# *René Wamkeue*, ing., Ph.D Full Professor

# Personal

#### 2004-2011 UNIVERSITY OF QUEBEC AT ABITIBI-TEMISCAMINGUE, PQ, Canada

2810 Amulet, Rouyn-Noranda, J9X 6J8, QC Associate Professor, University of Laval, Quebec City, PQ

Associate Professor, University of Quebec at Chicoutimi, PQ

# Education

1997	PhD in Electrical Engineering,
	Ecole Polytechnique de Montreal, Montreal, PQ, Canada
1990	Master of Applied Sciences in Electrical Engineering and Pedagogical Sciences,
	University of Douala, Advanced Teaching School for Technical Education, Cameroon
1985	Bachelor of Applied Sciences in Electrical Engineering and Pedagogical Sciences,
	University of Douala, Advanced Teaching School for Technical Education, Cameroon

# **Professional Experience**

#### 1998-Present University of Quebec at Abitibi-Temiscamingue, PQ, Canada

- Since 2010 Holder, Quebec Research Chair in Engineering Education
- Since 2008 Full Professor, Electrical Engineering
- 1998-2005 Associate Professor, Electrical Engineering

Development and teaching of 5 under graduated and 4 graduated courses- Supervisor of 30 under graduated student projects, 10 Masters and 6 PhD candidates.

#### 2005-Present University of Laval Quebec City, PQ, Canada

• Associate Professor, Electrical Engineering and computer sciences

#### 2004-Present University of Quebec at Chicoutimi, PQ, Canada

- Associate Professor, Electrical Engineering
- 1997-1998 Ecole Polytechnique de Montreal, Montreal, PQ,
  - Assistant Professor, Electrical Engineering and Computer Sciences
- 1990-1992 The University of Douala, Douala, Cameroon,
  - Assistant Professor, Advanced Teaching School for Technical Education
- **1990-1992** Cameroonian Higher Education,
  - Teacher, Government Technical High School, Douala Cameroon
  - Teacher, Government Technical Secondary School, Douala Cameroon

# **ADMINISTRATIVE FUNCTIONS**

#### Universite of Quebec at Abitibi-Témiscamingue, PQ, Canada

- 2004-2011 Program manager and Technical coordinator of electromechanical related projects with industrial partners
- 2002-2004 Director, Applied Sciences Research Unit
- 1999-2001 Program coordinateur, Bachalor in Electromechanical engineering

#### MEMBERSHIP

- Past Secretary of Working Group 7 for revision of IEEE Std-115 procedures of testing synchronous machines
- Member of IEEE-PES Electric Machine Committee
- Member executive committee, Quebec practicing professional engineering organization, Abitibi-Témiscaminque, PQ.
- Senior Member IEEE

## PAST EDITOR

- Proceedings of the 17th IASTED International Conference on Modelling and Simulation, May 24-26, 2006, Montréal Canada
- Proceedings of the 18th IASTED International Conference on Modelling and Simulation, May 30-June 1, 2007, Montréal Canada
- Proceedings of the 19th IASTED International Conference on Modelling and Simulation, May 26-28,2008, Quebec, Canada

#### CONFERENCE CHAIR AND SESSION CHAIR

- General Conference Chair, International Association for Science and Technology for Development, IASTED Conference on Modelling and Simulation, May 30-June 1, 2007, Montreal, Canada
- General Conference Chair, International Association for Science and Technology for Development, IASTED Conference on Modelling and Simulation, May , 24-26 2006, Montreal, Canada
- Member organising comitee ELECTRIMACS'2008, Université Laval, Québec, Juin 8-11, 2008
- Session Chairman, 6<sup>th</sup> Symposium on Advanced Electromechanical Motion System, Electromotion, September, 27-29, 2005, Lausanne, Switzerland
- Session Chairman, 16<sup>th</sup> IASTED Conference on Modelling and Simulation, May 18-20, 2005, Cancun, Mexico
- Session Chairman, IASTED, Control and Applications, May, 20-22, 2002, Cancun, Mexico,
- Session Chairman, ICEMS, Power Electronics, August, 15-20, 2001, Shenyang, China,
- Session Chairman, IASTED, Power Systems, July, 24-27, 2000, Banff, New Scotia, Canada,
- Session Chairman, IASTED, Systems Identification, September 1-3, 1999, Cairns, Australia,

#### REVIEWER

• Reviewer Power Engineering Society :

IEEE Transactions on Energy conversion:

IEEE Transactions on Power Delivery

IEEE Transactions on Power Systems

IEEE Transactions on Automatic Control

- Reviewer IET, Proceedings on Electric Power Applications
- Member technical comitee du SCI (Systemics, Cibernetics and Information)
- Member technical committee, Journal of Automation, Mobile Robotics and Intelligent Systems
- Technical Referee, Canada Natural Sciences and Engineering Research Council
- Reviewer IEEE, IEMDC'2005, International Electric Machines and Drives Conferences, San Antonio, Texas, May 15-18, 2005
- Reviewer IEEE international Join Conference on Neural Network, Vancouver July 2006, Canada,
- Reviewer IEEE International Symposium on Industrial Electronics, 9-13 July, 2006, Montréal

#### **IEEE AWARD**

Best IEEE-PES'2009 paper Award, **R. Wamkeue**, F. Baetscher, I. Kamwa, "Hybrid State Model Based Time-Domain Identification of Synchronous Machine Parameters from Saturated Load Rejection Test Records," IEEE Transactions on Energy Conversion, Vol.23, Issue 1, March 2008, Pages 68-77. (2009's Best Paper Award)

#### IEEE STANDARDS ASSOCIATION CERTIFICATE OF APPRECIATION

Acknowledges with appreciation for outstanding contributions to the development of IEEE Standard 115<sup>™</sup> - 2009, IEEE Guide for Test Procedures for Synchronous- Part I: Test Procedures and Parameter Determination for Dynamic Analysis

# **Selected Research Grants**

#### QUEBEC RESEAR CHAIR IN ENGINEERING EDUCATION

- Design, development and implementation of a reduced scale analog simulator for power • system networks including turbo-generator, transmission and distribution power cables and dynamic loads; (partnership with HYDRO-QUÉBEC)
- Development of a new software for simulation and identification of AC electrical machines •

#### HYDRO-QUÉBEC

- Design and finite element modeling of reduced scale generator for power system analog • simulator
- Understanding effects of private distributed power generation units to Hydro-Quebec utility • network

#### NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL 179K\$

- Modeling and Statistic identification of electrical machines (induction, synchronous, DC • machines and transformers)
- Numerical modeling, real time prediction, stability analysis, identification and control of islanded electrical networks based windmill/diesel twimming
- Analysis, design and optimiztion of self-excited and self-controlled asynchronous generator •

#### SWISS STRATEGIC RESEARCH FOR ENGINEERING 60K\$

Modeling and on-line identification of triphase induction machine for real-time control purpose.

#### QUEBEC RESEARCH GRANT

Modeling and finite element identification of synchronous machines

#### UQAT RESEARCH FUNDS

Modeling, identification, design and control of electric machines for wind applications

503K\$/2009-2014

45K\$

100 K\$

## 70k\$

## A. BOOK CHAPTER

D. Aguglia, P. Viarouge, **R. Wamkeue** and J. Cros, "Optimal Selection of Drive Components for Doubly-Fed Induction Generator Based Wind Turbines," Accepted for publishing in the book "Wind Turbines," ISBN 978-953-7619-X-X published by INTECH.

## B. PEER-REVIEWED JOURNAL PAPERS

- 1. **R. Wamkeue**, I. Kamwa, M. Chacha "Unbalanced Transients Based Maximum Likelihood Identification of Multi-Rotor Winding Induction Machines," IEEE Transaction on Energy Conversion, Vol. 18, No.1, pp. 33-40, March 2003
- R. Wamkeue, N. E.E. Elkadri, I.Kamwa, M. Chacha "Finite-Element Modelling of Multiple Rotor Circuits Synchronous Machine," International Journal of Modelling and Simulation, Vol.22, No.4, pp. 239-244, Dec, 2002
- R. Wamkeue, I. Kamwa, M. Chacha., "Line-to-Line Short-circuit Transients Based Finite-Element Performance and Parameter Predictions of Large Hydrogenerators," IEEE Transaction on Energy Conversion, Vol. 18, No. 3 pp.370-378, September 2003
- 4. **R. Wamkeue**, I. Kamwa , "Load Rejection Analysis of Self-Excited Induction Generators for Autonomous Power Generation," Electric Power Components and Systems, Vol. 30, No.3, pp. 263-275, 2002.
- 5. **R. Wamkeue**, I. Kamwa, "Numerical Modeling and Simulation of Saturated Unbalanced Electromechanical Transients of Self-Excited Induction Generators," Electric Power Systems Research, Vol. 61, pp.11-21, 2002
- R. Wamkeue, N.E.E Elkadri, I. Kamwa, M. Chacha, "Unbalanced Transient-based Finite-element modeling of Large Generators", Electric Power Systems Research, Vol. 56, pp.205-210, February 2000.
- 7. **R. Wamkeue**, I. Kamwa, "Generalized state-space modelling of induction machines having multiple rotor circuits," Electromotion, Vol. 7, No.1, pp. 15-22, January-March, 2000
- R. Wamkeue, (M) I. Kamwa (SM), X. Daï-Do (SM), A. Keyhani (SM) "Iteratively Reweighted Least Squares for Maximum Likelihood Identification of Synchronous Machine Parameters from On-line Tests," IEEE Transaction on Energy Conversion, Vol. 14 (2), pp.159-166, June 1999.
- 9. **R. Wamkeue, (M), I**. Kamwa (SM), X. Daï-Do (SM), "Line-to-line Short-Circuit Based Maximum Likelihood Estimation of Stability Model of Large Generators," IEEE Transactions on Energy Conversion, Vol. 14 (2), pp.167-174, June 1999.

- B. Bensaker, H. Kherfane, M. Metatla, R. Wamkeue, , "State-space modelling of induction motors for sensor less control and monitoring purposes," Electromotion, Vol. 10, No.4, pp. 483-488, October-December 2003
- 11. **R. Wamkeue,** D. Aguglia, I. Kamwa, ," Saturated Electromechanical Simulink Block-Diagram Model Of Induction-Machine," Electromotion , Vol. 10, No.3, pp.180-186, July-September, 2003
- R. Wamkeue, I. Kamwa, X. Daï-Do, "Numerical Modeling and Simulation of Unsymmetrical Transients of Synchronous Machines with Neutral Included," Electric Machines and Power Systems, Vol. 26, Number 1, January 1998, pp. 93-108
- I.Kamwa, R.Wamkeue, X. Daï-Do, "General Approaches to efficient d-q Simulation and Model Translation for Synchronous Machines: A Recap," Electric Power Systems Research, (1997) Vol. 42, pp. 173-180, 1997
- 14. **R. Wamkeue**, L. Songia, M. Lakehal, P. Viarouge "State Modelling of Self-excited Induction Generator for Wind Power Applications," WIND ENERGY, Vol. 9, Issue 6, pages 499-520, June 2006
- R. Wamkeue, D. Aguglia, M. Lakehal, P. Viarouge "Two-Step Method for Identification of Nonlinear Model of Induction Machine," IEEE Transaction on Energy Conversion, Vol. 22, Issue 4, pages 801-809, December 2007
- 16. N. Kandil, **R. Wamkeue**, Maarouf Saad, Semaan Georges, "An efficient approach for short term load forecasting using artificial neural networks," ELECTRICAL POWER and ENERGY SYSTEMS, No. 28, pp: 525-530, 2006
- 17. **R. Wamkeue,** F. Baetscher, I. Kamwa, J. El Hayek, "New and Efficient Approach for Saturated Synchronous Generator Load Rejection Analysis," ELECTRIC POWER COMPONENTS AND SYSTEMS, No.34, pp: 539-563, 2006, May 2006
- R. Wamkeue, C. Jolette, I. Kamwa, "Alternative Approaches for Analysis and Prediction of Synchronous Generator Under Partial and Full Load Rejection Tests," Electric Power Application, IET, July 2007, pages : 581-590
- R. Wamkeue, C. Jolette, I. Kamwa, "Analytical Response of Synchronous during Load Rejection and Field Short-Circuit Tests," Electric Power Components and Systems, Volume 35, Issue 7 July 2007, Pages 803-821.
- R. Wamkeue, F. Baetscher, I. Kamwa, "Hybrid State Model Based Time-Domain Identification of Synchronous Machine Parameters from Saturated Load Rejection Test Records," IEEE Transactions on Energy Conversion, Vol.23, Issue 1, March 2008, Pages 68-77. (2009's Best Paper Award)
- 21. D. Aguglia, P. Viarouge, **R. Wamkeue** and J. Cros, "Analytical determination of steady-state converter control laws for wind turbines equipped with doubly-fed induction generators", *IET Renewable Power Generation Journal*, Vol. 2, n.1, March 2008, pp.16-25.

- D. Aguglia, P. Viarouge, R. Wamkeue and J. Cros, "Determination of Fault Operation Dynamical Constraints for the Design of Wind Turbine DFIG Drives", Transactions of IMACS: Modeling and Simulation of Electrical Machines, Converters and Power Systems, Published by Elsevier Ltd., Vol. 81, issue 2, October 2010, pp.252-262
- 23. **R. Wamkeue**, C. Jolette, I. Kamwa, "Advanced Modeling of a Synchronous Generator under Line-Switching and Load-Rejection Tests for Isolated Grid Applications" IEEE Transactions on Energy Conversion, Vol.25, no.3, September 2010, pages 680-689.
- 24. **R. Wamkeue**, C. Jolette and D. Kairous, "Determination of Synchronous Generator Parameters from Time-Variant Analytical Load Rejection Curve Fitting" Accepted for publication in Electric Power Components and Systems, Issue 2011,
- 25. **R. Wamkeue**, C. Jolette, A. Mpanda, I. Kamwa, "Cross-Identification of Synchronous Generators Parameters from RTDR Test Time-Domain Analytical Responses," Accepted for publication in IEEE Transactions on Energy Conversion, Issue 2011

#### C. PEER-REVIEWED CONFERENCES PAPERS

- Eder. Fernandez R., R. Wamkeue, N. Kandil, "Series Compensation Optimisation Method <-SCOM>> for Long Distribution Lines, 7<sup>th</sup> IASTED International Conference on Power and Energy Systems, PES 2004, November 28- December 1, 2004, Florida, USA
- R. Wamkeue, N. Kandil, J. El Hayek and M. Berrada "Equivalent Circuit Based Current-Controlled State Model of Synchronous Machine," Conference Proceedings, IPEMC'2004 IEEE, 4th International Power Electronics and Motion Control Conference, Vol. 3, pp. 1483-1489, August 14-16, 2004, Xi'an, China
- B. Bensaker, H. Kherfane, M. Metatla, R. Wamkeue, "Sensor less Monitoring of Induction Motor Drive Systems," 11th IFAC Automation in mining, metal processing, Nancy, 8-10 September 2004, France
- B. Bensaker, H. Kherfane, M. Metatla, R. Wamkeue, "Nonlinear Modelling of Induction Motor Drives for Nonlinear Sensor less Control Purpose," 6<sup>th</sup> IFAC Nonlinear Control systems, , 01-03 September 2004, Stuttgart, Germany
- 5. **R. Wamkeue**, I. Kamwa, J. East, "Induction Motors Performance Improvement Using Long Distribution Line Series Compensation," Internal Conference on Renewable Energies and Quality, ICREPQ'03, 9-11 May 2003, Vigo, Spain
- 6. D. G Ngoma, Amsini Sadiki, R. Wamkeue, "Efficient approach in modelling and simulation of dualpressure once-through heat recovery steam generator" Proceedind Power and Energy Systems Conference (PES2002), IASTED pp. 18-223 February 24-26 2003, CALIFORNIA, USA

- 7. **R. Wamkeue**, D. Aguglia, I. Kamwa, "Saturated Electromehanical Simulink Block-Diagram Model Of Induction-Machine," Proceedings *Electromotion , Vol. 1,* pp.180-186, *November* 26-28, 2003, *Marrakech, Morocco*
- 8. B. Bensaker, H. Kherfane, M. Metatla, R. Wamkeue, , "State-space modelling of induction motors for sensor less control and monitoring purposes," Proceedings *Electromotion, Vol. 2, No.3, ,* pp. 483-488, *November 26-28, 2003, Marrakech, Morocco*
- 9. **R. Wamkeue**, I. Kamwa, "Comparative Analysis of Squirrel cage Self-Excited Induction Generator During Load Rejection Transients, IASTED International Conference in Control and Applications, Cancun, Mexico, May 20-22, 2002.
- 10. Guyh Dituba Ngoma, Ralf Loth, **R. Wamkeue**, "Numerical Improvement to Predict of Flow Stability in Natural Circulation and Once-Through Heat Recovery Steam Generator Systems," Proceedings Power and Energy Systems Conference (PES2002), IASTED pp. 511-516, Crete, Greece, 2002
- 11. **R. Wamkeue**, I. Kamwa, "Identification of Self-Excited Induction Generator Parameters from Load Rejection Simulated Records," Proceedings of the IASTED International Conference on Modeling, Identification and Control, Innsbruck, Austria, February, 19-22, 2001, pp.49-55.
- R. Wamkeue, S. Moraogue, I. Kamwa "Distribution Network Fed in Co-Generation by Induction Generators : Incidence of Self-Excitation Phenomenom," *Proceedings of IEEE International Electric Machine and Drives Conference*, IEMDC 2001, Cambridge, Massachusetts, June 17-20 2001, pp. 594-603
- 13. **R. Wamkeue**, S. Moraogue, J.P. Kenne, I. Kamwa "Incidence of Induction Generator Modelling on Self-excitation Phenomenon Prediction in Electrical Network Cogeneration" *IASTED International Conference on Modelling and Simulation (ASM),* September 4-7, 2001, Marbella, Espagne,
  - 14. J. P. Kenne, **R. Wamkeue**, "Production and Corrective Maintenance Policies in a Failure Prone Manufacturing System, *IASTED International Conference on Modelling and Simulation (ASM)*, September 4-7, 2001, Marbella, Espagne,
  - 15 **Wamkeue**, I. Kamwa, "Detailed Analysis of Load Rejection Test of Autonomous Synchronous Generator," *International Conference on Electrical Machines and Systems (ICEMS'2001)*, August February 20, 2001, in Shenyang, China,
  - 16 **Wamkeue**, I.Kamwa, "Modèles d'état généralisés de la machine synchrone," *Électrotechnique du futur, EF'2001*, Nancy, Novembre 2001, 14-15, France
  - 17. **R. Wamkeue**, I. Kamwa, "Saturated Electromechanical Transients Based Maximum Likelihood Identification of Double-Cage Induction Machine Parameters," *International Conference on Electrical Machines*, ICEM'2000, 28-29 August 2000, Espoo Finland.
  - 18. **R. Wamkeue**, I. Kamwa, "Load Rejection Analysis of Self-Excited Induction Generators for Autonomous Power Generation," *International Association of Science and Technology for Development, (IASTED) Conference*, ASM'2000, 24-26 July 2000, Banff, Calgary, Canada

- 19. **R. Wamkeue**, I. Kamwa, "Nouvelle Approche d'Identification au Maximum de Vraisemblance des Systèmes Dynamiques," *Conférence Internationale Francophone d'Automatique*, CIFA 2000, Lille, 5-8 Juillet 2000, France.
- R. Wamkeue, I. Kamwa, "Numerical Modeling and Simulation of Saturated Unbalanced Electromechanical Transients of Self-Excited Induction Generators," 2000 Canadian Conference on Electrical and Computer\_Engineering, Halifax, Nova Scotia, Proceedings pp. 1147-1151, Canada, May 7-10, 2000.
- 21. **R. Wamkeue**, I.Kamwa, "Unbalanced Transients Based Maximum Likelihood Identification of Multi-Rotor Winding Induction Machines." *IASTED Conference Applied Modelling and Simulation*, September 1-3, 1999, Proceedings pp.553-557. Cairns, Australia.
- R. Wamkeue, N. E.E. Elkadri, I.Kamwa, M. Chacha "Finite-Element Modelling of Multiple Rotor Circuits Synchronous Machine" *IASTED Conference Applied Modelling and Simulation*, September 1-3, 1999, Proceedings pp.299-303, Cairns, Australia
- 23. **R. Wamkeue**, I. Kamwa, "Generalized State Modelling of Induction Machine having Multiple Rotors Circuits", 3<sup>rd</sup> *International Symposium on Electromechanical Motion Systems, Electromotion*'99, July 8-9 ,1999, Patras, Proceedings, vol.1, pp.61-66', Greece.
- 24. I. Kamwa, A. Mpanda-Mabwe, **R.Wamkeue**, A. Keyhani, "Statistical Identification of small and Large Synchronous Machines from On-line Operating Records." *ELECTRIMACS'99 Conference*, August 9-11, 1999, Lisbon, Portugal
- R. Wamkeue, (M) I. Kamwa, (M) X. Daï-Do, (SM) A. Keyhani, (SM) "Iteratively Reweighted Least Squares for Maximum Likelihood Identification Of Synchronous Machine Parameters from On-line Tests," 1998 IEEE Winter\_Meeting Power Engineering Society, February 1-5, 1998, Tampa, Florida (USA)
- R. Wamkeue, I. Kamwa, X. Daï-Do, "A Detailed Model of Grounded Synchronous Machines for Saturated Unsymmetrical Transients," 5<sup>ème</sup> Conférence Internationale ELECTRICMACS'96, Proc. vol 1/3, 1996, Saint-Nazaire, France, Septembre 1996, pp.169-176
- 27. **R. Wamkeue**, I. Kamwa, X. Daï-Do, "Current Controlled Modeling of Synchronous Machines with Application to Stator and Rotor Decrement Test Analysis," 5<sup>ème</sup> Conférence Internationale ELECTRICMACS'96, Proc. vol 1/3, 1996, Saint-Nazaire, France Septembre 1996, pp. 333-340
- B. Bensaker, R. Wamkeue "Generalized extended Park's vector approach for monitoring induction motor drive systems," "Proceedings *Electromotion*'2005, 6<sup>th</sup> Symposium on Advanced Electromechanical Motion Systems 27-29 September 2005, Lausanne, Switzerland
- R. Wamkeue, L. Songia, M. Lakehal, "Simple-shunt and short-shunt connections based state modelling of stand-alone self-excited induction generators," Proceedings *Electromotion*'2005, 6<sup>th</sup> Symposium on Advanced Electromechanical Motion Systems 27-29 September 2005, Lausanne, Switzerland

- R. Wamkeue, L. Songia, M. Lakehal, G. D. Ngoma, "Dynamic model of self-excited induction generator," Proceedings of the 16<sup>th</sup> IASTED International Conference on Modelling and Simulation, May 18-20, 2005, Cancun, Mexico, pp. 408-415,
- 31. **R. Wamkeue**, B. Bensaker, "Two-Port Circuit Based Hybrid Model of Synchronous Machine, "IEEE International Electric Machines and Drives Conference, IEMDC'2005, May 15-18, 2005, San Antonio, Texas, USA, pp. 99-105
- R. Wamkeue, F. Baetscher, I. Kamwa, "Identification of Synchronous Machine Parameters from Saturated Load Rejection Test Records," International Conference on Electrical Machines (IEEE-ICEM'2006), Chania, Crete Island, Greece, September 2-5, 2006
- Y. Amirat, M. E. H. Benbouzid, B. Bensaker, R. Wamkeue, H. Magel, "The State of the Art of Generators for Wind Energy Conversion Systems," International Conference on Electrical Machines (IEEE-ICEM'2006), Chania, Crete Island, Greece, September 2-5, 2006
- I. Kamwa, B. Baraboi, R. Wamkeue, "Sensorless ANN-Based Speed Estimation of Synchronous Generators: Improved Performance through Physically Motivated Pre-filters," "006 International Joint Conference On Neural Networks, IJCON-IEEE, Vancouver, BC, Canada, July 16-21, 2006
- 35. **R. Wamkeue**, D. Aguglia, M. Lakehal, "Efficient Approach for Identification of Nonlinear Model of Induction Machine," Electronic Proceedings, International Symposium on Industrial Electronics, IEEE-ISIE 2006, 9-13 July 2006, Montréal, Canada
- R. Wamkeue, J. Christian, I. Kamwa, "New Approach for Partial- and Full-Load Rejection Analysis of Synchronous Generator," Electronic Proceedings, IEEE Canadian Conference on Electrical and Computer Engineering, CCECE-2006, 7-10 May 2006, Ottawa, Canada
- D. Aguglia, Philippe Viarouge, R. Wamkeue, J. Cross, "Analytical Method of Steady-State Converter Control Laws for Wind Turbines Equipped with Double-Fed Induction Generators," EWEC' 2007, European Wind Energy Conference, 7-10, May 2007, Milan, Italy
- D. Aguglia, Philippe Viarouge, R. Wamkeue, J. Cross, "Selection of Gearbox Ratio and Power Converters Ratings for Wind Turbines Equipped With Doubly-Fed Induction Generators," IEMDC'07, IEEE Conference, Antalya, Turkey, May 3-5 2007
- Y. Amirat, M.E.H. Benbouzid, B. Bensaker and R. Wamkeue, "Condition Monitoring and Fault Diagnosis in Wind Energy Conversion Systems: A Review" IEMDC'07, IEEE Conference, Antalya, Turkey, May 3-5 2007
- 40. **R. Wamkeue**, C. Jolette and A. Mpanda, "Practical Approach towards Modeling of Synchronous Generator under Line-Switching Tests," ACEMP'07 and ELECTROMOTION'07 Joint meeting, 10-12 September 2007 Bodrum Turkey

- 41. D. Aguglia, **R. Wamkeue**, Philippe Viarouge,, J. Cross, "Exploring Suitable Applications for Double-Fed Asynchronous Machines," ICEMS 2008, IEEE Conference, October 17-20, 2008, Wuhan, China
- 42. D. Aguglia, Philippe Viarouge, **R. Wamkeue**, and J. Cross, "Optimizing the annual energy production of doubly-fed induction generator based wind turbines," in IEEE Proc. Electrical Power and Energy Conference (EPEC), Montreal, October 2008
- 43. D. Aguglia, Philippe Viarouge, **R. Wamkeue**, and J. Cross, "Efficient Design Tool for Dynamical Constraints Determination Associated to fault Operation of DFIG Based Wind Turbines," in Proc., ELECTRIMACS International Conference, Quebec, Canada, June 2008
- 44. D. Aguglia, Philippe Viarouge, **R. Wamkeue**, J. Cross, "Doubly-fed Induction Generator Drive Optimal Design for Wind Turbines with Reduced Gearbox Stages Number," In Proc. European Wind Energy Conference (EWEC), Marseille, March 2009
- 45. D. Aguglia, **R. Wamkeue**, Philippe Viarouge, , and J. Cross, "Efficient FEA Identification of Equivalent Circuit Inductances for DFIM Design," Accepted for Compumag International Conference, Brazil, November 2009
- 46. J.J Beaudoin and **R. Wamkeue**, "Towards a Self-Excited Self-Regulated Induction Generator for Wind Turbine Application," Electrical Power and Energy Conference (EPEC)'IEEE, October 22-23, 2009, Quebec, Canada
- 47. D. Kairous, **R.Wamkeue** and B.Belmadani, "Towards DFIG Control for wind Power Generation and Harmonic Current Mitigation," In Proc. Annual Canadian Conference on Electrical and Computer Engineering, IEEE, CCECE 2010 May 2-5, 2010, Calgary, Alberta, Canada
- 48. D. Kairous, **R.Wamkeue** and B.Belmadani, "Advanced Control of Variable Speed Wind Energy Conversion System with DFIG," In Proc. International Conference on Environment and Electrical Engineering IEEE, EEEIC Conference 2010, Prague, Czech Republic, 16-19 May 2010
- 49. **R.Wamkeue**, C.Jolette and D. Kairous, "Estimation of Synchronous Generator Parameters from Load Rejection Analytical Responses," In proc. International Conference on Environment and Electrical Engineering IEEE, EEEIC Conference 2010, Prague, Czech Republic, 16-19 May 2010
- 50. D. Kairous, **R.Wamkeue** and B.Belmadani, "Sliding Mode Control of DFIG based Variable Speed WECS with Flywheel Energy Storage," In Proc. IEEE, ICEM10, Rome, Italy, September 6-8, 2010
- 51. **R. Wamkeue**, J. M, Nyobe-Yome, "New Approach to Teaching Instantaneous Powers in Steady-State AC Circuits," Accepted for IEEE EDUCON Education Engineering 2011, Amman, Jordan, April 4-6, 2011
- 52. F. Bacha, **R. Wamkeue**, M. Gasmi, "Fuzzy Direct Power Control for PWM Converted Connected to the Grid," Accepted for Eighth IEEE International Conference on Systems, Signals and Devices SSD-11, Sousse, Tunisia, March 22-25, 2011