, IEEE Circuits And Systems Society (CASS) Fellow Evaluation Committee, Class 2018.**
- 01/01/2016 31/12/2016 **Member, Nominations Committee, IEEE CAS Society.**
- 01/01/2014 31/12/2014 **Member, Nominating Committee, Division I (CASS, EDS, SSCS) – Director of IEEE, Representative of IEEE CASS.**
- 01/01/2012 31/12/2013 **Vice-President (World),** Regional Activities and Membership of the IEEE Circuits And Systems Society (CASS).
- 01/01/2012 31/12/2013 **Member, IEEE CASS Fellow Evaluation Committee,** Classes of 2013 & 2014.
- 01/01/2010 31/12/2013 **Associate-Editor, IEEE Transactions on CAS–Part II: Express Briefs,** of the IEEE Circuits and Systems Society (CASS) – **Best Associate-Editor 2012-2013.**
- 01/01/2009 31/12/2011 **Vice-President, Region 10 (Asia, Australia, the Pacific)** of the IEEE Circuits and Systems Society (CASS).
- 01/01/2008 **IEEE Fellow** [IEEE Member since 1988].
- 01/08/2005 31/12/2008 **Founding Chairman, IEEE Macau Joint-Chapter CAS/COM [“2009 World-Chapter of the Year” by IEEE CASS].**
- 14/11/2003 31/12/2005 **Founding Chairman, IEEE Macau Section.**
- 1998 **Counselor, UM IEEE Student Branch.**

### Scientific Reviewer

- 12/2014 **External Examiner,** in the evaluation of a Ph.D. Thesis entitled *Multiband LTE Power Amplifier for Handset Application* [Invited by the University of Malaya].
- 01/2012 **External Examiner,** in the evaluation of a Ph.D. Thesis entitled *Low-Voltage Low-Power Analog-to-Digital Converters* [Invited by the National University of Singapore].
- 03/2010 **External Examiner,** in the evaluation of a project proposal in the field of *Prognostics and System Health Management (PHM)* [Invited by the Research Grants & Contracts Office of the City University of Hong Kong].
- 07/2003 **External Examiner,** in the evaluation of a project proposal in the field of *Microelectronics* submitted by one Hong Kong University [Invited by the Research Grants Council – RGC of the Hong Kong University Grants Committee – UGC].

### Reviewer – Scientific Journals

*IEEE Journal of Solid-State Circuits*  
*IEEE Transactions on Circuits and Systems I: Regular Papers*  
*IEEE Transactions on Circuits and Systems II: Express Briefs*  
*IEEE Transactions on VLSI Systems*

*IET Electronics Letters*  
*IET Circuits Devices & Systems*  
*Journal for Optimization and Engineering* (Springer)  
*Journal of Circuits, Systems & Computers* (World Scientific-Japan)  
*Analog Integrated Circuits & Signal Processing Journal* (Springer)  
*International Journal of Circuit Theory and Applications* (Wiley-Interscience)  
*IEEE Transactions on CAS I: Fundamental Theory and Applications* (2000–2003)  
*IEEE Transactions on CAS II: Analog and Digital Signal Processing* (2000–2003)  
*IEE Electronics Letters* (1992–2006)

## **Reviewer – Conferences**

*IEEE European Solid-State Circuits Conference – ESSCIRC*  
*IEEE International Symposium on Circuits and Systems – ISCAS*  
*IEEE Asian Solid-State Circuits Conference – ASSCC*  
*IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS*  
*IEEE Phd Research In Microelectronics & Electronics ASIA – PRIMEASIA*  
*IEEE Phd Research In Microelectronics & Electronics – PRIME*  
*IEEE Design of Circuits and Integrated Systems – DCIS*

## **Conferences Organization (42)**

11/2019		<b>42. IEEE Asian Solid-State Circuits Conference – A-SSCC'2019</b> , Macao, China, <b>General Chair</b>
05/2019		<b>41. IEEE International Symposium on Circuits and Systems – ISCAS'2019</b> , Sapporo, Hokaido, Japan, <b>International Advisory Committee</b>
27/05/2018	05/30/2018	<b>40. IEEE International Symposium on Circuits and Systems – ISCAS'2018</b> , Florence, Italy, <b>International Advisory Committee</b>
25/10/2016	28/10/2016	<b>39. 13<sup>th</sup> IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2016</b> , Jeju, South Korea, <b>International Advisory Co-Chair</b>
01/02/2016	04/02/2016	<b>38. ACM &amp; IEEE Asia South Pacific Design Automation Conference – ASP-DAC'2016</b> , Macao, China, <b>General Chair</b>
27/11/2015	29/11/2015	<b>37. 6<sup>th</sup> IEEE Asia-Pacific Conference on Postgraduate Research in Microelectronics and Electronics – PRIMEASIA'2015</b> , Hyderabad, India, <b>General Co-Chair</b>
12/06/2011	03/07/2014	<b>34-36. IEEE Ph.D. Research in Microelectronics and Electronics – PRIME'2011, 2013, 2014</b> , <b>Technical Program Committee</b>
17/11/2014	20/11/2014	<b>33. 12<sup>th</sup> IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2014</b> , Ishigaki, Okinawa, Jaipan, <b>International Steering Committee Chair</b>
17/09/2014	19/09/2014	<b>32. XXIV Annual Meeting of the Association of Portuguese Speaking Universities – AULP'2014</b> , Macao, China, <b>Scientific Program Committee Chair</b>
19/12/2013	21/12/2013	<b>31. 5<sup>th</sup> IEEE Asia-Pacific Conference on Postgraduate Research in Microelectronics and Electronics – PRIMEASIA'2013</b> , Hyderabad, India, <b>International Steering Committee Chair &amp; General Co-Chair</b>
05/12/2012	07/12/2012	<b>30. 4<sup>th</sup> IEEE Asia-Pacific Conference on Postgraduate Research in Microelectronics and Electronics – PRIMEASIA'2012</b> , Hyderabad, India, <b>International Steering Committee Chair &amp; General Co-Chair</b>
02/12/2012	05/12/2012	<b>29. 11<sup>th</sup> IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS'2012</b> , Kaohsiung, Taiwan, <b>International Steering Committee</b>

## Chair

06/10/2011	08/10/2011	<b>28.</b> 3 <sup>rd</sup> IEEE Asia-Pacific Conference on Postgraduate Research in Microelectronics and Electronics – <b>PRIMEASIA'2011</b> , Macao, China, <b>General Chair</b>
30/6/2011	01/07/2011	<b>27.</b> 10 <sup>th</sup> IEEE International Symposium on Signals, Circuits and Systems – <b>ISSCS'2011</b> , Iasi, Romania, <b>Technical Program Committee</b>
06/12/2010	09/12/2010	<b>26.</b> 10 <sup>th</sup> IEEE Asia-Pacific Conference on Circuits and Systems – <b>APCCAS'2010</b> , Kuala Lumpur, Malaysia, <b>International Steering Committee Chair</b>
13/09/2010	17/9/2010	<b>25.</b> 36 <sup>th</sup> IEEE European Solid-State Circuits Conference – <b>ESSCIRC'2010</b> , Seville, Spain, <b>Technical Program Committee Member &amp; Co-Chair of the Analog Circuits Sub-Committee</b>
06/09/2010	10/09/2010	<b>24.</b> XX Annual Meeting of the Association of Portuguese Speaking Universities – <b>AULP'2010</b> , Macao, China, <b>Scientific Program Committee Chair</b>
12/1/2010	14/1/2010	<b>23.</b> 2 <sup>nd</sup> IEEE International Conference on Frontiers of Prognostics & Health Management – <b>PHM'2010</b> , Macao, China, (jointly organized by CALCE/University of Maryland, City University of Hong Kong and UM), <b>Conference Co-Chair</b>
07/12/2009	10/12/2009	<b>22.</b> 7 <sup>th</sup> IEEE International Conference on Information, Communications and Signal Processing – <b>ICICS'2009</b> , Macao, China, (jointly organized by Nanyang Technological University, Singapore and UM), <b>Honorary Conference Co-Chair</b>
31/11/2008	03/12/2008	<b>21.</b> 9 <sup>th</sup> IEEE Asia-Pacific Conference on Circuits and Systems – <b>APCCAS'2008</b> , Macao, China, <b>General Chair</b>
27/05/2008	28/05/2008	<b>20.</b> Jean Monnet Conference – <b>The European Union at 50: Assessing the Past, Looking Ahead</b> , UM, Macao, China, (jointly supported by the European Union and UM), <b>Organizing Committee</b>
04/12/2006	06/12/2006	<b>19.</b> 8 <sup>th</sup> IEEE Asia-Pacific Conference on Circuits and Systems – <b>APCCAS'2006</b> , Singapore, <b>Technical Program Committee</b>
24/08/2006	27/08/2006	<b>18.</b> 10 <sup>th</sup> IEEE Cross-Strait Tri-Regional Radio, Science & Wireless Technology conference – <b>CSTRWC'2006</b> , UM, Macao, China, (supported by IEEE Macau, H.K., Beijing & Taipei Sections), <b>General Chair</b>
13/07/2006	14/07/2006	<b>17.</b> 4 <sup>th</sup> IEEE / IEE Regional Inter-University Postgraduate Electrical and Electronics Engineering Conference - <b>RIUPEEEEC'2006</b> , UM, Macao, China, (supported by IEEE Macau & H.K. Sections and IEE H.K.), <b>General Chair</b> (Proceedings RIUPEEEEC 2006)
12/06/2006	16/06/2006	<b>16.</b> XVI Annual Meeting of the Association of Portuguese Speaking Universities – <b>AULP'2006</b> , Macao, China, <b>Scientific Program Committee Chair</b>
12/06/2006	15/06/2006	<b>15.</b> IEEE Ph.D. Research in Microelectronics and Electronics – <b>PRIME'2006</b> , Otranto, Lecce, Italy, <b>Technical Program Committee</b>
11/12/2005	13/12/2005	<b>14.</b> IEEE 2005 Asia-Pacific Workshop on Visual Information Processing - <b>VIP'2005</b> , Hong Kong, China, <b>Advisory Committee</b>
30/11/2005	02/12/2005	<b>13.</b> 4 <sup>th</sup> International Conference on Wavelet Analysis and its Applications – <b>WAA'2005</b> , UM, Macao, China, (supported by IEEE Macau Section), <b>Honorary Chair</b>
14/07/2005	15/07/2005	<b>12.</b> IEEE / IEE Regional Inter-University Postgraduate Electrical and Electronics Engineering Conference - <b>RIUPEEEEC'2005</b> , Hong Kong, China, (supported by IEEE H.K. & Macau Sections and IEE Hong Kong), <b>Advisory Committee</b>
29/06/2005	03/07/2005	<b>11.</b> IEEE International Conference on Robotics & Biomimetics – <b>ROBIO'2005</b> , Hong Kong & Macao, China, (supported by IEEE H.K. & Macau Sections),

### Academic Advisory Board

14/06/2005	16/06/2005	<b>10.</b> <i>9<sup>th</sup> IEEE International Symposium on Consumer Electronics – ISCE’2005</i> , UM, Macao, China, (supported by IEEE H.K. & Macau Sections), <b>Organizing Committee Chair – Macao</b>
27/4/2005	30/4/2005	<b>9.</b> <i>IEEE 2005 International Conference on Asian Green Electronics</i> , Pudong, Shanghai, China, <b>Academic Advisory Board</b>
06/12/2004	09/12/2004	<b>8.</b> <i>7<sup>th</sup> IEEE Asia-Pacific Conference on Circuits and Systems – APCCAS’2004</i> , Tainan, Taiwan, <b>Technical Program Committee</b>
30/11/2004	02/12/2004	<b>7.</b> <i>11<sup>th</sup> IEEE Annual Conference on Mechatronics and Machine Vision in Practice - M2VIP’2004</i> , UM, Macao, China, (supported by IEEE H.K. & Macau Sections), <b>Organizing Committee Chair – Macao</b>
13/10/2004	15/10/2004	<b>6.</b> <i>IEEE / IEE Japan International Analog VLSI Workshop – AVLSIWS’2004</i> , UM, Macao, China, (supported by IEEE Tokyo CAS Chapter and IEEE Macau Section), <b>General Chair</b> <a href="http://www.umac.mo/AVLSIWS2004/">http://www.umac.mo/AVLSIWS2004/</a>
21/09/2004	23/09/2004	<b>5.</b> <i>IEEE European Solid-State Circuits Conference - ESSCIRC’2004</i> , Leuven, Belgium, <b>Technical Program Committee</b>
27/04/2004	30/04/2004	<b>4.</b> <i>IEEE 2004 International Conference on the Business of Electronic Product Reliability and Liability</i> , Shanghai, China, <b>Local Advisory Board</b>
07/10/2003	10/10/2003	<b>3.</b> <i>XIII Annual Meeting of the Association of Portuguese Speaking Universities – AULP’2003</i> , Macao, China, <b>Scientific Program Committee Chair</b>
20/04/1998	23/04/1998	<b>2.</b> <i>VIII Annual Meeting of the Association of Portuguese Speaking Universities – AULP’1998</i> , Macao, China, <b>Scientific Program Committee Chair</b>
02/07/1997	04/07/1997	<b>1.</b> <i>1<sup>st</sup> International Conference on Technology Policy and Innovation / Management, Assessment, Commercialization, Application and Organization of Science and Technology - Macau’97</i> , UM, Macao, China, (jointly organized by UM, IST / TU of Lisbon and University of Texas at Austin), <b>General Co-Chair</b>

### Invited Lectures / Presentations [14] [ TOP ]

Feb 22	<b>2017</b>	<b>13. &amp; 14.</b> <u>"Two Decades nurturing Scientists in Macao-From a Desert to a State Key Lab of China excelling in the World-Stage of Electronics"</u> , <b>University Lecture Series</b> , University of Macau, <b>Macao, China (13) &amp; DECE/IST/U of Lisbon, Portugal (14)</b> .
Mar 16	<b>2016</b>	
May 30	<b>2015</b>	<b>12.</b> <u>"Two Decades of Microelectronics in Macao – From a Desert to a State Key Lab of China and Beyond"</u> , <b>Invited Lecture</b> , Chao Kuang Pio College, University of Macau, <b>Macao, China</b> .
Oct 8 & 9	<b>2013</b>	<b>11.</b> <u>"Two Decades of Microelectronics in Macao – From a Desert to a State Key Lab of China in Analog and Mixed-Signal VLSI"</u> , <b>Invited Lecture</b> , (Oct. 8) - National Chiao Tung University, (Oct. 9) - Chip Implementation Center (CIC), <b>Hsinchu, Taiwan</b> .
Feb 10	<b>2012</b>	<b>10.</b> <u>"Duas Décadas de Microelectrónica em Macau – De UM Deserto a um Laboratório de Referência do Estado Chinês"</u> , <b>Invited Lecture</b> , Portuguese Academy of Sciences, <b>Lisbon, Portugal</b> .
May 18 & 20	<b>2011</b>	<b>9.</b> <u>"Two Decades in Macao Microelectronics – Education, Industry, Scientific Research / State Key Laboratory of Analog and Mixed-Signal VLSI – Locally, from World (Quality) to National (Quantity)"</u> , <b>Invited Seminar</b> (May 18), Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Minas Gerais, & <b>Invited Speaker</b> (May 20), IEEE CASS Workshop, Universidade Federal do Rio Grande do Sul (UFRGS), Porto Alegre, Rio Grande do Sul, <b>Brazil</b> [also as a Guest Editorial in <i>Macao ICT Magazine</i> , Vol. 7, pp. 6-7, May 2011].
Mar 28	<b>2008</b>	<b>8.</b> <u>"Why the interest in the position of Vice-Rector (Research)?"</u> , to the UM Recruitment Committee of Vice-Rector (Research), <b>Macao, China</b> .
Nov 25	<b>2005</b>	<b>7.</b> <u>"Portuguese Universities in transition from Tradition to European Union Bologna’s Higher-Education Framework System – University of Macau as a</u>

*Case Study", **Keynote Speaker** in 2005 Sino Education Conference, National Taiwan Normal University, Taipei, Taiwan.*

May 24	2005	6. " <u>Universidade de Macau – Tecnologia, Gestão Eficiente e Desenvolvimento Acelerado</u> ", <b>Keynote Speaker</b> in 15 <sup>th</sup> Annual Meeting of the Association of Portuguese Speaking Universities - AULP, Instituto Superior de Ciências Sociais e Políticas - ISCSP / TU of <b>Lisbon, Portugal</b> .
Feb 17	2004	5. " <u>EEE Activities in Macao</u> ", in the Ceremony of Installation as the Founding Chairman of IEEE Macau Section (witnessed by IEEE President), University of Macau, <b>Macao, China</b> , and in the Annual R10 Meeting, <b>Adelaide, Australia</b> , April <b>2004</b> .
Nov	2003	4. " <u>University of Macau – Teaching, Research and Management with International Standards</u> ", <b>Invited Speaker</b> in Presidents' Forum – the Reform and Development of Contemporary Higher Education, 110th Anniversary - University of Wuhan, <b>Hubei, China</b> .
Oct 25	2000	3. " <u>Analog Filters in Integrated Systems: CMOS Multirate Switched-Capacitor and GaAs Microwave Lumped and Tuned Transversal</u> ", <b>Invited Speaker</b> in The First Portugal-China Workshop on Solid-State Circuits, jointly-organized by IST / TU of Lisbon, UM and University of Fudan, <b>Shanghai, China</b> .
Nov	1998	2. " <u>University Development facing Globalization - Teaching and R&amp;D in the Age of Information Technology</u> ", <b>Invited Speaker</b> in Symposium on Educational Reform & Development for 21st Century Higher Education of Learning, 70th Anniversary – University of Guangxi, <b>Nanning, China</b> .
Jul 27	1993	1. " <u>CMOS Multirate Switched-Capacitor Filters</u> ", <b>Invited Seminar</b> in the Institute of Microelectronics, University of Tsinghua, <b>Beijing, China</b> .

## **Pedagogic Activity (Teaching) [ TOP ]**

06/2007

**Most Favourite Teacher, elected by the students of DEEE / FST / UM**

### **Courses [21]**

16/10/1992

07/2014

**Department of Electrical and Computer Engineering**, Faculty of Science and Technology, University of Macau [10]

**Bachelor:** *Information Technology Revolution and Electronics (New – From 2011/2012 to 2013/2014), Circuit Analysis (CA), Signals and Systems (S&S), (student evaluation – average: CA 2004/2005 – **5** e S&S 2007/2008 – **4.5 to 5**, in a scale of 1 to 6), plus Telecommunication Electronics, Digital Signal Processing, System Design and Final Project (supervised 24 students between 92/93 and 99/00)*

**Master:** *Microelectronic Circuit Design, Microelectronics for Telecommunications and Signal Processing, or Introduction to Research*

01/10/1980

15/10/1992

**Electronics Section**, DECE/IST/TU of Lisbon [11]

**Bachelor:** *Applied Electronics III, Applied Electronics IV, Telecommunications and Electronics Laboratory, Electronics II (Telecommunications), Electronics III, Electronics IV, Microelectronics of Telecommunications and Final Project (supervised 2 students in 91/92)*

**Master:** *Optimization and Modelation, Analog and Digital Filtering and Microelectronics of Telecommunications*

## **Scientific Activity (Research) [ TOP ]**

### **a) Funded Research Projects & State Key Lab**

Oct 16 1992

Present

**i) Department of Electrical and Computer Engineering**, Faculty of Science and Technology, University of Macau

**Scientific R&D Projects (21)**  
[as **Principal Investigator - PI**]



Jan 2017	Dec 2019	<b>21. Plan &amp; Budget 2017-2019 / Maintaining World-level State-of-the-Art Electronics Status while Expanding Commercialization Activity</b> , proposed fund to FDCT (55MMOP) and Match Fund from UM - Research (55MMOP) – <b>State Key Lab Fund - III</b>
Jun 2015	Jun 2018	<b>20. Electronic-Automated Digital Microfluidics System for Disease Diagnostics</b> , funded by FDCT and Research Committee of UM (4MMOP)
Jan 2015	Jan 2017	<b>19. Giga-Hz ADC for Next Generation WiGig and WiHD Wireless Communication Systems</b> , funded by FDCT and Research Committee of UM (2.75MMOP) [Co-PI]
Jun 2014	Jun 2017	<b>18. High-Performance Wideband Data Conversion Interfaces for a Evolving Informative World</b> , funded by FDCT and Research Committee of UM (5.5MMOP) [Co-PI]
Jan 2014	Dec 2016	<b>17. Plan &amp; Budget 2014-2016 / Consolidation and Further Integration of the Research Lines</b> , funded by FDCT (60MMOP) and Research Committee of UM (40MMOP) – <b>State Key Lab Fund - II</b>
Dec 2012	Dec 2015	<b>16. Ultra-Low Power Solar-Powered CMOS Biomedical Implantable Sensing Chip capable of Bi-Directional Communication</b> , funded by FDCT and Research Committee of UM (3MMOP) [Co-PI]
Dec 2011	Sep 2015	<b>15. Investigation on CMOS Based Digital Microfluidics</b> , funded by FDCT (3MMOP) and Research Committee of UM (1MMOP), in collaboration with the Dalian Institute of Chemical Physics of Chinese Academy of Sciences
Jan 2011	Dec 2013	<b>14. Plan &amp; Budget 2011-2013 / Setup of Human and Technical Infrastructure of the Analog and Mixed-Signal VLSI State Key Laboratory</b> , funded by FDCT (30MMOP) and Research Committee of UM (10MMOP) – <b>State Key Lab Fund - I</b>
May 2010	Dec 2013	<b>13. General Purpose Intelligent Adaptive Biosignal Acquisition System (Phase VI)</b> , funded by FDCT and Research Committee UM (1MMOP) [Co-PI]
Dec 2009	May 2014	<b>12. Integrated Generalized PWM Controller for DC-AC Inverter</b> , funded by FDCT and Research Committee UM (1.5MMOP) [Co-PI]
Dec 2009	May 2013	<b>11. Research and Development of Comprehensive Data Conversion Platforms in Nanometer CMOS Technology</b> , funded by FDCT and Research Committee UM (5MMOP) [Co-PI]
Nov 2009	Jun 2013	<b>10. Wireless Circuits and Systems for Mobile TV Applications in Nanoscale CMOS</b> , funded by FDCT and Research Committee UM (5MMOP) [Co-PI]
Jan 2007	Dec 2008	<b>9. Low-Voltage Multistandard-Compliant CMOS Wireless-Transceiver Analog-Baseband Platform</b> , sponsored by FDCT and Research Committee UM (2MMOP)
Jan 2007	Dec 2008	<b>8. High-Speed, High-Resolution, Low-Power Analog-to-Digital Conversion System with Emerging Scaled CMOS Technology</b> , sponsored by FDCT and Research Committee UM (2.4MMOP)
Oct 2003	Aug 2007	<b>7. Analog Baseband Microelectronics for SOC – Novel CMOS IF Data Conversion Platform for Multi-Standard Wireless Communication</b> , funded by Research Committee UM (4.8MMOP – including the financial support to create the Analog and Mixed-Signal VLSI Research Lab initiated in 2004.
Jan 2005	Aug 2005	<b>6. Two-Step Channel Selection for Wireless Receiver and Transmitter Front-Ends</b> , application to US Patent, sponsored by FDCT (150KMOP)

Oct 2003	Jun 2006	<b>5. RF Microelectronics For SoC – Analysis and Design of the Reusable RF Platform</b> , sponsored by Research Committee UM ( <u>4MMOP</u> – including updating of testing equipment from the <i>Wireless Communication Research Lab</i> concluded in 2005)
Oct 2000	Jun 2001	<b>4. Research Laboratory establishment in Wireless Communication</b> , sponsored by Research Committee UM ( <u>2MMOP</u> – for the creation of the <i>Wireless Communication Research Lab</i> concluded in 2001)
Oct 1999	Jun 2001	<b>3. Integrated Circuit Design of Low-Voltage Low-Power Multirate Analog-Digital System</b> , sponsored by Research Committee UM ( <u>200KMOP</u> )
Oct 1998	Jun 2000	<b>2. MMIC Design and Testing</b> , sponsored by Research Committee UM ( <u>120KMOP</u> )
Nov 1993	Jun 1994	<b>1. UMCHIP – University of Macau CHIP</b> , sponsored by Research Committee UM ( <u>40KMOP</u> )
Oct 1 1980	Oct 15 1992	<b>ii) Department of Electrical and Computer Engineering</b> , DECE/IST/TU of Lisbon
1990	1991	<b>R&amp;D Projects</b> (collaboration with companies - <b>4</b> ) [as Researcher] <b>4. Integrated Circuit for Mobile Phone</b> , for EID, Portugal
1986	1987	<b>3. Analog Filtering and Tone Detection for a V.32 Modem</b> , for British Telecom, UK
1985	1986	<b>2. Modem of 1200 b.p.s.</b> , for Standard Electrical, Portugal
1982	1983	<b>1. Modem of 300 b.p.s.</b> , for Centrel/CAEP-ID, Portugal
<b>b) Theses</b>		
Oct 16 1992	Present	<b>Department of ECE</b> , FST/UM  <b>Ph.D. Theses under Supervision (3)</b> [3 as Supervisor: Jiang Yang, Chen Zhiyuan and Qi Liang]  <b>Ph.D. Theses Supervised (23)</b> [As Supervisor or Co-supervisor]
Dec 2017		<b>23. Gengzhen Qi</b> , SAW-Less Multiband TDD/FDD Transceiver Front-Ends Using Gain-Boosted N-path Techniques (Co-Supervisor)
Sep 2017		<b>22. Chak-Fong Cheang</b> , Digital Correction Techniques for I/Q Mismatch, LO Feedthrough and Distortion in Wideband Transmitters (Co-Supervisor)
Sep 2017		<b>21. Wei-Han Yu</b> , Power-Efficient and Wideband WLAN Transmitter Techniques in Nanoscale CMOS (Co-Supervisor)
Sep 2016		<b>20. Ka-Meng Lei</b> , Handheld CMOS-Based NMR Devices for Biological/Chemical Diagnosis (Co-Supervisor)
Mar 2016		<b>19. Chio-In Jeong</b> , Low-Power CMOS Processors Design for ECG QRS Wave Detection and Data Compression (Co-Supervisor)
Oct 2015		<b>18. Jie Gao</b> , Electronic-Automated Intelligent Digital Microfluidic System and Its Applications to DNA Amplification (Supervisor)
Mar 2015		<b>17. Yaohua Zhao</b> , Low-Power High-Linearity and Area-Efficient Switched-Capacitor Filters Design Techniques in Nanoscale CMOS (Supervisor)

- Mar **2015** **16.Tawfiq Amin**, *Analysis and Design of Power-Efficient Voltage-Controlled Oscillators for Wireless Applications in Nanoscale CMOS* (Supervisor)
- Jul **2014** **15.Yan Zushu**, *Systematic Design and Implementation of Single-Stage and Multi-Stage CMOS Amplifiers* (Supervisor)
- Jul **2014** **14.Zhicheng Lin**, *Ultra-Low-Power and Ultra-Low-Cost Short-Range Wireless Receivers in Nanoscale CMOS* (Supervisor)
- Jul **2014** **13.Fujian Lin**, *Advanced Circuit Design Techniques for Low-Power Wideband Wireless Receivers in Nanoscale CMOS* (Supervisor)
- Jul **2014** **12.Un Ka Fai**, *New Architectures and Circuit Design Techniques for TV-Band White-Space Wireless Transmitters* (Supervisor)
- Mar **2012** **11.U-Fat Chio**, *Design Techniques for Low-Power High-Speed Analog-to-Digital Converters using Binary-Search and Subranging Schemes* (Co-Supervisor)
- Jul **2011** **10.Zhu Yan**, *Circuit Techniques for High-Performance SAR-Type ADCs* (Co-Supervisor)
- Jul **2011** **9.He-Gong Wei**, *Design of High-Speed Power/Area Optimized Multi-Bit/Cycle SAR ADC* (Co-Supervisor)
- Jul **2008** **8.Sai-Weng Sin**, *Generalized Low-Voltage Circuit Design Techniques for Very High-Speed Time-Interleaved Pipelined ADC* (Supervisor)
- Jul **2008** **7.Sio-Weng Ting**, *Multiple-Bandgap Defected Ground Structure and its Applications to Highly Selective Microwave Bandpass Filters* (Co-Supervisor)
- Jun **2008** **6.Wai-Wa Choi**, *Microwave Miniaturization Techniques and their Applications to Quasi-Elliptic Bandpass Filters* (Supervisor)
- Jul **2006** **5.Pui-In Mak**, *Multistandard-Compliant and Low-Voltage Analog-Baseband Techniques for Wireless Communication Systems* (Supervisor)
- Jul **2002** **4.Vai Mang I**, *Detecting ECG Late Potentials using Wavelet Transform* (Co-Supervisor)
- Jun **2002** **3.Seng-Pan U**, *Multirate Switched-Capacitor Interpolation Techniques for Very-High Frequency Analog Front-End Filtering* (Supervisor)
- Apr **2001** **2.Cheong Ngai**, *Interactive Compiler for Automated Design of IIR SC Multistage Decimators* (Supervisor)
- Jul **2000** **1.Kam-Weng Tam**, *MMIC Lumped and Transversal Active Bandpass Filter* (Co-Supervisor)
- M.Sc. Theses Supervised (21)**  
[As Supervisor or Co-supervisor]
- Dec **2014** **21.Li Yue**, *Joint-Digital-Predistortion for Wireless Transmitter's I/Q Imbalance and PA Nonlinearities using an Asymmetrical Complexity Reduced Volterra Series Model* (Co-Supervisor)
- Jul **2014** **20.Peng Xingqiang**, *Advanced Circuit Techniques for Class-D Power Amplifiers in Nanoscale CMOS* (Co-Supervisor)
- Jun **2014** **19.Wang Wei**, *Systematic Analysis and Design of Area-Efficient Frequency Compensation Techniques for Micropower Two-Stage CMOS Amplifiers* (Co-Supervisor)

- Aug **2013** **18.Chen Zhiyuan**, *Single-Chip Solar Energy Harvesting IC with Integrated Solar Cells for Biomedical Application*(Supervisor)
- Dec **2012** **17.Weng-Fai Cheng**, *A Wideband Balun Low-Noise Amplifier and Digital Impairment Correction Techniques for Wireless Transmitters* (Co-Supervisor)
- Dec **2012** **16.Xiao Yan Jie**, *Capacitance-to-Digital Converter for Lab-on-Chip Digital Microfluidics System & an Ultra-low Power SAR ADC with Effective Calibration* (Co-Supervisor)
- Jul **2012** **15.Yu Wei Han**, *Digital Pre-distortion and Calibration Techniques for Wireless Transmitters* (Co-Supervisor)
- Jun **2011** **14.Liu Miao**, *High-Voltage-Enabled Operational Amplifier and Active-Decoupling Technique for Wideband Balun-LNA* (Co-Supervisor)
- Apr **2010** **13.Lo Keng Wai**, *Wideband Active-Balun Variable-Gain Low-Noise Amplifier for Mobile-TV Applications* (Co-Supervisor)
- Jul **2009** **12.Un Ka Fai**, *Nanoscale CMOS Circuits for Wireless Applications: CT/DT Channel Selection Filter & Open-Loop Multi-Phase Local-Oscillator Generators* (Supervisor)
- Aug **2008** **11.He-Gong Wei**, *Design of High-Speed Analog-to-Digital Converter with High Accuracy Power Switchable Track-and-Hold* (Co-Supervisor)
- Jul **2008** **10.Yan Zhu**, *Comprehensive Linearity Analysis of High-Speed Power-Efficient Successive-Approximation ADCs with Series Capacitive DAC Structure* (Co-Supervisor)
- Aug **2007** **9.Weng-Ieng Mok**, *New Architecture for Pipeline/Two-Step ADC* (Co-Supervisor)
- Aug **2007** **8.Ka-Hou Ao Jeong**, *Low-Voltage Analog Baseband Circuitry for IEEE 802.11a WLAN Transceiver* (Co-Supervisor)
- Jul **2007** **7.Kin-Sang Chio**, *A Robust Low-Distortion Sigma-Delta Modulator for Dual-Mode RF Receivers*(Co-Supervisor)
- Jul **2007** **6.Ngai Kong**, *Reconfigurable Switched-Current Fuzzy Logic Controller*(Co-Supervisor)
- Jun **2006** **5.Ma Jun Xia**, *Design of Power Efficient Flash-Interpolation Type ADC for UWB Applications* (Co-Supervisor)
- Sep **2003** **4.Sai-Weng Sin**, *Timing-Jitter Effects in Time-Interleaved Sampled-Data Systems – Generalized Noise Analysis & Mismatch-Insensitive Clock Generation* (Co-Supervisor)
- Dec **2002** **3.Lou Fan**, *Mismatch-Insensitive N-Path Multirate SC Sigma-Delta Modulator for High-Frequency Applications* (Supervisor)
- Mar **1999** **2.Lou Weng Tim**, *CMOS Programmable Pulse and Multiphase Clock Generator* (Supervisor)
- Jul **1997** **1.Seng-Pan U**, *Impulse Sampled Switched-Capacitor Sampling Rate Converters* (Supervisor)

#### **Graduated Ph.D. Students (current appointments) [20] [ TOP ]**

**2016** **Ka-Meng Lei**, Macao Fellow in the *State Key Lab of Analog and Mixed-Signal VLSI*, UM, Macao [currently in

Harvard University, USA].

- 2016** **Chio-In Jeong**, *Design Engineer @ Hisilicon (Huawei)*, Shenzhen, China.
- 2015** **Jie Gao**, *Laboratory Technician in charge of the Clean Room (Microfluidics Chips), Biomedical Research Line in the State Key Lab of Analog and Mixed-Signal VLSI*, DEEE/FST/UM.
- 2015** **Tawfiq Amin**, *Assistant Professor @ Military Institute of Science & Technology (MIST)*, Dhaka, Bangladesh.
- 2015** **Yaohua Zhao**, *Design Engineer @ Mediatek*, Singapore.
- 2014** **Zushu Yan**, *Senior Design Engineer @ Qualcomm*, San Diego, California, USA.
- 2014** **Zhicheng Lin**, *Senior Design Engineer @ Qualcomm*, San Diego, California, USA.
- 2014** **Fujian Lin**, *Design Engineer @ Mediatek*, Singapore.
- 2014** **Ka-Fai Un**, *Post-Doc in the State Key Lab of Analog and Mixed-Signal VLSI*, UM, Macao.
- 2012** **U-Fat Chio**, *Post-Doc in the State Key Lab of Analog and Mixed-Signal VLSI*, UM.
- 2011** **He-Gong Wei**, *Design Engineer @ Silicon Labs*, LA, California, USA, *former Post-Doc in the Communication Circuits Laboratory*, Electrical Engineering Department, University of California Los Angeles (UCLA), USA.
- 2011** **Yan Zhu**, *Assistant Professor in the State Key Lab of Analog and Mixed-Signal VLSI & Part-time Consultant @ Hisilicon (Huawei)*, UM, Macao & Shenzhen, China.
- 2008** **Wai-Wa Choi**, *Assistant Professor, Wireless Communication Lab*, DECE/FST/UM, Macao.
- 2008** **Sio-Weng Ting**, *Assistant Professor, Wireless Communication Lab*, DECE/FST/UM.
- 2008** **Sai-Weng Sin**, *Assistant Professor, Academic Coordinator & Coordinator of the Data Conversion & Signal Processing Research Line in the State Key Lab of Analog and Mixed-Signal VLSI*, DECE/FST/UM, Macao.
- 2006** **Pui-In Mak**, *Associate Professor and Coordinator of the Wireless Research Line in the State Key Lab of Analog and Mixed-Signal VLSI*, DEEE/FST/UM, *Senior Member of IEEE, IEEE Distinguished Lecturer from IEEE CASS*.
- 2002** **Vai Mang I**, *Associate Professor and former Head of Department of DECE/FST/UM. Former Chairman of IEEE Macau Section, Senior Member of IEEE*.
- 2002** **Seng-Pan U**, *General Manager Synopsys (Chipidea-Macao), Visiting Professor (part-time) in DECE/FST/UM, Deputy-Director of the State Key Lab of Analog and Mixed-Signal VLSI, Chairman of IEEE Macao Joint-Chapter on CAS/COM and of IEEE Macao SSC Chapter, Fellow Member of IEEE*, Macao.
- 2001** **Cheong Ngai**, *Associate Professor in Macau Polytechnic Institute and Assistant Coordinator of the Computer Studies Program*, Macao.
- 2000** **Kam-Weng Tam**, *Full-Professor and Coordinator of the Wireless Communication Lab, Associate Dean of FST/UM and former Head of Department of DECE/FST/UM, Senior Member of IEEE*, Macao.

#### **Service (Representing UM or Public in Macao) [ TOP ]**

- |                    |                |   |
|--------------------|----------------|---|
| <b>Jan 1 2017</b>  | <b>Present</b> | <b>Chairman of the Special Committee about Technology Mediation and Cooperation Industry-University-Research of the Council of Science and Technology</b> , nominated by the Chief Executive of Macao SAR Government. |
| <b>Aug 8 2016</b>  | <b>Present</b> | <b>Member of the Council of Science and Technology</b> , nominated by the Chief Executive of Macao SAR Government.  |
| <b>Jul 5 2016</b>  | <b>Present</b> | <b>Member of the Consultative Committee</b> , Jorge Álvares Foundation, Lisbon, Portugal.   |
| <b>Aug 19 2015</b> | <b>Present</b> | <b>President of the Council of Architecture, Engineering and Urbanism</b> , nominated by the Chief Executive of Macao SAR Government.   |
| <b>Sep 19 2014</b> | <b>Present</b> | <b>President of the Association of Portuguese Speaking Universities - AULP</b> , representing UM.   |

Sep 1 2012	Present	<b>Director of the European Union Academic Program – EUAP Macau</b> , representing UM.
Jan 1 2011	Dec 2015	<b>Coordinator of 21 courses</b> in UM for the Secretariat of the <b>Forum of Economic Cooperation between China, Macao and the Portuguese Speaking Countries</b> .
Mar 1 2010	Present	<b>Member of the Board of the International Institute of Macao - IIM</b> .
Jan 1 2009	Present	<b>Chair of the Board – UMTEC (Technology Company owned by UM)</b> , representing UM.
Sep 1 2007	Aug 31 2012	<b>Executive Director</b> of the <b>Jean Monnet Chair on European Union Law - Facing the Constitutional and Governance Challenges in the Era of Globalization</b> , in the Faculty of Law.
Sep 1 2005	Sep 19 2014	<b>Vice-President of the Association of Portuguese Speaking Universities - AULP</b> , representing the Rector of UM.
Sep 1 1997	Present	<b>Scientific and Management Activity in IEEM</b>  <b>Member of the Board of Directors</b> of the Institute of European Studies of Macao – <b>IEEM</b> , between January and October of 2002, in representation of UM. <b>President of the Scientific Council</b> of the Master in European Studies (97/06). <b>President of the General Assembly</b> , in representation of UM (2008-Present).
Sep 1 1997	Present	<b>President (or VP) of the General Assembly of the Institute for the Development and Quality – IDQ-Macau</b> , representing UM.
Mar 1 1996	Dec 31 2012	<b>Management Activity in INESC-Macau</b>  <b>Member</b> (96/97) and <b>President of the Board of Directors</b> (97/03), in representation of UM. <b>VP of the General Assembly</b> , in representation of UM (2008-2012).
Sep 1 2001	Mar 31 2003	<b>Member of the Council for Science and Technology</b> , as President of INESC-Macau, nominated by Macao SAR Government (Chinese Administration).
Apr 2001	Sep 2002	<b>Co-founder of Chipidea Microelectronics (Macao) [now Synopsys]</b> coordinated in representation of UM the elaboration of the Cooperation Protocol – UM / Chipidea Microelectronis that led to the creation of a Design Center of the company in Macao.
Oct 7 1998	Jan 31 2000	<b>Member of the Consultative Council of the Y2K</b> , as President of INESC-Macau, nominated by Macao SAR Government (Chinese Administration) [created the "Macao Y2K Center"].
Jan 1 1998	Dec 19 1999	<b>Member of the Consultative Council for Science, Tecnology and Innovation</b> , as President of INESC-Macau, nominated by Macao Government (Portuguese Administration).
Oct 1 1993	Aug 31 2000	<b>Member of the Comission for the Recognition of Academic Degrees</b> , nominated by Macao Government (Portuguese Administration).

## **Selected Publications & Patents (521) [ TOP ]**

### **Books (co-author)**

7. KA-MENG LEI, PUI-IN MAK, MAN-KAY LAW, R.P.MARTINS, *Handheld Total Chemical and Biological Analysis Systems: Bridging NMR, Digital Microfluidics, and Semiconductors*, ISBN 978-3-319-67825-2, Series of Analog Circuits and Signal Processing (ACSP), **Springer Press, USA**, January **2018**.
6. ZHICHENG LIN, PUI-IN MAK, R.P.MARTINS, *Ultra-Low-Power and Ultra-Low-Cost Short-Range Wireless Receivers in Nanoscale CMOS*, ISBN 978-3-319-21524-2, Series of Analog Circuits and Signal Processing (ACSP), **Springer Press, USA**, January **2016**.
5. PUI-IN MAK, R.P.MARTINS, *High-/Mixed-Voltage Analog and RF Circuit Techniques for Nanoscale CMOS*, ISBN 978-1-4419-9538-4, Series on Analog Circuits and Signal Processing, **Springer - USA**, March **2012**.

4. SAI-WENG SIN, SENG-PAN U, R.P.MARTINS, *Generalized Low-Voltage Circuit Design Techniques for Very High-Speed Time-Interleaved Pipelined ADC*, Springer - Analog Circuits and Signal Processing, ISBN 978-90-481-9709-5, Dordrecht, The Netherlands: **Springer**, January **2011**.
3. PUI-IN MAK, SENG-PAN U, R.P.MARTINS, *Analog Baseband Architectures and Circuits for Multistandard and Low-Voltage Wireless Transceivers*, The Kluwer International Series in Engineering and Computer Science - Analog Circuits and Signal Processing, ISBN: 978-1-4020-6432-6, Dordrecht, The Netherlands: **Springer**, September **2007**.
2. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, *Design of Very High-Frequency Multirate Switched-Capacitor Circuits – Extending the Boundaries of CMOS Analog Front-End Filtering*, Technology Series, ISBN: 978-7-03-018249-4, Beijing, China: **Science Press**, January **2007**.
1. SENG-PAN U, R.P.MARTINS, J.E.FRANCA, *Design of Very High-Frequency Multirate Switched-Capacitor Circuits – Extending the Boundaries of CMOS Analog Front-End Filtering*, The Kluwer International Series in Engineering and Computer Science - Analog Circuits and Signal Processing, ISBN: 0-387-26121-4, Dordrecht, The Netherlands: **Springer**, September **2005**.

### **Book chapters**

11. KA-MENG LEI, NAN SUN, PUI-IN MAK, R.P.MARTINS, DONHEE HAM, "Micro-NMR on CMOS for biomolecular sensing", Chapter in *CMOS Circuits for Biological Sensing and Processing*, **Springer Press: USA, 2018**. [*Collaboration Harvard University & University of Macau*]
10. R.P.MARTINS, J. RANGEL, "O Impulso dos Encontros no Sul da China. O Ensino Superior de Macau, o apoio à AULP, e o Português na R.A.E.M.", *30 Anos a construir Redes de Ensino Superior em Português – Revista Internacional em Língua Portuguesa - RILP*, AULP Edition, III Série, No.30, ISSN: 2182-4452, pp.81-113, December **2016**.
9. R.P.MARTINS, "Multirate Filters" & "In Memoriam – Rui de Figueiredo", 2 Chapters in *A Brief History of Circuits and Systems – From Green, Mobile, Pervasive Networking to Big Data Computing*, Editors: Franco Maloberti & Anthony C. Davies, ISBN:978-8793379718, pp.101-104 & pp.305-306, **IEEE CAS Society & River Publishers: Denmark & The Netherlands, 2016**.
8. PUI-IN MAK, R.P.MARTINS, "Circuit Techniques for IoT-Enabling Short-Range ULP Radios", Chapter 14 in *Enabling the Internet of Things - from circuits to networks*, Editor: Massimo Alioto, pp. - , ISBN: , **Springer Press: USA, 2016**.
7. R.P.MARTINS, "A Universidade de Macau – 35 Anos", in *40 Anos de Políticas de Ciência e de Ensino Superior*, Editors: Maria de Lurdes Rodrigues and Manuel Heitor (a tribute to José Mariano Gago), ISBN: 978-972-40-6121-4, pp.1043-1050, **Almedina, Coimbra, Portugal, July 2015**.
6. ZHICHENG LIN, PUI-IN MAK, R.P.MARTINS, "Design and Implementation of Ultra-Low-Power ZigBee WPAN Receiver", Chapter 15, Part III - Biomedical and Short-Range Radios, in *Wireless Transceiver Circuits: System Perspectives and Design Aspects*, Editors: W. Rhee and K. Iniewski, pp.403-424, ISBN: 978-1-4822-3435-0 (eBook ISBN: 978-1-4822-3436-7), **CRC Press: USA, 2015**.
5. KA-FAI UN, PUI-IN MAK, R.P.MARTINS, "An Open-Loop Multi-Phase Local-Oscillator Generation Technique", Chapter 10 in *Low Power Emerging Wireless Technologies*, pp. 297-312, ISBN: 978-1-4665-0701-2, Boca Raton, Florida, **CRC Press: USA, 2013**.
4. IU VAI PAN, R.P.MARTINS, "Science and Technology Policies for Macau towards the 21st Century", Part V Opportunities for China in *Science, Technology and Innovation Policy: Opportunities and Challenges for the Knowledge Economy*, pp.453-458, ISBN: 1-56720-271-3, Westport, **Quorum Books: USA, 2000**.
3. R.P.MARTINS, "A Universidade de Macau – Evolução recente e desafios futuros", in *A Presença Portuguesa no Pacífico – Fórum Macau*, ISBN: 972-9229-70-08, pp.119-137, **Instituto do Oriente/ISCSP: Technical University of Lisbon, Portugal, April/May 1999**.
2. A.C.M.SOUSA, R.P.MARTINS, "Visão Global do Desenvolvimento da Tecnologia nalguns Países da Região do Pacífico e um "Microcosmos": Macau", in *Elementos para a Gestão de Ciência e Tecnologia*, ISBN: 972-9493-36-7, pp.27-45, **JNICT: Portuguese Ministry of Science and Technology, Lisbon, Portugal 1996**.
1. J.E.FRANCA, R.P.MARTINS, "Multirate Switched-Capacitor Filters", Chapter 8 in *Design of VLSI for Telecommunications and Signal Processing*, pp.251-288, ISBN: 0-13-203639-8, Englewood Cliffs, New Jersey, **Prentice-Hall: USA, 1994**.

### **Patents – USA (23) & Taiwan (2)**

#### **USA**

23. Zhicheng Lin, Pui In Mak, R. P. Martins, "Complex-Pole Load Offering Concurrent Image Rejection and Channel Selection", **US Patent, No. 9,479,140**, October **2016**.
22. Pui In Mak, Zhicheng Lin, R. P. Martins, "Ultra-Low-Voltage Current-Reuse Voltage-Controlled Oscillator and Transconductance-Capacitor Filter", **US Patent, No. 9,444,431**, September **2016**.

21. Pui In Mak, Zhicheng Lin, *R. P. Martins*, "Gain-Boosted N-Path Bandpass Filter", **US Patent, No. 9,374,063**, June **2016**.
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