

## Paulo F. Ribeiro, Ph.D., PE, MBA, IEEE Fellow

Professor of Engineering  
2323 Burning Tree Drive SE  
Grand Rapids, Michigan 49546  
(616) 526-6407  
[pribeiro@calvin.edu](mailto:pribeiro@calvin.edu)  
[pfribeiro@calvi.edu](mailto:pfribeiro@calvi.edu)

### Education:

Master's of Business Administration, Lynchburg College, Lynchburg, VA, 2000.  
Ph.D. Electrical Engineering, University of Manchester, Manchester, England, 1985  
Diploma in Power Engineering, Power Technology Course, Power Technologies, Inc. 1979.  
BSEE Electrical Engineering, 1975, Federal University, Recife - Brazil, 1975.  
Military Engineering, Brazilian Army - 2nd Lieutenant – Army Reserve Officer Program, 1972

### Capabilities:

Academic, Industrial management, and research experience in power systems, power electronics and power quality engineering, performing and managing transmission system planning, strategic and operation studies for power utilities and military applications; conducting research on transmission system modeling, space power systems, power electronics for photovoltaic, wind, and fuel cell generation, flexible ac transmission systems and superconducting magnetic energy storage systems; working as a consultant for the utility industry on power quality and power electronics; conducting international business and technology transfer (Europe and South America); and teaching electrical engineering full-time and part-time since 1978.

### Experience:

- With Calvin College Engineering Department, Grand Rapids, Michigan, Since 2000
  - Full professor (tenured) of electrical engineering
- With the Center for Advanced Power Systems (CAPS) Florida State University (sabbatical Jan 2006-Dec 2008)
  - Visiting Scientist consulting with several utilities (EPRI) and military (Navy) projects. Projects include modeling and simulation of SMES, shipboard power systems and compensation for wind farms.
- With the Federal University of Itajuba, Itajuba, Brazil, Since 2002 (affiliated consultant)
  - Adjunct professor of electrical engineering teaching summer courses and advising graduate students.
- With the Brazilian ISO (ONS), Since 1999
  - Consulting work regarding grid operation standards.
- With Virginia Tech University, Blacksburg, Virginia, 1996-2000
  - Adjunct professor of electrical engineering
- With BWX Technologies, Inc., Product Development Department – Naval Nuclear Fuel Division, Since 1994-2000
  - Power Systems Chief Engineer - Responsible for the power electronics interface, power systems and power quality studies. Other projects: Navy Electromagnetic Launcher EMALS, and fuel cell systems.
- With EPRI (contractor via Jacobs Engineering), 1992-1994
  - Carried out research on FACTS Controllers (included EMTP studies)
  - Supported the Power Quality Business Unit, Customer Systems Division,
- With The Energy Systems Planning and Analysis Group of Jacobs Engineers, 1992-1994
  - Responsible for power system planning and analysis (Power Quality, Custom Power, FACTS, Energy Conservation, etc.).
  - Principal investigator for several research projects for EPRI, including support for international business development
- With the Transmission System Studies Department of CHESF, Federal Power Utility, Brazil, 1975-1987
  - Performed/ Supervised Load Flow, Fault, Transient Stability, and Harmonic Studies, Responsible for site measurements on the 230 kV network, -Developed Computer Programs (in Fortran) for Unbalances and Harmonic Penetration Studies, Participated in the Commissioning of Static VAR Compensators (SVC), and Alternative Energy Sources (Photovoltaic and Wind Generating Plants).

With the Federal University of Pernambuco, Recife, Brazil, 1978-1981

Adjunct professor of electrical engineering teaching undergraduate and graduate courses.

### **Employment:**

Professor of Engineering, Calvin College, Grand Rapids, Michigan, Since 2000

Power Systems Chief Engineer, BWX Technologies, Inc, Naval Nuclear Fuel Division, Lynchburg, VA, 94-2000

Energy Systems Consultant, Jacobs Serrine Engineers, San Jose, California, 1992 to 94.

Associate Professor of Engineering, Dordt College, Iowa, 1987-1992 (on leave 92-94)

Transmission System Planning Engineer, CHESF, Federal Power Utility, Recife, Brazil, 76-81, and 85-87.

Florida State University, Center for Advanced Power Systems (CAPS) 2001-2008 (Research Advisor = sabbatical)

### **Research Appointments**

Center for Advanced Power Systems (CAPS), Florida State University, Tallahassee, FL, Jan 06-Dec 08.

Electric Power Research Institute (EPRI) - Fixed Term Appointment for Research (1992)

NASA Lewis Research Center, Cleveland, Ohio, Research Fellowship (1991)

Research Assistant, University of Manchester, Manchester, England, 1982-1985.

### **Membership of Committees**

Associate Editor, International Journal of Power and Energy Systems

IEEE PES, Task Force on Probabilistic Aspects of Harmonics (Chairman 1999 - )

IEEE International Conference on Harmonics and Quality of Power (ICHQP) – Co-Chair of Executive Committee 2000).

IEEE PES, Working Group on Superconductivity T&D Applications )

IEEE Working Groups (Harmonics, Harmonic Modeling and Simulation),

CIGRE WG 36-05 International, 1987-present, CIGRE/WG 36.05, Brazil, 80-82, 85 - 87, Chairman

Power Electronics and IEEE 519 Application Guide, FACTS)

IEEE Power Engineering Society, Siouland Section - Iowa, 1991/1992, Vice-Chairman

Transmission Planning Committee, Eletrobras, 1977-1979, 1985-1987, Brazil

### **Professional Qualifications/Registrations:**

European Engineer (Eur Ing), Parchment no. 15352

Registered Professional Engineer - PE, State of Iowa, USA, No. 11375

Chartered Engineer (CEng), England, Reg. No. 366621.

### **Professional and Academic Societies:**

Institute of Electrical and Electronics Engineers – Elected Fellow – FIEEE

Institution of Electrical Engineers (England) - Corporate Member MIEE

Institute of Electrical and Electronics Engineers - Senior Member SMIEEE

Conference Internationale des Grandes Reseaux Electriques a Haute Tension (CIGRE) - Member

Sigma Beta Delta, National Honor Society in Business, Management, and Administration

### **Patents:**

Multi-Phase DC-DC Chopper With Different Number of Phases, Patent Number 5,661,646, August 26, 1997

### **Courses Taught and International Workshops Conducted:**

(between 1978 - 2008)

Control Systems, Power Systems Analysis; Electromechanical Energy Conversion; Circuit Analysis I, II;

Electronic Conversion; Control Systems ; Electromagnetic Fields; Electronics I, II; Analog Circuit Design,

Introduction to Communications, Engineering Business and Economics, Power Quality Summer Courses and Workshops (Brazil, Colombia, Italy, England)

Power System Harmonics Course (University of California, Davis, Sacramento State University, Federal University of Itjuba)

Electric Energy and Environmental Systems, FACTS, Custom Power and Power Quality (Virginia Tech)

### **Research Experience:**

- Analysis of the Transfer Function of the Control System of a Diesel Electric Locomotive.
- Investigation of the Performance of a Small DC Motor Under Severe Load and Temperature Conditions.
- Harmonic Penetration in Transmission Systems (Ph.D. Thesis).
- Effect of background distortion on the transmission system caused by low voltage harmonic loads.
- Harmonic Asymmetries in transmission systems, and Harmonic Summation.
- Energy Conservation in Distribution Systems by Reduced Voltage Operation.
- Evaluation of Electric and Magnetic Field Levels caused by an RF-FM Transmitter and Transmission Power Lines.
- Space Power System Studies: Investigations on Distribution Losses on a Lunar Base Power System and Microsatellites for the Mars Program (2003) for JPL-NASA.
- FACTS and Power Quality
- Power electronics circuit topologies and control technologies

### **Scholarships/Grants:**

NASA-Jet Propulsion Lab, Summer Research on Micro Satellites For Mars, 2003  
National Research Council of Brazil, 1976, 1982-1985.  
Overseas Research Student Award, Principals of the Universities of the United Kingdom, England, 83 -85.  
National Science Foundation (NSF), Instructor of an enrichment program for High School students - 1990.  
Faculty Fellowship at the NASA Lewis Research Center, Cleveland, Ohio, Summer 1991  
National Science Foundation (NSF), Grant for Participation in International Conference, September, 1994  
National Science Foundation (NSF), Research on Customer Driven Holistic Micro-Grids (2007-2010)

### **Publications**

- 152- Time-Varying Waveform Distortions in Power Systems, Editor and Co-Author of 10 Chapters: Paulo F. Ribeiro, Wiley-IEEE, 2009. ISBN: 978-0-470-71402-7, Hardcover, 400 pages, Wiley-IEEE Press, 2009  
Co-Authored the following Chapters of the book:
- 1 Probabilistic aspects of time-varying harmonics, R. E. Morrison, Y. Baghzouz, P. F. Ribeiro and C. A. Duque
  - 2 Probability distribution and spectral analysis of nonstationary random processes, P. F. Ribeiro and C. A. Duque
  - 5 Visualizing Joseph Fourier's imaginative discovery via FEA, P. J. Masson, P. M. Silveira, C. A. Duque and P. F. Ribeiro
  - 15 Visualization of time-varying waveform distortions with wavelets, P. M. Silveira and P. F. Ribeiro
  - 17 Fuzzy logic application for time-varying harmonics, B. R. Klingenberg and P. F. Ribeiro
  - 18 Real-time simulation of time-varying harmonics, Y. Liu, M. Steurer and P.F. Ribeiro
  - 20 Enhanced empirical mode decomposition applied to waveform distortions, N. Senroy, S. Suryanarayanan and P. F. Ribeiro
  - 22 Tracking time-varying power harmonic distortions, C. A. Duque, P. M. Silveira, T. Baldwin and P. F. Ribeiro,
  - 23 Enhanced DFT for time-varying harmonic decomposition, P. M. Silveira, C. A. Duque, T. Baldwin and P. F. Ribeiro
  - 24 Enhanced PLL based filter for time-varying harmonic decomposition, J. R. Carvalho, C. A. Duque, M. V. Ribeiro, A. S. Cerqueira and P. F. Ribeiro
  - Appendix B: Sample of waveforms and decompositions, C. A. Duque, M. V. Ribeiro and P. F. Ribeiro
- 151 - Regional Editor for North America of the International Journal of Renewable Energy Technology Volume 1, No. 1, 2009, Publisher's website: [www.inderscience.com](http://www.inderscience.com), Email: [editorial@inderscience.com](mailto:editorial@inderscience.com)  
ISSN (Online) 1757-398X, ISSN (Print) 1757-3971.

- 150 - Masson, P. J.; Silveira, P. M.; Duque, C.; Ribeiro, P. F.; "Fourier series: Visualizing Joseph Fourier's imaginative discovery via fea and time-frequency decomposition," *Harmonics and Quality of Power*, 2008. ICHQP 2008. 13th International Conference on Sept. 28 2008-Oct. 1 2008 Page(s):1 - 5
- 149 - Ribeiro, P.F., "Common misapplications of the IEEE 519 harmonic standard: Voltage or current limits," *Power and Energy Society General Meeting - Conversion and Delivery of Electrical Energy in the 21st Century*, 2008 IEEE, 20-24 July 2008 Page(s):1 – 3.
- 148 - Ribeiro, P. F., "Publish or perish: An evaluation of the quality, quantity, ethics and review process of IEEE/PES publications: A summary of the Power Globe discussion," *Power and Energy Society General Meeting - Conversion and Delivery of Electrical Energy in the 21st Century*, 2008 IEEE, 20-24 July 2008 Page(s):1 – 6.
- 147 - de Carvalho, J.R.; Duque, C.A.; Baldwin, T.L.; Ribeiro, P.F., "A DFT-based approach for efficient harmonic/inter-harmonic analysis under time-varying conditions," *Power and Energy Society General Meeting - Conversion and Delivery of Electrical Energy in the 21st Century*, 2008 IEEE, 20-24 July 2008 Page(s):1 - 7
- 146 - Souza, R. R. N.; Coutinho, D.F.; Dos Reis, F. S.; Ribeiro, P.F., "Estimation of parameterized nonlinear loads: A time-domain approach," *Power Electronics Specialists Conference, 2008. PESC 2008,IEEE*, 15-19 June 2008 Page(s):4617 – 4623.
- 145 - Duque, C.; Silveira, P.M.; Baldwin, T.; Ribeiro, P. F., "Novel method for tracking time-varying power harmonic distortions without frequency spillover," *Power and Energy Society General Meeting - Conversion and Delivery of Electrical Energy in the 21st Century*, IEEE, 20-24 July 2008 Page(s):1 – 6.
- 144 - Reis, D. C. S.; Villela, P. R. C.; Duque, C. A.; Ribeiro, P.F.; "Transmission systems power quality monitors allocation," *Power and Energy Society General Meeting - Conversion and Delivery of Electrical Energy in the 21st Century*, IEEE, 20-24 July 2008 Page(s):1 – 7.
- 143 - Pan, Y.; Silveira, P. M.; Steurer, M.; Baldwin, T. L.; Ribeiro, P. F., "A fault location approach for high-impedance grounded DC shipboard power distribution systems," *Power and Energy Society General Meeting Conversion and Delivery of Electrical Energy in the 21st Century*, IEEE, 20-24 July 2008 Page(s):1 - 6
- 142 - Limits for Voltage Distortion in the Frequency Range 2 to 9 kHz, Bollen, M. H. J.; Ribeiro, P. F.; Larsson, E. O. A.; Lundmark, C. M.; *Power Delivery, IEEE Transactions on Volume 23, Issue 3, July 2008 Page(s):1481 - 1487*
- 141 - Voltage Sensitivity to Capacitor Switching on an Existing Fixed Speed, Induction Generator Wind Farm, Steurer, M.; Langston, J.; Anderson, L.; Suryanarayanan, S.; Meeker, R.; Ribeiro, P.; *Power Engineering Society General Meeting, 2007. IEEE 24-28 June 2007 Page(s):1 - 4*
- 140 - Interharmonics: Theory and Modeling, Testa, Alfredo ; Akram, M.F.; Burch, R.; Carpinelli, G.; Chang, G.; Dinavahi, V.; Hatziadoniu, C.; Grady, W.M.; Gunther, E.; Halpin, M.; Lehn, P.; Liu, Y.; Langella, R.; Lowenstein, M.; Medina, A.; Ortmeier, T.; Ranade, S.; Ribeiro, P.F.; Watson, N.; Wikston, J.; Xu, W. Source: *IEEE Transactions on Power Delivery*, v 22, n 4, October, 2007, p 2335-2348
- 139 - - Nonlinear Loads Parameters Estimation and Modeling, Souza, R.R.N. ; Coutinho, D.F.; Tonkoski, R., Jr.; Silva, S.L.C.; Tello, M.; Canalli, V.M.; Dias, G.A.D.; Lima, J.C.M.; Sarmanho, U.A.S.; Maizonave, G.B.; Adegas, F.D.; Ceccon, G.B.; Dos Reis, F.S.; Ribeiro, P.F.; Source: *2007 IEEE International Symposium on Industrial Electronics*, 2007, p 937-42
- 138 - Real-Time Digital Time-Varying Harmonic Modeling and Simulation Techniques, Lok-Fu Pak; Dinavahi, V.; Gary Chang; Steurer, M.; Ribeiro, P.F. Source: *IEEE, Transactions on Power Delivery*, v 22, n 2, April 2007, p 1218-27

- 137 - Investigating the Impact of Pulsed Power Charging Demands on Shipboard Power Quality, Steurer, M. ; Andrus, M.; Langsten, J.; Qi, L.; Suryanarayanan, S.; Woodruff, S.; Ribeiro, P.F. Source: IEEE Electric Ship Technologies Symposium, ESTS 2007, IEEE Electric Ship Technologies Symposium, ESTS 2007, 2007, p 315-321
- 136 - An improved Hilbert-Huang, Senroy, N. ; Suryanarayanan, S.; Ribeiro, P.F. Source: IEEE Transactions on Power Systems, v 22, n 4, Nov. 2007, p 1843-50
- 135 - Harmonic Levels and Television Events, Browne, N.; Perera, S.; Ribeiro, P.F; Power Engineering Society General Meeting, 2007. IEEE, 24-28 June 2007 Page(s):1 - 6
- 134 - Harmonic Distortion on a Transmission System During Games of the Brazilian National Team in the 2006 World Cup, Leitao, J. J. A.L.; Fonseca, L. C. A.; Lira, M. M. S.; Soares, L. R.; Ribeiro, P. F.; Power Engineering Society General Meeting, 2007. IEEE 24-28 June 2007 Page(s):1 - 2
- 133 - Fuzzy Logic for Harmonic Distortion Diagnosis in Power Systems Klingenberg, B.R.; Ribeiro, P.F.; Electro/information Technology, 2006 IEEE International Conference on May 2006 page(s):87 - 92
- 132 - Investigating the Impact of Pulsed Power Charging Demands on Shipboard Power Quality Steurer, M.; Andrus, M.; Langston, J.; Qi, L.; Suryanarayanan, S.; Woodruff, S.; Ribeiro, P.F.; Electric Ship Technologies Symposium, 2007. ESTS '07. IEEE 21-23 May 2007 Page(s):315 - 321
- 131 - Power Quality Indices Assessments on The Transmission Network in The Northeast of Brazil Leitao, J.J.L.; Siqueira, I.P.; Lira, M.M.S.; Ribeiro, P.F.; Transmission & Distribution Conference and Exposition: Latin America, 2006. TDC '06. IEEE/PES Aug. 2006 Page(s):1 - 5
- 130 - Harmonic Distortion on a Transmission System During Games of the Brazilian National Team in the 2006 World Cup Leitao, J. J. A.L.; Fonseca, L. C. A.; Lira, M. M. S.; Soares, L. R.; Ribeiro, P. F.; Power Engineering Society General Meeting, 2007. IEEE 24-28 June 2007 Page(s):1 - 2
- 129 - Harmonic Levels and Television Events Browne, N.; Perera, S.; Ribeiro, P.F; Power Engineering Society General Meeting, 2007. IEEE 24-28 June 2007 Page(s):1 - 6
- 128 - Real-Time Digital Time-Varying Harmonic Modeling and Simulation Techniques IEEE Task Force on Harmonics Modeling and Simulation, Lok-Fu Pak; Dinavahi, V.; Gary Chang; Steurer, M.; Ribeiro, P.F.; Power Delivery, IEEE Transactions on Volume 22, Issue 2, April 2007 Page(s):1218 - 1227
- 127 - Chen, L.; Liu, Y.; Arsoy, A.B.; Ribeiro, P.F.; Steurer, M.; Iravani, M.R. "Detailed modeling of superconducting magnetic energy storage (SMES) system" Power Delivery, IEEE Transactions on Volume 21, Issue 2, April 2006 Page(s):699 - 710
- 126 - Dos Reis, F. S., ; Ribeiro, P.F.; Tonkoski Jr., R., Telló, M.; Canalli, V. M.; Dias, G.A.D.; Lima, J. C. M.; Sarmanho, U. A. S.; Maizonave, G. B.; Adegas, F. D.; Ceccon, G. B.; Souza, R. R. N.; "Modeling and Identification of Loads in the Time Domain" (in Portuguese), INDUSCON, Recife, Brazil, April 9-12, 2006,
- 125 - José C. Oliveira, Carlos E. Tavares, Antônio C. Delaiba , Fernando N. Belchior, Paulo Ribeiro, Rildo M. T. Silva; "A Proposal to Support the Analysis of Consumers Refunding Demands", Paulo Ribeiro et al. INDUSCON, Recife, Brazil, April 9-12, 2006.
- 124 - Klingenberg, B.R.; Ribeiro, P.F., "Fuzzy Logic for Harmonic Distortion Diagnosis in Power Systems", Electro/information Technology, 2006 IEEE International Conference on May 2006 Page(s):87 - 92

- 123 – P.F. Ribeiro, Suryanarayanan, S.; Steurer "Time-Varying Power Quality Issues: An Overview of Advanced Modelling / Simulation and Control Approaches, Applications and Solutions, at the SEPOPE, Florianopolis, Brazil, May 21-24, 2006.
- 122 - S. Suryanarayanan, W. Ren, M. Steurer, P. Ribeiro, G. T. Heydt "A Real-time Controller Concept Demonstration for Distributed Generation Interconnection," in Proceedings of the IEEE Power Engineering Society General Meeting, Montreal, Canada, Jun. 2006.
- 121 - Langston, J.; Suryanarayanan, S.; Steurer, M.; Andrus, M.; Woodruff, S.; Ribeiro, P.F.; "Experiences with the simulation of a notional all-electric ship integrated power system on a large-scale high-speed electromagnetic transient simulator" Power Engineering Society General Meeting, 2006. IEEE, 18-22 June 2006 Page(s):5 pp.
- 120 – J. J. L. Leitão, I. P. Siqueira, M. M. S. Lira, and P. F. Ribeiro, "Power Quality Indices Assessments on the Transmission Network in the Northeast of Brazil" 2006 IEEE PES Transmission and Distribution and Exposition Latin America, Caracas, Venezuela, August 15-18, 2006.
- 119 - Carpinelli, G.; Ribeiro, P.; Testa, A. "Probabilistic and Time-Frequency Aspects of Time Varying Waveforms in Power Systems" Power Systems Conference and Exposition, 2006. PSCE '06. 2006 IEEE PES, Oct. 29-Nov. 1 2006 Page(s):246 – 251
- 118 - Ribeiro, P. F., S. Suryanarayanan and Michael Steurer: Probabilistic aspects and flexible thresholds of waveform distortions, IEEE PSCE Atlanta GA, October 2006
- 117 - B. R. Klingenberg, P.F. Ribeiro, S. Suryanarayanan, " Harmonic Distortion Diagnosis Using a Fuzzy Logic Approach," accepted, 12th International Conference on Harmonics and Quality of Power (ICHQP), Cascais, Portugal, Oct, 2006.
- 116 - N. Senroy, S. Suryanarayanan and P. F. Ribeiro, " An improved Hilbert-Huang method for analysis of time-varying waveforms in power quality," IEEE Trans. Power Sys., 2007
- 115 - P. Ribeiro, M. Steurer, S. Surayanarayanan, J. Langston, L. Anderson, R Meeker. "Voltage Sensitivity to Capacitor Switching on an Existing Induction Generation Wind Farm,"
- 114 - J. J. L. Leitão, L. C. A. Farias, M. M. S. Lira, L. R. Soares and P. F. Ribeiro, "Harmonic Distortion on a Transmission System During Games of the Brazilian National Team in the 2006 World Cup," IEEE PES Tampa 2007
- 113 - N. Browne, B.S.P. Perera and P.F. Ribeiro, "Harmonic Levels and Television Events in Australia," IEEE PES Tampa 2007.
- 112 - P. F. Ribeiro, M. Steurer, M. Islam, Re-Evaluating Electric Power System Harmonic Distortion Limits for Shipboard Systems, 11th International Conference on Harmonics and Quality of Power, Lake Placid, New York, September, 12-15, 2004.
- 111 - D. O. C. Brasil, P. F. Ribeiro, J.C. Oliveira, J. R. Medeiros, A.C. Delaiba, Assessing the Accuracy of Power Quality Instrumentation, 11th International Conference on Harmonics and Quality of Power, Lake Placid, New York, September, 12-15, 2004.
- 110 - Y. Liu, M. Steurer, S. Woodruff, P. F. Ribeiro, A Novel Power Quality Assessment Method Using Real Time Hardware-in-the-Loop Simulation, 11th International Conference on Harmonics and Quality of Power, Lake Placid, New York, September, 12-15, 2004.

- 109 - D.O.C. Brasil, P. F. Ribeiro, J.C. Oliveira, J.R. Medeiros, M.D. Teixeira, Power Quality Measurement Instrumentation: Comprehensive Field Campaign and Laboratory Tests, CIGRE Conference, Paris, August 30-September 3, 2004.
- 108 - Y. Liu, M. Steurer, and P. F. Ribeiro, A Novel Approach to Power Quality Assessment: Real Time Hardware-in-the-Loop Test Bed, IEEE Power Engineering Letter, IEEE Transactions on Power Delivery, Vol. 20, No. 2, April 2005, pp1200-1201.
- 107 - P.F. Ribeiro, An Overview of Probabilistic Aspects of Harmonics: State of the Art and New Developments, IEEE PES Summer Meeting, 12–16 June 2005, San Francisco, CA.
- 106 - W. Ren, M. Steurer, and S. Woodruff, and P.F. Ribeiro, Augmenting E-ship Power System Evaluation and Converter Controller Design by Means of Real-time Hardware-In-Loop Simulation, IEEE Electric Ship Technologies Symposium (ESTS 2005), 25 to July 27, 2005, Philadelphia, PA.
- 105 - J.A. Moor Neto, M. Aredes, M. S. Ndiaye, P. F. Ribeiro, S.A. Mussa, Estudos de Distorções Variantes no Tempo por Intermédio da Transformada Wavelet, VI Seminário Brasileiro de Qualidade de Energia, August 21-24, 2005, Belem, Brazil.
- 104 - F. C.Medeiros, D. O. C.Brasil, F. Ferreira, P. A.C. Rosas, P. F. Ribeiro, Conceitos e Considerações Sobre o Impacto da Geração Eólica da Rede Básica, VI Seminário Brasileiro de Qualidade de Energia, August 21-24, 2005, Belem, Brazil.
- 103 - P. F. Ribeiro, F. Ferreira, F. Medeiros, Geração Distribuída e Impacto na Qualidade de Energia, VI Seminário Brasileiro de Qualidade de Energia, August 21-24, 2005, Belem, Brazil.
- 102 - P. F. Ribeiro (Co-chairman of ICHQP – International Conference on Harmonics and Quality of Power) , (invited paper) M. Steurer, S. Woodruff “Dynamic Performance of a STATCOM/SMES System Utilized for Voltage Collapse Mitigation,” IEEE/CIGRE International Symposium on Quality and Security of Electric Power Delivery Systems, Montreal, 7-10 October 2003.
- 101 - Brasil D., de Medeiros J.R., Ribeiro P.F., de Oliveira J.C., Teixeira M.D.: Considerations on Power Quality Measurement Instrumentation, “7th International Conference on Electrical Power Quality and Utilization” (EPQU’03), September 2003, Cracow, Poland.
- 100 - P. F. Ribeiro, Aysen (Basa) Arsoy, Yilu Liu, and Ling Chen “Benchmark System for Superconducting Magnetic Energy Storage (SMES) System”, Prepared in cooperation with the IEEE Task Force on Benchmark Models for Digital Simulation of FACTS & Custom-Power Controllers, IEEE 2003.
- 99 - P. F. Ribeiro, (In Portuguese) “A Importância do Enfoque Probabilístico na Fixação de Limites de Harmônicas,” The Importance of Probabilistic Analysis for Harmonic Limits, Revista de Eletricidade Moderna, São Paulo Brazil, October 2003.
- 98 - R.J.R.Gomes, D.O.C. Brasil, J.R. Medeiros, P.F. Ribeiro, “Basic grid performance standards management— Concepts and Procedures,” IEEE/CIGRE International Symposium on Quality and Security of Electric Power Delivery Systems, Montreal, 7-10 October 2003.
- 97 - Medeiros, J.R.; Ribeiro, P.F.; “ Considerations on harmonic measurements and instrumentation under time varying conditions” Power Engineering Society General Meeting, 2003, IEEE, Volume: 2 , 13-17 July 2003, Pages: 1178 Vol. 2
- 96 - Ribeiro, P.F.; “A novel way for dealing with time-varying harmonic distortions: the concept of evolutionary spectra” Power Engineering Society General Meeting, 2003, IEEE, Volume: 2 , 13-17 July 2003, Pages: 1153 Vol. 2

- 95 - P.F. Ribeiro, "Power Electronics Conditioners: Configurations, Performance, Power Quality and Cost Issues: Introductory Considerations", X International Conference on Harmonics and Quality of Power, Rio de Janeiro, October 5-9, 2002, Volume: 2 , 2002, Page(s): 587 -589
- 94 - G. W. Chang, P. F. Ribeiro, G. G. Lai, H. M. Huang, and C. T. Chang, "A New Approach for Prediction of Harmonic Currents Generated by a Cluster of AC/DC Converters", X International Conference on Harmonics and Quality of Power, Rio de Janeiro, October 5-9, 2002, Volume: 1 , 2002, Page(s): 373 -377
- 93 - Arsoy, A.B.; Liu, Y.; Ribeiro, P.F.; Wang, F.; "StatCom-SMES," Industry Applications Magazine, IEEE , Volume: 9 Issue: 2 , March-April 2003, Page(s): 21 -28
- 92 - P. F. Ribeiro, Aysen (Basa) Arsoy, Yilu Liu, ,and Ling Chen "Benchmark System for Superconducting Magnetic Energy Storage (SMES) System", Prepared in cooperation with the IEEE Task Force on Benchmark Models for Digital Simulation of FACTS & Custom-Power Controllers (to be published).
- 91 - P.F. Ribeiro, "A Importância do Enfoque Probabilístico na Fixação de Limites de Harmônicas," Revista de Eletricidade Moderna, Sao Paulo Brazil, October 2003.
- 90 - Ribeiro, P.F.; Johnson, B.K.; Crow, M.L.; Arsoy, A.; Liu, Y., "Energy storage systems for advanced power applications," Proceedings of the IEEE , Volume: 89 Issue: 12 , Dec. 2001, Page(s): 1744 -1756.
- 89 - Ribeiro, P.F., "An Overview of Power Quality Problems in Transportation and Isolated Power Systems," Power Engineering Society Summer Meeting, 2001. IEEE , Volume: 1 , 15-19 July 2001, Page(s): 196 -197 vol.1.
- 88 - Ribeiro, P.F.; Carpinelli, G., "IEEE Std 519 Revision: The Need for Probabilistic Limits of Harmonics," Power Engineering Society Summer Meeting, 2001. IEEE , Volume: 2 , 15-19 July 2001, Page(s): 809 -812 vol.2.
- 87 - Ribeiro, P.F.; Aysen Arsoy; Yilu Liu, "Transmission Power Quality Benefits realized by a SMES-FACTS Controller," Harmonics and Quality of Power, 2000. Proceedings. Ninth International Conference on , Volume: 1 , 1-4 Oct. 2000, Page(s): 307 -312 vol.1.
- 86 - Arsoy, A.; Yilu Liu; Ribeiro, P.F.; Wang, F., "Power Converter and SMES in Controlling Power System Dynamics," Industry Applications Conference, 2000. Conference Record of the 2000 IEEE , Volume: 4 , 8-12 Oct. 2000, Page(s): 2051 -2057 vol.4.
- 85 - Arsoy, A.; Liu, Y.; Ribeiro, P.F.; Xu, W., "The Impact of Energy Storage on the Dynamic Performance of a Static Synchronous Compensator," Power Electronics and Motion Control Conference, 2000. Proceedings. PIEMC 2000. The Third International , Volume: 2 , 15-18 Aug. 2000, Page(s): 519 -524 vol.2.
- 84 - P.F. Ribeiro, Letter Published: on Harmonic Standards, Power Quality Assurance Magazine, August 2000
- 83 - A. Arsoy, Y. Liu, S. Chen, Z. Yang, M. L. Crow, P.F. Ribeiro, "Dynamic Performance of a Static Synchronous Compensator with Energy Storage," accepted for IEEE PES WM 2001.
- 82 - A. Arsoy, Y. Liu, and P.F. Ribeiro "Transient Modeling and Simulation of a SMES Coil and the Power Electronics Interface" IEEE Transactions on Applied Superconductivity, Vol.9, No.4, p.4715-4724, December 1999.
- 81 - Abu-Hashim, R.; Burch, R.; Chang, G.; Grady, M.; Gunther, E.; Halpin, M.; Harziadonin, C.; Liu, Y.; Marz, M.; Ortmeyer, T.; Rajagopalan, V.; Ranade, S.; Ribeiro, P.; Sim, T.; Xu, W., "Test Systems for Harmonics Modeling and Simulation," Power Delivery, IEEE Transactions on , Volume: 14 Issue: 2 , April 1999, Page(s): 579 -587.

- 80 - P.F. Ribeiro, "Modeling & Simulations of Power System Harmonics" (CD-ROM) (principal-editor), IEEE Educational Product, 1999.
- 79 - Baghzouz, Y.; Burch, R.F.; Capasso, A.; Cavallini, A.; Emanuel, A.E.; Halpin, M.; Langella, R.; Montanari, G.; Olejniczak, K.J.; Ribeiro, P.; Rios-Marcuello, S.; Ruggiero, F.; Thallam, R.; Testa, A.; Verde, P., "Time-varying harmonics. II. Harmonic Summation and Propagation," Power Delivery, IEEE Transactions on , Volume: 17 Issue: 1 , Jan. 2002, Page(s): 279 -285
- 78 - Gunther, E.W.; P.F. Ribeiro, et al, "Interharmonics in Power Systems," Power Engineering Society Summer Meeting, 2001. IEEE , Volume: 2 , 15-19 July 2001 - Page(s): 813 -817 vol.2
- 77 - A. Arsoy, Y. Liu, and P.F. Ribeiro, "Electromagnetic Transient Interaction of a SMES Coil and the Power Electronics Interface," Virginia Tech Power Electronics Conference, September 1998.
- 76 - Karasik, V.; Dixon, K.; Weber, C.; Batchelder, B.; Campbell, G.; Ribeiro, P.F., "SMES for Power Utility Applications: A Review of Technical and Cost Considerations," Applied Superconductivity, IEEE Transactions on , Volume: 9 Issue: 2 , June 1999, Page(s): 541 -546
- 75 - P.F. Ribeiro, "Advanced Power Quality Solutions for Increasingly Sophisticated Industrial Processes," XII Brazilain Congress on Automation, Uberlandia, September 1998.
- 74 - P.F. Ribeiro, X. Mao, "Power Factor Correction," John Wiley Encyclopedia of Electrical and Electronics Engineering, 1998.
- 73 - P.F. Ribeiro, "Distribution Systems and Other Elements Modeling," Chapter 3, IEEE Tutorial on Harmonics Modeling and Simulation, 1998
- 72 - P.F. Ribeiro, "Frequency-Domain Harmonic Analysis Methods," Chapter 7, IEEE Tutorial on Harmonics Modeling and Simulation, 1998
- 71 - Advanced Techniques and Technologies For Power Quality: Necessary Sophistication or Indispensible Tools, 1998 Large Engineering Systems Conference on Power Engineering, June 7-9, 1998, Halifax, Nova Scotia, Canada.
- 70 - P.F. Ribeiro, P. Pilay, "Wavelet Analysis of Power Systems Transients Using Scalograms and Multi-Resolution Analysis," IEEE PES Winter Meeting 1999.
- 69 - Pereira, F.C.; Souto, O.C.N.; De Oliveira, J.C.; Vilaca, A.L.A.; Ribeiro, P.F., "An Analysis of Costs Related to the Loss of Power Quality," Harmonics And Quality of Power, 1998. Proceedings. 8th International Conference on , Volume: 2 , 14-16 Oct. 1998, Page(s): 777 -782 vol.2
- 68 - Souto, O.C.N.; De Oliveira, J.C.; Neto, L.M.; Ribeiro, P.F., Power Quality Impact on Performance and Associated Costs of Three-Phase Induction Motors, Harmonics And Quality of Power, 1998. Proceedings. 8th International Conference on , Volume: 2 , 14-16 Oct. 1998, Page(s): 791 -797 vol.2
- 67 - Oliveira, J.C.; Vilaca, A.L.A.; de Oliveira, A.; Souto, O.C.N.; Marcio, A.; Ribeiro, P.F., "A Practical Case of Power Quality Study," Harmonics And Quality of Power, 1998. Proceedings. 8th International Conference on , Volume: 1 , 14-16 Oct. 1998, Page(s): 382 -387 vol.1
- 66 - Delaiba, A.C.; de Oliveira, J.C.; Cardoso, J.R.; Ribeiro, P.F., "Practical Validation for the Frequency Domain Approach to Study the Thermal Behavior of Transformers Under Nonsinusoidal Operation Conditions," Harmonics And Quality of Power, 1998. Proceedings. 8th International Conference on , Volume: 2 , 14-16 Oct. 1998, Page(s): 946 -951 vol.2

- 65 - Baghzouz, Y.; Burch, R.F.; Capasso, A.; Cavallini, A.; Emanuel, A.E.; Halpin, M.; Imece, A.; Ludbrook, A.; Montanari, G.; Olejniczak, K.J.; Ribeiro, P.F.; Rios-Marcuello, S.; Tang, L.; Thaliyam, R.; Verde, P., "Time-Varying Harmonics. I. Characterizing Measured Data," Power Delivery, IEEE Transactions on , Volume: 13 Issue: 3 , July 1998, Page(s): 938 -944.
- 64 - P.F. Ribeiro, "The Power Industry Revolution," Modern Electricity, Brazil, March 1998 (Portuguese).
- 63 - P.F. Ribeiro, "A Superconducting Magnetic Energy Storage (SMES) Device for Utility Application: An Integrated Demonstration of Energy Storage, FACTS Technology, and Power Quality Functions," Proceedings of the IASTED International Conference, High Technology in The Power Industry, October 27-30, 1997, Orlando Florida.
- 62 - P.F. Ribeiro, "Multi-MW Power Electronics Design and Cost Issues," EPRI Power Electronics Applications Workshop, San Diego, November 5-7, 1997
- 61 - Abu-Hashim, R.; Burch, R.; Chang, G.; Grady, M.; Gunther, E.; Halpin, M.; Harziadonin, C.; Liu, Y.; Marz, M.; Ortmeyer, T.; Rajagopalan, V.; Ranade, S.; Ribeiro, P.; Sim, T.; Xu, W., "Test systems for Harmonics Modeling and Simulation," Power Delivery, IEEE Transactions on , Volume: 14 Issue: 2 , April 1999, Page(s): 579 -587
- 60 - P.F. Ribeiro, "Superconducting Magnetic Energy Storage for Integrated Power Quality Solutions," National Science Foundation Conference on Unbundled Power Quality Services in the Power Industry, November 1996.
- 59 - Galli, A.W.; Heydt, G.T.; Ribeiro, P.F., " Exploring the Power of Wavelet Analysis," Computer Applications in Power, IEEE , Volume: 9 Issue: 4 , Oct. 1996, Page(s): 37 -41
- 58 - P.F. Ribeiro, "A Reflection on the Subject of Converter Internal Harmonic Impedance," 7th International Conference on Harmonics and Power Quality, Las Vegas, October 1996.
- 57 - P.F. Ribeiro, "Power Quality Modeling Using Wavelets," 7th International Conference on Harmonics and Power Quality, Las Vegas, October 1996.
- 56 - AC System Modeling For AC Filter Design - An Overview of Impedance Modeling, Electra No. 164, February 1996.
- 55 - Gole, A.M.; Keri, A.; Kwankpa, C.; Gunther, E.W.; Dommel, H.W.; Hassan, I.; Marti, J.R.; Martinez, J.A.; Fehrlé, K.G.; Tang, L.; McGranaghan, M.F.; Nayak, O.B.; Ribeiro, P.F.; Irvani, R.; Lasseter, R.; "Guidelines for Modeling Power Electronics in Electric Power Engineering Applications," Power Delivery, IEEE Transactions on , Volume: 12 Issue: 1 , Jan. 1997, Page(s): 505 -514
- 54 - Rogers, D.A.; Ribeiro, P.F., "Ethics, Technology, and Society in the Heartland: Their Role in Engineering Education," Technology and Society Technical Expertise and Public Decisions, 1996. Proceedings., 1996 International Symposium on , 21-22 June 1996, Page(s): 172 -176
- 53 - P.F. Ribeiro, "Superconducting Magnetic Energy Storage (SMES) For Integrated Power Quality Applications," Power Quality '95 Exhibition, Germany, November, 1995.
- 52 - P.F. Ribeiro, "Integrated Power Quality Considerations of a Superconducting Magnetic Energy Storage System," EPRI PQA'95 Conference, New York, NY, May 1995
- 51 - P.F. Ribeiro (co-author), "Superconducting Magnetic Energy Storage Systems for Transmission and Distribution Applications," CICRE WG 36 Colloquium, Brazil, May 1995.

- 50 - P.F. Ribeiro (co-author) "Modeling and simulation of the propagation of harmonics in electric power networks. I. Concepts, models, and simulation techniques," Power Delivery, IEEE Transactions on , Volume: 11 Issue: 1 , Jan. 1996 Page(s): 452 -465
- 49 - P.F. Ribeiro, "Modeling and simulation of the propagation of harmonics in electric power networks. II. Sample systems and examples," Power Delivery, IEEE Transactions on , Volume: 11 Issue: 1 , Jan. 1996 Page(s): 466 -474
- 48 - P.F. Ribeiro; N. Hingorani, "Flexible AC Transmission Systems: The State of the Art," Modern Electricity, Brazil, January 1995 (Portuguese)
- 47 - P.F. Ribeiro, "Superconducting Power Delivery Systems For Transmission & Distribution Applications," Presented at the 57th American Power Conference, Chicago, IL, April 18-20, 1995
- 46 - P.F. Ribeiro, D. Rogers, "Power Electronics, Power Quality and Modern Analytical Tools: The Impact on Electrical Engineering Education," IEEE / ASEE - 1994 Frontiers in Education Conference, San Jose, CA, 1994
- 45 - Ribeiro, P.F.; Rogers, D.A., "An experiment with Electronic Instruction: a Power Systems Course Via E-Mail/Internet," Frontiers in Education Conference, 1994. Twenty-fourth Annual Conference. Proceedings , 2-6 Nov. 1994, Page(s): 440 -443
- 44 - Ribeiro, P.F., "Demystifying Power Quality Computations: An Integrated Harmonic Analysis Using a Graphical Environment," Power Quality Symposium, Sacramento Sate University, Sacramento, October 94.
- 43 - P.F. Ribeiro, "Probabilistic Assessment of Harmonic Distortion Caused by Residential Load Areas," ICHPS VI / 94 Italy.
- 42 - P.F. Ribeiro, "A Novel Approach to Non-Linear Load Modeling," ICHPS VI / 94 Italy.
- 41 - P.F. Ribeiro, "Wavelet Transform: An Advanced Tool for Analyzing Non-Stationary Distortions In Power Systems," ICHPS VI / 94 Italy.
- 40 - P.F. Ribeiro, "An Efficient Method for Assessment of Dynamic Load Behavior of Modern Rail Systems and its Impact on AC Voltage Regulation," ICHPS VI / 94 Italy.
- 39 - P.F. Ribeiro, "A Simplified Method for Analyzing Harmonic Sensitivity in Electrical Power Networks, ICHPS VI / 94 Italy.
- 38 - P.F. Ribeiro, Power Quality Issues in South America: Present Reality and Future Opportunities, PQA 94, Amsterdam.
- 37 - P.F. Ribeiro, "Application of Wavelets to Determine Motor Drive Performance During Power Systems Switching Transients," PQA 94, Amsterdam.
- 36 - P.F. Ribeiro, Advance Techniques for Voltage Quality Analysis: Unnecessary Sophistication or Indispensable Tools?, PQA 94, Amsterdam.
- 35 - P.F. Ribeiro, Power Quality: An Integrated Perspective (in Portuguese) SNPTEE 1993, Recife, Brazil.
- 34 - P.F. Ribeiro, Flexible AC Transmission Systems (FACTS): The State of the Art (in Portuguese), SNPTEE 1994, Recife, Brazil .

- 33 - P.F. Ribeiro, Future Analysis Tools for Power Quality, EPRI - PQA 93, San Diego, November 1993.
- 32 - P.F. Ribeiro, Harmonics and Energy Loss - A Study in ASD Applications, EPRI - PQA 93, San Diego, November 1993
- 31 - Ribeiro, P.F., "Guidelines On Distribution System And Load Representation For Harmonic Studies Harmonics in Power Systems," ICHPS V International Conference on , September 22-25, 1992, Page(s): 272 -280
- 30 - de Oliveira, A.; de Oliveira, J.C.; Ribeiro, P.F., "Developments In Instrumentation For Harmonic Distortion Monitoring And Measurement," Harmonics in Power Systems., ICHPS V International Conference on , September 22-25, 1992, Page(s): 23 -28
- 29 - de Oliveira, A.; de Oliveira, J.C.; Sharaf, A.M.; Ortmeyer, T.H.; Ribeiro, P.F., "Harmonic Standards - The Need For An Integrated Perspective, Harmonics in Power Systems., ICHPS V International Conference on , September 22-25, 1992, Page(s): 295 -302
- 28 - P.F. Ribeiro; Fonseca, L.C., "Considerations On The Accuracy Of Three-Phase Harmonic Penetration Studies in Transmission Systems: A Case Study, Harmonics in Power Systems., ICHPS V International Conference on , September 22-25, 1992, Page(s): 57 -64
- 27 - P.F. Ribeiro, D.M. Kankam, Energy Loss Analysis of An Integrated Space Power Distribution System", Intersociety Energy Conversion Engineering Conference (IECEC), San Diego, CA, August 1992:
- 26 - P.F. Ribeiro, "Integrated Engineering Education: Educating World Class Engineers", National Conference of the American Society for Engineering Education (ASEE), Toledo, Ohio, June 1992:
- 25 - P.F. Ribeiro, "Integrated Use of Computer Software in Electrical Engineering Education", ASEE Computers in Education Journal, April 1992.
- 24 - P.F. Ribeiro, "Using The Windows Environment for Integration of Computer Software Into Electrical Engineering Classwork: Some Applications", North Midwest Section Meeting of the American Society for Engineering Education,, Milwaukee, Wisconsin, October 8-10, 1992:
- 23 - P.F. Ribeiro, "Fourier Analysis Across the Curriculum: An Integrated Approach", North Midwest Section Meeting of the American Society for Engineering Education,, Milwaukee, Wisconsin, October 8-10, 1992:
- 22 - P.F. Ribeiro, "Using MathCAD/Windows in Introduction to Power System Analysis", North Midwest Section Meeting of the American Society for Engineering Education,, Milwaukee, Wisconsin, October 8-10, 1992:
- 21 - P.F. Ribeiro, D. Rogers, "Engineering Ethics for the Twenty-First Century", American Society for Engineering Education,, 1992 Annual Meeting, Toledo, Ohio.
- 20 - Ribeiro, P.F., "Introduction of Professional Software into the Curriculum of an Undergraduate Power System Analysis Course," Power Systems, IEEE Transactions on , Volume: 6 Issue: 4 , Nov. 1991, Page(s): 1584 -1588
- 19 - P.F. Ribeiro, D.M. Kankam "Energy Loss Analysis as a Planning Tool For Space Power Systems: A Lunar Base Application", First Iowa Space Conference, The University of Iowa, Iowa City, Iowa, January 24-25, 1992 (co-author Dr. M.David Kankam)
- 18 - P.F. Ribeiro, "Lunar Base Power System Study: Energy Loss Analysis of an AC Distribution System", Faculty Fellowship Research Report, NASA Lewis Research Center, Cleveland, Ohio, August, 1991.

- 17 - P.F. Ribeiro, D. Rogers, "Options for Engineering Design Education", Electromagnetics, Microwave Engineering, and Communications Electronics, 3rd International Symposium on Recent Advances in Microwave Technology, University of Nevada, Reno, August, 1991.
- 16 - P.F. Ribeiro, D. Rogers "Integrated Use of Computer Software in Electrical Engineering Education", Proceedings of the 1991 American Society for Engineering Education Conference, New Orleans, June 16- 19.
- 15 - P.F. Ribeiro, "Operating Experience with Voltage Distortions in the Brazilian Network: A Survey", IV International Conference on Harmonics in Power Systems, Budapest Technical University, Budapest, Hungary, October 1990.
- 14 - P.F. Ribeiro, "Investigations of Harmonic Penetration in Transmission Systems," Ph.D. Thesis submitted to The Victoria University of Manchester, England, July, 1985.
- 13 - P.F. Ribeiro, "Some Considerations on Harmonic Penetration Studies in Transmission Systems," 20th Universities Power Engineering Conference, Huddersfield, England, April 1985.
- 12 - P.F. Ribeiro et al, "Equipment Producing Harmonics and the Conditions Governing their Connection to the Main Power Supply," 1989 (joint authorship CIGRE WG 36.05) CIGRE - Electra. Nr 123, March 1989, pp 20-37.
- 11 - P.F. Ribeiro, "Power Systems Analysis on a Small Municipal Utility: An Unfolding Approach to the teaching of Power Engineering", 1989 Annual Meeting of the ASEE, South Dakota State University, Brookings, October 15- 17, 1989.
- 10 - P.F. Ribeiro, A. Navarro, "Measurements and Analysis of Harmonics Due to a Static Compensator Operating in a Long Radial Transmission System (Brazil's Northeast)," III International Conference on Harmonics in Power Systems, September, 1988, Purdue University
- 9 - P.F. Ribeiro, J. Bickford, "Harmonic Asymmetries in Transmission Systems," 21st Universities Power Engineering Conference, Imperial College, London, England, April, 1986.
- 8 - P.F. Ribeiro, "Accuracy of Harmonic Distortion Measurements,"; "Effect of Load Growth on Harmonic Levels," ; "Transformers/Line Models," Technical Contributions to the Biennial Meeting of CIGRE, Paris, August, 1986 .
- 7 - P.F. Ribeiro, "Analysis of Harmonics Generated by Thyristor Controlled Reactors," (in Portuguese), IX Seminario Nacional de Producao e Transmissao de Energia Eletrica, Belo Horizonte, 1987).
- 6 - P.F. Ribeiro, "Planning Criteria and Procedures for Supplying Distorting Loads", (in Portuguese), GTCP - Eletrobras, Brazil, 1989.
- 5 - P.F. Ribeiro, "Considerations on Harmonic Propagation in Transmission Systems", (in Portuguese), Conferencia Internacional da Comissao de Integracao Eletrica Regional (CIER), Comite Latino- Americano, Chile, 1987.
- 4 - P.F. Ribeiro, "Analysis of Harmonic Distortions Caused by Non- Linear Loads", (in Portuguese), Conferencia Internacional da Comissao de Integracao Eletrica Regional (CIER), Comite Latino- Americano, Chile, 1987.
- 3 - P.F. Ribeiro, "Harmonic Analysis of the Fortaleza Static Compensator" (in Portuguese), IX Seminario Nacional de Producao e Transmissao de Energia Eletrica, Belo Horizonte, 1987.

2 - P.F. Ribeiro, "Study of the Electrical Behavior of an Industrial AC Railway (Unbalances, Harmonics and Voltage Fluctuations)," (in Portuguese), V Seminario Nacional de Producao e Transmissao de Energia Eletrica, Recife, 1979.

1 - P.F. Ribeiro, J. Robba, "Unbalances Caused by an Industrial AC Railway - A Simplified Analysis," (in Portuguese), IV Seminario Nacional de Producao e Transmissao de Energia Eletrica, Rio de Janeiro, 1977.