CURRICULUM VITAE

PERSONAL:

Name: **SOOD**, Vijay Kumar (Mr)

Telephone: **Office**: 450-652-8089

Email: v.sood@ieee.org

Nationality: Canadian
Languages: English, French, Hindi.

QUALIFICATIONS:

ACADEMIC:

3 Dec-1977	**Ph. D.**	University of Bradford, Yorkshire, England. UK
4 July 1969	M. Sc. (Thesis)	University of Strathclyde, Glasgow, Scotland. UK
28 Sept 1967	B. Sc. (1st class Hons.)	University of Nairobi, Kenya.

PROFESSIONAL:

1967 - **MIEE**, C. Eng. (UK). (qualified for Euro Eng. classification)

1978 - Member of l'Ordre des Ingénieurs du Québec. (equivalent to P.Eng. status)

1985 - **Senior Member** of IEEE

1999 - **Fellow** of the Engineering Institute of Canada (EIC), elected 1 January 1999

1991 - IEEE Montréal Section **Chapter Chairman**
Chapters - Power Engineering and Industrial Applications, Fellowship and Awards Committee
Member of IEEE Working Group on Computers in Power Systems

1995 - Member of CIGRE Working Groups 14.22 and 14.33

1994 - 96 Associate Editor for *IEEE Canadian Review* quarterly magazine.

1996 - 2005 **Managing Editor** for *IEEE Canadian Review* quarterly magazine (see www.ieee.ca/canrev).
Longest serving Editor in its history; Have completed more than 50% of the published issues
Candidate was instrumental in making this a bilingual, national journal.

1980 -2000 **Member** of Canadian Electricity Association (CEA), T and D, HVDC Controls Committee.

1990 - 94 Elected **School Commissioner**, St. Lawrence School Board (now Riverside School Board).

1994 - 98 Elected **School Commissioner**, South Shore School Board (now Riverside School Board).

1998 - 2004 Director and Treasurer of IEEE Montreal Conferences Inc.

2003 - 2007 **Director** of IEEE Canadian Foundation, provides grants and bursaries to university students.

2003 - **Chair** of the Technical and Professional Development Committee, Engineering Institute of Canada

2002 - Associate Editor of Control Engineering Practice, A journal of Elsiever and Permagon Press.

2004 - Associate Editor of Candian Journal of Electrical and Computer Engineering.

2004 - 2007 **Member of NSERC (Canada) Grants Selection Committee**, GSC335 (one of eight members)
Grant Selection Committees are responsible for the adjudication of applications submitted to NSERC's largest funding program, the Discovery Grants, and to the Equipment Grants programs. This committee is responsible for grants to academia in Electromagnetism and Electrical Systems (GSC335). (Confidential work).
Active review of grants applications for NSERC for Chairs of Excellence. (Confidential work).

WORK EXPERIENCE:

1. 1976 - **Institut de recherche d'Hydro-Québec, (IREQ)**
1800 Lionel Boulet, Varennes, Québec. J3X 1S1
As "Researcher" in "Power Systems Simulation, and Electrical Equipment" Groups.

1. Numerous power system simulation studies on IREQ's analog simulator/TNA for internal/external clients.
2. Member of HQ team for technical evaluation of bids for Madawaska, Chateauquay and MTDC DC terminals
3. Project Leader for research projects on Active Filters, Forced Commutated Inverters, HVDC Controls and Neural Network Applications to Power Systems.
4. Project Leader for technical specification, purchase, commissioning and evaluation of Siemens Controls for the IREQ HVDC simulator/TNA.
5. Taught numerous advanced level courses on HVDC Transmission (in collaboration with University of Wisconsin in Madison, Concordia University in Montréal, CPRI in Bangalore, India etc.)
6. Member of Canadian Electricity Association (CEA), CIGRE and IEEE Working Groups and committees.
7. Contracts for HQI, EPRI, DOE, CIDA, Westinghouse, CEA and other agencies.
8. Contracts for Toshiba on modeling of STATCOM converter and advanced controllers in EMTP.
9. Technical Coordinator for HVDC contracts in India (i.e. MSEB) for Hydro Québec International (HQI).
10. Refurbishing and maintenance of thyristor modules for Madawaska HVDC station.
11. Fault current limiters for new generation distribution systems.

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2. 1969-76 **Railway Technical Centre**,
London Road, Derby, England.
As "Senior Scientific Officer" in Machines Section.

1. Design, development of DC choppers for the speed control of railway rapid transit traction motors.
2. Technical specifications, tendering and evaluation of train-borne power supplies for electronic equipment.
3. Testing and commissioning of first thyristor equipped AC locomotive on British Railways. Assessment of harmonic interference to railway track signalling circuits.

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3. 1984- **Concordia University,**
1455 de Maisonneuve Boulevard West, Montréal. H3G 1M8
As "Adjunct Professor" in Dept. of Electrical and Computer Engineering.

1. Post-graduate supervisor for research in power electronics and power systems. **Holder of NSERC (continually since 1985) and FCAR (1994-97) research grants.** Supervised 14 post-graduate students, and examined 17 Ph.D. candidates from all over the world. Published over 70 articles in well-known international journals. Contributed as author to 1 book and 2 book chapters (on HVDC and FACTS).
2. Taught under-graduate and post-graduate courses (i.e. Electromagnetism, Electrical Circuits, HVDC transmission, FACTS, and Transients in Power Systems, Power Electronics) at the university.
3. Active collaboration with full-time faculty since 1984.

PUBLICATIONS:

Category 1: publications in refereed journals

1. P. C. S. Krishnayya, S. Lefebvre, **V. K. Sood** and N. J. Balu. "Simulator study of multiterminal HVDC system with small parallel tap and weak AC systems". IEEE Trans. on Power Apparatus and Systems, October 1984, Vol. PAS-103, No. 10, pp 3125-3132.
2. **V. K. Sood**, H. L. Nakra, B. Khodabakhchian and G. Scott, "Simulator Study of Hydro-Québec MTDC Line from James Bay to New England", IEEE Trans. on Power Delivery, Vol. 3, No. 4, October 1988, pp 1880-1886.
3. A. Gole, **V. K. Sood**, "A static compensator model for use with electromagnetic transients simulation programs", IEEE Trans on Power Delivery, July 1990, Vol 5, No 3.
4. L. X. Bui, **V. K. Sood** and S. Laurin, "Dynamic interactions between HVDC systems connected to ac buses in close proximity", IEEE Trans on Power Delivery, January 1991, Vol 6, No 1.
5. N. Kandil, **V. K. Sood**, K. Khorasani and R. V. Patel, "Fault Identification in an AC-DC transmission system using Neural Networks", 1991 IEEE PICA Conference, May 6-10, Baltimore. Also in IEEE Trans. on Power Systems, May 1992, Vol.7, No.2, pp 812-819
6. **V. K. Sood**, N. Kandil, R. V. Patel and K. Khorasani, "Comparative evaluation of Neural Network Based and PI Current Controllers for HVdc Transmission Systems", IEEE Trans. on Power Electronics, Vol. 9, No. 3, May 1994.
7. Y. Maharisi, V. Q. Do, **V. K. Sood**, S. Casoria and J. Belanger, "HVDC control system based on parallel processors", IEEE Paper No. SM 94-530-6 PWRS, PES SM 1994, San Francisco. Also in IEEE Trans. on Power Systems, May 1995, Vol.10, No.2, pp 995-1002
8. I. Kamwa, R. Grondin, **V. K. Sood**, et al, "Recurrent Neural Networks for phasor detection and adaptive identification in power system control and protection", IEEE Instrumentation Society, Annual Meeting: Integrating Intelligent Instrumentation and Control, 22-25 April 1995, Boston, MA. Also in IEEE Transactions on Instrumentation and Measurement, April 1996, Vol.45, No.2, pp 657- 664
9. **V.K.Sood**, H.S.Chandrasekhariah and L.L.Lai, "Fault diagnosis using Neural Networks in HVDC Systems", Australian Journal of Intelligent Information Processing Systems, Vol.3, No.1, Autumn 1996. pp 46-56. Also included as Chapter 12 of the book edited by L.L.Lai, "Intelligent System Applications in Power Engineering - Evolutionary Programming and Neural Networks", J.Wiley & Sons, ISBN 0-471-98095-1
10. K.G.Narendra, **V.K.Sood**, K.Khorasani and R.V. Patel, "Application of Radial Basis Function Neural Network for fault diagnosis in HVDC system", International Conference on Power Electronics, Drives and Energy Systems for Industrial Growth, 8-11 Jan. 1996, New Delhi, India. Ref No. PE-P20-PWRS-0-03-1997. Also in IEEE Trans. on Power Systems, Feb. 1998, Vol. 13, No.1, pp 177-183
11. K.G.Narendra, **V.K.Sood**, K.Khorasani and R.V. Patel, "Investigation into an Artificial Neural Network based on-line current controller for an HVDC transmission link", IEEE Trans. on Power Systems, Nov. 1997, Vol. 12, No.4, pp 1425-1431.
12. K.G.Narendra, K.Khorasani, **V.K.Sood** and R.V. Patel, "Intelligent Current Controller for an HVDC transmission link", PICA'97 meeting in summer of 1997, Ohio, USA. Paper No. PE-188PWRS-16-09-1997. Also in IEEE Trans. on Power Systems, Aug. 1998, Vol. 13, No.3, pp 1076-1083
13. A.M. Gaouda, E.F. El-Saadany, M.A. Salama, **V.K.Sood** and A. Chikhani, "Monitoring HVDC Systems Using Wavelet Multi-resolution Analysis", IEEE Trans. on Power Systems, Nov. 2001. Vol. 16, No.4, pp 662-670

Category 2: publications in refereed conferences

1. M. H. Rashid and V. K. Sood. "Comparative evaluations of thyristor choppers for railway applications". IEEE 34th Vehicular Technology Conference, Pittsburg, Pennsylvania, 21-23 May, 1984, pp 235-241.
2. V. K. Sood and M. H. Rashid. "Performance evaluations of a line-side commutator chopper in regenerative braking". 1st Congresso Latino-Americano de Automatica and 5th Congresso Brazileiro de Automatica, Campina Grande, Paraiba. 3-6 Sept. 1984 pp 1135 - 1140.
3. V. K. Sood. "A novel dc line-side force-commutated HVDC inverter for feeding remote loads". IEEE International Communications and Energy Conference, Montréal. 2-4 Oct. 1984. pp 86-89.

4. V. K. Sood. “Force-commutated HVDC Inverters”. IEEE International Communications and Energy Conference, Montréal. 2 - 4 Oct. 1984. pp 90-93.
5. V. K. Sood and M. H. Rashid. “Losses and Efficiency of a line-side commutated thyristor chopper for railway applications”. IEEE Int. Communications and Energy Conference, Montréal. 2-4 Oct. 1984. pp 112-115.
6. **V. K. Sood**. “A novel force-commutated thyristor inverter for a series tap in a HVDC line”. Int. Conference on Computers, Systems and Signal Processing, Bangalore, India. 10-12 Dec. 1984.
7. **V. K. Sood,** “Analysis and Simulator Evaluation of a dc line-side Force-Commutated HVDC Inverter for feeding a remote load”. IEEE Power Electronics Specialists Conference, Toulouse, France. 24 - 28 June 1985.
8. V. K. Sood. “An Introduction to Forced-Commutated HVDC Inverters”. Canadian Electrical Association Spring Meeting, Montréal, 24 - 26 March 1985.
9. **V. K. Sood**, “Analysis and Simulator Evaluation of a small Force-Commutated Series Inverter Tap in a HVDC Line”. IEE Fourth International Conference on AC and DC Power Transmission, London. 23 - 26 Sept. 1985.
10. V. K. Sood. “On the Mode Shifting Behavior of HVDC Systems”. Canadian Electrical Association Spring Meeting, Toronto, 24 - 26 March 1986.
11. “HVDC Controls Guide”. Canadian Electrical Association, produced by the HVDC Controls Committee (12 members), March 1984.
12. V. K. Sood, M. A. Rahman and M. H. Rashid. “An Assessment of the Harmonics Generated by a small Force Commutated Series Tap in a HVDC Line”. Second International Conference on Harmonics in Power systems, Winnipeg, Manitoba. 6-7 Oct. 1986.
13. V. K. Sood, “DC Controls based Protection to Enhance Operation of MTDC Systems”. Montech IEEE Conference, 29 Sept. - 13 Oct. 1986.
14. A. Gole, V. K. Sood, L. Mootoosamy, “Validation and Analysis of a Grid Control System using D-Q-Z Transformation for Static Compensator Systems”, Canadian Conference on Electrical and Computer Engineering, Sept. 17-20, 1989, Montréal.
15. M. K. Komaragiri, V. K. Sood, and A. Moshref, “Design of an Optimal AC Filter at a HVDC Convertor Bus”, Canadian Conference on Electrical and Computer Engineering, Sept. 17-20, 1989, Montréal.
16. A. Gole, V. K. Sood, “Modeling of Static Compensators and DC Converters for Control studies using Digital Simulation Programs”, CEA Spring Meeting, March 1990, Montréal.
17. A. Gole, V. K. Sood, “Development of a state variable based static compensator”, Power Electronics Specialists Conference, San Antonio, Texas. June 10-15,1990.
18. A. Gole, V. K. Sood, “Performance Analysis of a DGO type Phase Locked Grid Control System for HVDC Converters”, 4-7 June 1990, Sixth National Power Systems Conference, Bombay, India.
19. L. X. Bui, V. K. Sood, “HVDC Systems Connected to AC Buses in Close Proximity”, Transmission and Distribution, June 1990.
20. **V. K. Sood**, N. Kandil, R. V. Patel and K. Khorasani, “Neural Network Based Current Controller for HVDC Transmission Systems”, Second IEE International Conference on Neural Networks, Bournemouth, U. K., 18 - 20 November 1991.
21. N. Kandil, **V. K. Sood**, K. Khorasani and R. V. Patel, “Evaluation of an Off-Line Neural Network based Current Regulator for HVDC Transmission Systems”, Canadian Conference on Electrical and Computer Engineering, Toronto, 13-16 Sept., 1992.
22. T. Grigoriu, V. K. Sood, K. Khorasani and R. V. Patel, “Fault Identification in a series compensated AC line using Neural Networks.”, Canadian Conference on Electrical and Computer Engineering, Toronto, 13-16 Sept., 1992.
23. T. Grigoriu, **V. K. Sood**, K. Khorasani and R. V. Patel, “Fault Identification in a series compensated AC line using Neural Networks”, Canadian Electrical Association Spring Meeting, Montréal, 29 - 31 March 1993.
24. **V. K. Sood**, G. Sybille, L. Gerin-Lajoie and H. Biolodeau, “Simulation studies of SVC behavior during GIC”, Canadian Electrical Association Spring Meeting, Montréal, 29 - 31 March 1993.
25. H. Jin and V. K. Sood, “Modeling and Simulation of large HVDC systems using PECAN”, Canadian Electrical Association Spring Meeting, Montréal, 29 - 31 March 1993.

26. H. Jin, V. K. Sood, and W. Chen, "Simulation studies of a HVDC system with multiple-infeed converters", IEEE International Conf. on Computers, Communications and Automation, Oct. 19-21, 1993, Beijing, China.
27. N. Kandil, K. Khorasani, R. V. Patel and V. K. Sood, "Optimum learning rate for Backpropagation Neural Networks", Canadian Conference on Electrical and Computer Engineering, Vancouver, 13-16 Sept., 1993.
28. V. Khatri, V. K. Sood and H. Jin, "EMTP simulation of an HVDC rectifier operating with a weak ac system", IEEE PELS Workshop on Computers in Power Electronics, Aug. 7-10, 1994, Trois Rivieres, Québec.
29. D. Brillon, V. Rajagopalan and V. K. Sood, "Performance evaluation of simulation studies of a HVDC transmission system in ATP, ATOSEC5 and SIMULINK environments", IEEE PELS Workshop on Computers in Power Electronics, Aug. 7-10, 1994, Trois Rivières, Québec.
30. V. Khatri, V. K. Sood and H. Jin, "Analysis and EMTP simulation of a conventional gate firing unit for HVDC converters operating with weak ac systems", IEEE Canadian Conference on Electrical and Computer Engineering, Halifax, 25-28 Sept., 1994.
31. C. Gagnon, V. K. Sood, J. Belanger, A. Vallee, M. Toupin, P. Mercier and M. Tetreault, "Hydro-Québec Power System Simulator", IEEE Canadian Review, No. 19, Spring-Summer 1994. pp 6-9
32. M.Qiu, V.K.Sood and H.Jin, "Evaluation of Harmonic Impedance presented by a thyristor controlled ac load", IEEE WESCANEX Conf. on Communications, Power and Computing, May 15-16, 1995, Winnipeg, Manitoba. Canada.
33. N.Kandil, R.Marceau,X.Do, G.Vuong, V.K.Sood, "A novel approach to Transient Stability simulation using Neural Networks", IEEE Stockholm PowerTech, Stockholm, 18-22 June 1995
34. K.G. Narendra, V.K.Sood, R.V.Patel and K.Khorasani, "Neuro-Fuzzy VDCL unit to enhance performance of HVDC system", Canadian Conference on Electrical and Computer Engineering, Montréal, Sept., 1995.
35. N.Kandil, R.Marceau, X.Do, G.Vuong, V.K.Sood, "An investigation on the use of ANNs for rapid Transient Stability Simulation", Canadian Conference on Electrical and Computer Engineering, Montréal, Sept., 1995.
36. **V. K. Sood**, V. Khatri, H. Jin, "Performance Assessment using EMTP of two Gate Firing Units for HVDC Converters operating with Weak AC Systems", International Conference on Power System Transients, Sept. 3-7 1995, Technical University of Lisbon, Portugal. pp 517-522
37. V. K. Sood, G. Sybille, L. Gerin-Lajoie and H. Biolodeau, "Static Compensator behavior in presence of GIC", CIGRE Sept.1995, Montréal, Québec.
38. **V. K. Sood**, V. Khatri, H. Jin, "EMTP Modeling of CIGRE Benchmark Based HVDC Transmission System Operating with Weak AC Systems", International Conference on Power Electronics, Drives and Energy Systems for Industrial Growth, 8-11 Jan. 1996, New Delhi, India.
39. V.K.Sood, "Real-time Digital Simulators for Power System Simulators - State of the art", Workshop on HVDC Simulator Studies, 1-3 Sept. 1997, CPRI, Bangalore, India. pp 30-34
40. V.K.Sood, "Simulator studies of ac-dc system inter-actions", Workshop on HVDC Simulator Studies, 1-3 Sept. 1997, CPRI, Bangalore, India. pp 63-70
41. R.Arora and V.K.Sood, "Development of an EMTP based model of an active filter for distribution system studies", Canadian Conference on Electrical and Computer Engineering, Waterloo, May, 1998. 4 pages
42. **V.K.Sood** and R.Arora, "Development of an EMTP based model of an active filter for distribution system studies" IEE Int. Conf. on Power Electronics and Variable Speed Drives, Publication # 456, PEVD'98, London, UK. 21 Sept. 98, pp 181-186.
43. Nahi Kandil, Vijay Sood and Maarouf Saad, "Use Of ANNs For Short-term Load Forecasting", Canadian Conference on Electrical and Computer Engineering, CCECE'99, Edmonton, May 9-14, 1999. 5 pages
44. H. Etemadi, V.K. Sood, K. Khorasani and R. V. Patel, "Neural Network Based Fault Diagnosis In An HVDC System", IEE DPRT 2000 Conference in London. April 2000
45. A.M. Gaouda, E.F. El-Saadany, M.A. Salama, V.K.Sood and A. Chikhani, "Disturbance Monitoring in HVDC Systems Using Wavelet Multi-resolution Analysis", IEE DPRT 2000 Conference in London. April 2000
46. A.M Gaouda, M.M.A. Salama, A. Chikhani and V.K. Sood, "Automating the Classification of Power System Disturbances," IASTED International Conference Power and Energy Systems (presented at PES 2000) September 19-22, 2000 Marbella, Spain.

47. V.K.Sood, "Static Synchronous Series Compensator model in EMTP", IEEE CCECE 2002 Conference, Winnipeg, 12-15 May 2002.
48. A.Mazumder and V.K.Sood, "Comparative Study of HVDC System with Capacitor Commutated Converters", 7th International Conference on Modeling and Simulation of Electric Machines, Converters and Systems (Electrimacs 2002), École de Technologie Supérieure, Montréal, Canada, August 18-21, 2002
49. Chunhong He, Feng Li, and V.K.Sood, "Static Transfer Switch (STS) model in EMTPWorks RV", IEEE Canadian Conference on Electrical and Computer Engineering, Niagara Falls, ON, May 2004.
50. Y. Deng, V.K.Sood and L.Lopes, "STATCOM model in EMTP RV using Hysteresis Current Controlled Voltage Source Converter (VSC)", IEEE Canadian Conference on Electrical and Computer Engineering, Saskatoon, Saskatchewan, May 2005.
51. J.Qi, V.K. Sood, and V.Ramachandran, "Modeling a Fuzzy Logic Controller for Power Converters in EMTP RV", Int. Conference on Power Systems Transients (IPST'05) in Montreal, Canada on June 19-23, 2005.
52. S.Salem, V.K. Sood, "Modeling of Series Voltage Source Converter applications with EMTP RV", Int. Conference on Power Systems Transients (IPST'05) in Montreal, Canada on June 19-23, 2005.
53. J.Qi, V.K. Sood, and V.Ramachandran, "Incremental Fuzzy PI Control of a HVDC Plant", IEEE International Conference on Control Applications (CCA05) in Toronto, Canada on August 28-31, 2005

Category 3: Special publications

1. V. K. Sood. "DC Choppers for Rail Traction Applications". Ph. D. Thesis, 1977, University of Bradford, England.
2. R. J. Meredith, P. C. S. Krishnayya, S. Lefebvre, **V. K. Sood**, R. Lee and G. Langewisch. "Methodology for integration of HVDC links in large AC systems - Phase 1: Reference Manual". Electrical Power Research Institute, Final Report EL - 3004, RP 1964-1, March, 1984.
3. **V. K. Sood**, Position paper for Canadian Electrical Association on "Artificially Commutated HVDC Inverters", March 1989, Contract No. ST-174B.
4. **V. K. Sood**, "Flexible AC Transmission Systems". Canadian Electrical Association, Position Paper, Contract No. CEA-ST460, February 1996. 64 pages.
5. **V.K.Sood**, author of Book Chapter 8: FACTS, in Book: Power System Restructuring And Deregulation: Trading, Performance and Information Technology, Edited by L.L. Lai, Published by J.Wiley, ISBN 047149500x, Sept. 2001.
6. **V.K.Sood**, author of Book Chapter 24: HVDC Transmission, in the Book: Power Electronics Handbook, Edited by M.Rashid, Published by Academic Press, August 2001. ISBN 01258 16502, 1000 pages
7. **V.K.Sood**, author of Book, HVDC and FACTS Controllers - Applications of Static Converters in Power Systems, April 2004, ISBN 1-4020-7890-0, Published by Kluwer Academic Publishers, 300 pages

CONTRIBUTIONS TO SHORT COURSES:

1. Postgraduate teaching at Concordia University.

   1988 - HVDC Transmission.
   1991 - HVDC Transmission.
   1994 - Transients in Power Systems
   2001 - Power Electronics (Under-graduate & graduate)
   2002 - Power Electronics II (Graduate)
   2003 - Power Electronics II (Graduate) ELEC 641
   2004 - Power Electronics II (Graduate) ELEC 641, Jan 2004 and Sept 2004
   2005 - Power Electronics I (Graduate course) approved for teaching this course in summer of 2005.
2. Invited Tutorial: High Voltage DC Seminar, 11-12 March 1993, presented to BC Hydro employees in Vancouver, Organized by IEEE Vancouver Section.

3. Invited Tutorial: “Fault Diagnosis using Neural Networks in High Voltage Direct Current Transmission Systems”, V.K.Sood, H.S.C.Chandrasekharaiah, L.L.Lai, presented at Power Electronics, Drives and Energy Systems Conference, New Delhi, India. 8-11 Jan. 1996.
4. Taught special courses at the Workshop on HVDC Simulator Studies, Central Power Research Institute (CPRI), Bangalore, India. 1-3 Sept. 1997.
5. Invited Tutorial: High Voltage DC Seminar, 21 June 1999, presented to University of Waterloo, ON.
6. “Cours sur le transport d’energie en courant continu”, 15 May 2000 and June 2000, 1 week long course presented to Hydro-Quebec employees,
7. “Cours sur le transport d’energie en courant alternatif”, 3 Oct. 2000, 1 week long course presented to Hydro-Quebec employees,
8. Courses on Power Electronics I and II, Concordia University, sept. 2002 and Jan. 2003 respectively
9. Course on Power Electronics, Institut de Genie Electrique et Electronique, Ecole Polytechnic, Fall 2003.

Books Reviewed

1. Mania Pavella, Damien Ernst and Daniel Ruiz-Vega, “Transient Stability of Power Systems - A Unified Approach to Assessment and Control”, Kluwer's Power Electronics and Power Systems Series, ISBN 0-7923-7963-2, Published in 2000, 237 pages, by Kluwer Academic Publishers. Book review to be published in IEEE Canadian Review, Issue 38, Summer 2001.
2. Graham Rogers, “Power System Oscillations”, Cherry Tree Scientific Software, Publisher: Kluwer Academic Publishers, Boston, 328 pages. Published 2000, ISDN 0-7923-7712-5. Book review published in IEEE Canadian Review, Issue 37, Spring 2001.
3. Loi Lei Lai, “Intelligent System Applications in Power Engineering - Evolutionary Programming and Neural Networks”, J.Wiley & Sons, ISBN 0-471-98095-1. Book review published in IEEE Canadian Review, Issue 34, Summer 2000.
4. R.Mohan Mathur and Rajiv K. Varma, “Thyristor based FACTS controllers for Electrical Transmission Systems”, IEEE Press and J.Wiley, ISBN 0-471-20643-1, 2002. Book review, published in IEEE Canadian Review, Issue 42, Dec. 2002.
5. Enrique Acha, Claudio R. Fuerte-Esquivel, Hugo Ambriz-Pérez and César Angeles-Camacho, "FACTS - Modelling and Simulation in Power Networks", Publisher: J.Wiley & Sons. ISBN: 0-470-85271-2, 2004, pp 403. Book review, published in IEEE Canadian Review, Issue 50, May 2005.

Reviewer for NSERC applications for Grants and Chairs of Excellence

- I am frequently asked to review proposals and submissions from NSERC. Names/details cannot be supplied due to confidentiality requirements. In 2001, I reviewed two such proposals.
- In 2000, I was an External Expert Advisor for the accreditation of the technical program of the Industrial Electronics Department of the University of Quebec at Trois Rivieres (UQTR). In 2003, I repeated this exercise with the Department.
- In October 2004, I was appointed to the Grants Selection Committee GSC335 of NSERC for a period of 3 years. The work of this committee (8 persons) is highly significant as it is NSERC largest committee responsible for adjudicating research funds to academic researchers and for equipment grants. I am member of the largest committee within NSERC and my research budget allocation was over 875,000.00$; this was the largest share within the GSC 335 committee.

IEEE RELATED ACTIVITIES:

- **Senior Member** of the IEEE since 1985.
- **Chairman** of the two Chapters (*Power Engineering Society* and *Industry Applications Society, IEEE Montréal Section*) since 1991.
- For the years 1997-05, I am **Chairman** for the *Fellows and Awards Committee, IEEE Montréal Section*.
- I was the **Associate Editor** (1994-96) and am the **Managing Editor** (1996-05) of the quarterly journal *IEEE Canadian Review*.
- Sat on the *Nominations Committee for Senior Members the IEEE* for the year 1996.
- Frequently review articles for Transactions papers for IEEE, IEE and other journals.
- Acted as *Chairman or another role at Conference Sessions* at the following conferences:

1. IMACS'93 Montréal, Québec.
2. PELS UQTR'94 Also member of Organizing Committee, Trois Rivières
3. Canadian Electrical Association, spring meeting, Vancouver, March 1995
4. WESCANEX'95 Winnipeg, Manitoba. May 1995
5. IEEE CCECE'95 Also member of Organizing Committee, Montréal, 1995
6. IEEE PEDES'96 Invited Tutorial Session, N.Delhi, India. Jan 1996
7. IEEE CCECE'96 Also member of Organizing Committee, Montréal, 1996
8. Member of Local Organizing Committee for *Int. Conf. on Digital Power System Simulators*, Montréal, May 1997.
9. IEEE CCECE'99 Also member of Organizing Committee, Edmonton, 1999
10. IEE Int. Conf. on Electrical Utility Deregulation and Restructuring, and Power Technologies 2000 DRPT 2000, London, 4-7 April 2000, Member of International Advisory Committee
11. IEEE-PES/IEE/CSEE International Conference on Power System Technology, Member of International Advisory Committee - PowerCon 2000
12. IEEE CCECE'00 Also member of Organizing Committee, Halifax, 2000
13. IEE AC-DC Conference 2001, Member of International Organizing Committee
14. IEEE CCECE'01 Also member of Organizing Committee, Toronto, 2001
15. Member of Program Committee of the 2001 IEEE CIRA Conference in Banff
16. IEEE CCECE'02 Also member of Organizing Committee, Winnipeg, 2002
17. 5th IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA2003), to be held in Kobe, Japan, July 16-20, 2003,
18. **Co-Chair of the IEEE Int. Conf. CCECE 2003, May 4-7, 2003, Montreal.**
19. Apscom 2003 Conference, Member of International Organizing Committee
20. Technical Program Committee Member and Associate Editor, 2005 Int. Conf. on Control Applications, Toronto, August 2005

PATENTS:

1. Cryogenic Current Limiting Fuse, J.Cave, A.Hamel, V.K.Sood, D.R.Watson and W.Zhu, Ref: 4161-251PCT CMB/AA/clb, Filed 2004

DISTINCTIONS AND HONOURS:

- **Ordre de Mérite de la Ville de Brossard,** February 1997.
- **Outstanding Service Award,** from **IEEE Canada,** 27 May 1998.
- **Fellow** of **Engineering Institute of Canada (FEIC)**, 1 January 1999
- **Meritas 1999,** from the **Ordre des ingénieurs du Québec, Regional Plein-Sud,** 23 March 1999. plus cash award
- IEEE Third Millennium Award from IEEE, 20 June 2000
- IEEE Regional Activities Board **Achievement Award** for 2001, plus cash award
- **Engineering Institute of Canada CP Railway Engineering Medal, for 2002**