

Adel Ahmed Ali

Professor of Electrical Engineering
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Education

- 1976 Ph.D. in Electrical Engineering, University of Manitoba, Canada, GPA: 4.0/4.0
- 1973 M.Sc. in Electrical Engineering, University of Manitoba, Canada, GPA: 4.0/4.0
- 1967 B.Sc. in Electrical Engineering, Alexandria University, Egypt, Distinction, Honors

Employment

- Since August 2002 Professor of Electrical Engineering,
King Saud University (KSU), Riyadh Saudi Arabia
- 2001-2002 Head of Information Engineering Department- Sultan Qaboos
University (SQU), Oman
- 1996-2000 Head of Electrical Engineering Department SQU
- 1997- 98 Dean College of Engineering SQU
- 1996- 97 Assistant Dean College of Engineering SQU
- 1992-2002 Professor of Telecommunications,
Electrical, Electronics & Computer Engineering Department SQU
- 1988- 92 Professor of Electrical Engineering, KSU
- 1982- 88 Associate Professor of Electrical Engineering, KSU
- 1978- 82 Assistant Professor of Electrical Engineering, KSU
- 1976- 78 Transmission and Special Services Engineer,
Manitoba Telephone System, Winnipeg, Manitoba, Canada

Honors and Awards

- Best Paper Award IEE International Conference on Antenna and Propagation ICAP 87, London, March 1987.
- King Saud University Special Award for Excellence in Teaching and Research 1984.
- National Research Council of Canada Post-doctorate fellowship 1976.
- National Research Council of Canada Post-graduate Scholarship 1974-75.
- University of Manitoba Graduate Fellowship 1971-1973.

Membership of Scientific Societies

- Fellow, IET.
- IET membership advisor for Saudi Arabia.
- IET membership advisor for Oman 1998-2002.
- Senior Member of IEEE.
- Founding Chairman of IEEE Section, Oman.
- Oman representative in the International Federation of Information Processing (IFIP) 2001-2002.
- Member of the Association of Professional Engineers of Manitoba, Canada.

Professional activities

- Reviewer for IEEE, IET, and other journals and conferences.
- Reviewer for academic promotion for several universities.
- Program Chairman & Technical Chairman, International Conference in Communication, Computer, and Power, ICCCP'01, Muscat 12-14 February 2001.
- Program Chairman & Technical Chairman, International Conference in Communication, Computer, and Power, ICCCP'98, Muscat 7-10 December 98.
- Vice Chairman of the Sixth Arab International Solar Energy Conference, AISEC, Muscat, March 29-3, 98.
- Technical Chairman, First Communications Conference, Muscat March 11-13, 96.
- Technical Advisor, the Ministry of Post, Telegraph and Telephone PTT, Riyadh, Saudi Arabia, 1979-84.

Funded Research Projects

Year	Project	Sponsor	Cost
2008	Broadband Wireless Access for KSA: A Comparative Study of Available Technologies and an Optimum Plan for Future	Saudi Telephone Company (STC)	124,000 RS
2008	Availability of Radio Frequency Resource and its Management	Saudi Telephone Company (STC)	124,000 RS
2007-08	Study of RF Coexistence of Various Wireless Saudi Telephone Systems.	Saudi Telephone Company (STC)	280,000 RS
2006-08	Mobile Phone Base Station Radiation Safety: BS Auditing for the City of Riyadh	Communication & Information Technology (CITC)	1.8 million RS
2006-07	Smart Antennas in Fixed Wireless: Assessment of using Smart technologies in STC-FWA to increase existing systems capacity	STC	170,000 RS
2006-07	Reduced Spatial Multiplexing and Diversity Gains due to Ricean Fading and Antenna Correlation in MIMO Channels	KSU, Engineering Research Center	30,000 RS.
2005-06	Assessment of Capacity and Performance Enhancement using Frequency Hopping on STC GSM Network	KSU, National Research Project	490,000 RS
2003-04	Optimum modulation and coding for maximum coverage and capacity in cellular CDMA systems	KSU, Engineering Research Center	20,000 RS
2001-02	Strategic Plan for IT in Oman 2010	HM Sultan Qaboos fund	500,000 \$US.
1999-00	Converged networks Design.	Sultan Qaboos University Research Fund	4,000 \$ US
1998-99	Cellular mobile radio coverage for the Sultanate of Oman	General Telecommunication Organization (Omantel)	62,000 \$US
1983-85	Millimeter wave Propagation in Arid land - A Field Study in Riyadh	King Abdulaziz City for Science & Technology (KACST)	980,000 RS

1982-83	Millimeter wave Communication	King Saud University Research center (KSURC)	550,000 RS
1982	Computer Simulation of Communication Systems	KSURC	70,000 RS
1981	Secure Communication using Coded Wave forms	KSURC	40,000 RS
1980	Digital Transmission on Analog Channels	KSURC	40,000 RS

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- Fellow, IET.
- IET membership advisor for Saudi Arabia.
- IET membership advisor for Oman 1998-2002.
- Senior Member of IEEE.
- Founding Chairman of IEEE Section, Oman.
- Oman representative, The International Federation of Information Processing (IFIP) 2001-02.
- Member of the Association of Professional Engineers of Manitoba, 1976-87.

Short Courses

- WiMax fundamentals
- Wireless LANs & WAN's
- UMTS
- IT for all
- Data networks
- Principals of ATM
- ATM networks
- ATM/ Multi-gigabit Ethernet
- GSM Design
- Mobile satellite communications
- Optical fiber communications
- Cellular mobile telephone networks
- Integrated services digital networks
- Local area networks
- Spread spectrum multiple access
- Line -of-sight radio link system design
- Advances in digital modulation
- Wide band coaxial cable design
- Microwave communication
- Secure communication

Graduate Thesis Supervised

Financial Impact of Deploying MIMO Antenna System: A Case Study from Saudi Arabia	2008
A Real Time Mobile station Location Estimation Based on Artificial Intelligence Modeling Approach with Application to TETRA system	2007
Performance of MQAM With MRC Over Mobile Nakagami and Rician Fading Channels	2007
Diversity Analysis For M-QAM in Rician Fading Channels	2005
Capacity And Diversity Gains of MIMO Systems in Correlated Rician Fading Channels	2005
Coverage-Capacity in Cellular CDMA Systems using MQAM Modulation and Space-time coding	2005
	2002
Capacity of WCDMA Mobile Communication System Information Network Infrastructure for Oman	2002
	2002
Code Rate and Processing gain Trade-Off in DS/CDMA	2002
	2002
Converged Networking Evaluation For Oman	2001
	2001
Coverage-Capacity Trade-off in Cellular CDMA Systems	2001
	2001
Combined Rate & Power Adaptation in DS/CDM	2001
	2001
Optimized Capacity for CDMA System Supporting Constant Bit Rate Traffic and ON-OFF Traffic and using an SIR-Based Power Control	
Optimization of the processing gain of spread spectrum communication systems under jamming conditions	1991
	1991
Performance of direct sequence spread-spectrum communication over pulse-burst burst	

jammed fading channel

The effect of time delay distortion on digital modulations 1991

1990

Frequency hopped spread spectrum multiple access communication over frequency selective fading channels

Coded M-ary PSK performance over band limited non-linear satellite channels 1987

Millimeter wave design for arid land based on 18-year meteorological data in Saudi Arabia 1986

Graduate Courses Taught

- Wireless Communications
- Mobile Communications
- Linear System Theory
- Detection and estimation theory
- Signals and noise in communications
- Digital signal processing
- Digital communications
- Advanced digital communication
- Information theory and coding
- Selected topics in communications
- Data transmission
- Secure communication systems

Undergraduate Courses Taught

- Professional communications
- Communications systems
- Mobile communications
- Computer-communication networks
- Communication theory
- Transmission systems
- Digital communication
- Information theory and coding
- Electric-circuit theory
- Electromagnetic
- Communication project

Publications

1. Faihan D. Alotaibi and Adel A. Ali, "Tuning of Lee path loss model based on Recent RF measurements in 400 MHz conducted in Riyadh city-Saudi Arabia", Arabian Journal for Science and Engineering, King Fahd University of Petroleum & Minerals, Saudi Arabia, Volume 33, Number 1B, April 2008.
2. Faihan D. Alotaibi and Adel A. Ali, "TETRA Outdoor Large- Scale Received Signal Prediction Model Based on Recent RF Measurements in Riyadh Urban Area", King Saud University Journal, accepted for publications, 2008.
3. Faihan D. Alotaibi, Adel Abdennour and Adel A. Ali, "A Robust Prediction Model Using ANFIS Based on Recent TETRA Outdoor RF Measurements Conducted in Riyadh City – Saudi Arabia", accepted for publication in the International Journal of Electronics and Communications, April 2007.
4. Faihan D. Alotaibi and Adel A. Ali, "Level Crossing Rate and Average Fade Duration Calculation Schemes Based on Recent TETRA Measurements Conducted in Riyadh City-Saudi Arabia", International Conference of Communication Computer and Power - ICCCP'07, Muscat, Oman, February 19 to 21, 2007.
5. Ibrahim Al Shahrani and Adel Ahmed Ali, " Exact Symbol Error Rate of MQAM with MRC over Flat Fading Nakagami-m and Rician Channels, submitted for publication in IEEE Transactions on Vehicular Technology, April 2007.
6. Adel A. Ali and Khalid Alkhudairi, "BER for M-QAM with Space-Time Transmit Diversity in Nakagami Fading Channels" submitted for publication. June 2007.
7. Adel A. Ali and Syed M. Qaseem, "Effect of Channel Side Information on Capacity and Diversity of MIMO Systems in Correlated Fading Channels", Mosharaka International Conference on Wireless Communications and Mobile Computing, M-WCMC 2007.
8. Faihan D. Alotaibi and Adel A. Ali, "TETRA Outdoor Large- Scale Received Signal Prediction Model in Riyadh City-Saudi Arabia", IEEE Wireless and Microwave Technology, December 4-5, 2006, Clearwater, Florida, USA.
9. Adel A. Ali and Syed M. Qaseem, "Capacity and Diversity Gains of MIMO Systems in Correlated Rician Fading Channels" IEEE International Conference on Communications Systems, IEEE ICCS 2006, 30 Oct to 1 Nov 2006, Singapore.
10. Adel A. Ali and Khalid Alkhudairi "BER for MQAM with space diversity and MRC in Rician fading channels", International Conference on Mobile Computing and Wireless Communications, Amman, Jordan, 17-20 September, 2006.
11. Syed M. Qaseem and Adel A. Ali, "Effect of Antenna Correlation and Ricean Fading on Capacity and Diversity Gains of Wireless MIMO Systems", International Symposium on Wireless Systems and Networks ISWSN'05, Kingdom of Bahrain, April 25-27 2005.

12. Syed M. Qaseem and Adel A. Ali, "Capacity of Correlated MIMO Ricean Channels" International Conference of Communication Computer and Power - ICCCP'05, Muscat, Oman, February 14-16, 2005.
13. Adel A. Ali and Abdulmohsen Alheraish, "Reduced spatial multiplexing and diversity gains due to Ricean fading and antenna correlation in MIMO channels-a review", International Symposium on Wireless Systems and Networks ISWSN'05, Kingdom of Bahrain, April 25-27, 2005.
14. Adel A. Ali, "An Overview of MIMO Coverage and Capacity", Riyadh International Communication Conference" Saudi Arabia, February 2004.
15. Adel A. Ali," On WCDMA Detection–A Review", International Symposium on Wireless Systems and Networks (ISWSN03), Dhahran, Saudi Arabia, March 24-26, 2003.
16. Adel A. Ali and Ahmed Al-Naamany, "Biological Effects of Radiations from Mobile Phones- A review", SQU J. Engineering Sciences, 2003.
17. Adel A. Ali, "On Adaptive modulation and Coding for 3G", Wireless 2002, Calgary, Canada 8-10 July 2002.
18. Adel A. Ali," MQAM Modulation for Maximum Coverage-Capacity in Cellular CDMA Systems", Wireless 2001, Calgary, Canada 9-11 July 2001.
19. Adel A. Ali and Ahmed Al-Naamany, "Converged Networks- A review", SQU J. Engineering Sciences, 2001.
20. Adel A. Ali and Ahmed Al-Naamany, "Biological Effects of EM Radiations from Mobile Phones", ICCCP2001, February 2001.
21. Adel A. Ali, "Optimum Time Diversity and BCH Codes for DS-SS CDMA Cellular Mobile Channels", Wireless Personal Communications, vol. 9, No. 3, May 1999, pp 217-231.
22. Adel A. Ali, "MQAM Modulation and RS Codes for SS-CDMA Communication over Rician Fading Channels", IEE Proceedings-Communications, vol. 145, No. 6, December 1998, pp 414-418.
23. Adel A. Ali," Optimum Time Diversity for DS SS-CDMA Cellular Mobile Channels", International Conference on Communication, Computer and Power ICCCP'98, Muscat, Oman, 7-10 December 1998.
24. Adel A. Ali," Optimum BCH Codes for DS SS-CDMA Cellular Mobile Channels for DS SS-CDMA Cellular Mobile Channels", International Conference on Communication, Computer and Power ICCCP'98, Muscat, Oman, 7-10 December 1998
25. Adel A. Ali," MQAM Modulation and RS Codes for SS-CDMA Communication over Rician Fading Channels", Alazhar International Engineering Conference Cairo, Egypt, December 17-21, 1997.

26. Adel A. Ali," Code Division Multiple Access for Future Mobile Communication", First Communication Conference, Oman, Muscat 11-13, 1996.
27. Adel A. Ali, "Optimum Time Diversity for Channels subject to Pulse-Burst Interference", IEE Proceedings-Communications, vol. 143, No.1, Feb 1996, pp. 43-46.
28. Adel A. Ali," On Modulation and Coding for CDMA Cellular Mobile", First Communication Conference, Muscat, Oman, March 11-13, 1996.
29. Adel A. Ali, "Worst-Case Partial-Band Noise Jamming of Rician Fading Channels", IEEE Trans., Communications, 1996.
30. Adel A. Ali "Optimum Hop Length for Millimeter Wave Radio Links in an Arid Climate" IEE Proceedings- Microwaves, Antennas and Propagation, vol. 142, No.2, April 1995, pp 156-162.
31. Adel A. Ali and Isam H. Zabalawi, "Optimum Selection of Reed-Solomon and Bose - Chaudhuri- Hocquenghem Codes for Frequency Hopping Multiple Access-Spread Spectrum Communication Systems", I.J. Space Communications, ISO Press, the Netherlands, Vol.13, No. 1, 1995, pp. 51-57.
32. Adel A. Ali and Isam I. Zabalawi, "Optimum Selection of RS and BCH Codes for FHMA-SS Communication Systems, 1995 International Conference on Electronics, Circuits and Systems ICECS'95, 17-21 December 1995, Amman, Jordan.
33. Adel A. Ali "Worst-Case Pulsed Noise Jamming of BPSK-SS Transmitted Over Rician Fading Channels" IEEE Int. Symposium on Spread Spectrum Techniques & Application, IEEE ISSSTA' 94. Univ. of Oulu, Finland, July 4-6, 1994.
34. Adel A. Ali, "Optimum Modulation and Diversity for DS-SS Communication Over Pulse-Burst Jammed Fading Channels", GLOBECOM' 94, San Francisco, USA, Nov. 27-Dec.1, 1994.
35. Adel A. Ali, "Optimum Modulation and Diversity for DS-SS Communication Over Rayleigh Fading Channels subject to Pulse-Burst Interference", IEE Proceedings-Communications, vol. 141, No.4, August 1994. pp 237-240.
36. Adel A. Ali "Worst-Case Pulsed Noise Jamming of BPSK-SS Transmitted Over Rician Fading Channels" Int. J. of Space Communications, Vol.11; No 4, ISO Press, The Netherlands, 1993, pp 321-326.
37. Adel A. Ali, A.S. Al-Ruwais and Z.T. Al-Otaiby, "Optimum Diversity and Coding for Frequency-Hopped Multiple-Access Spread-Spectrum Communication Over Rayleigh Faded Channel Subject to Pulse-Burst Jamming", I.J. Space Communications, ISO Press, the Netherlands, Vol.11, No. 3, 1993, pp 227-233
38. Adel A. Ali and M. A. Alhaider, "Effect of Multi-path Fading on Millimeter Wave Propagation; A Field Study", IEE Proceedings -H, Vol.140, No.5, October 1993, pp 343-346.

39. Adel A. Ali, "Optimum Hop Length for Millimetric Wave Radio Links In Arid Climate", IEE Fourth European Conference on Radio Relay Systems" 1993.
40. Adel A. Ali and M. A. Alhaider, "Millimeter Wave Propagation in Arid Climate A Field Study", IEEE Trans. on Antennas and Propagation, June 1992, pp 492-499.
41. Adel A. Ali and A.S. Al-Ruwais, "Effect of Constellation Design, Pulse Shaping and BCH Codes on Performance of M-ary QAM Transmitted over Gaussian Band limited Channels, Int. J. of Space Communications, vol.10, No.1, ISO Press, The Netherlands, 1992, pp 39-52.
42. Adel A. Ali and A. S. Al-Ruwais, "Diversity and Coding for Frequency-Hopped Spread-Spectrum Communication over a Rician Faded Channel Subject to Pulse-Burst Jamming" Int. J. of Space Communications, vol.9, Elsevier Publisher, The Netherlands, 1991, pp 3-8.
43. Adel A. Ali and M A. Alhaider, "Experimental Studies on Millimeter Wave Propagation in Arid Climate: Scintillation and Multipath Fading", IEE Sixth International Conference on Antennas and Propagation, ICAP-89, April 1989, London, U.K.
44. Alhaider and Adel A. Ali, "Experimental Studies on Millimeter wave and Infrared Wave Propagation in Arid Land: The Effect of Sand Storms", IEE Sixth International Conference on Antennas and Propagation, ICAP-89, April 1989, London, U.K.
45. Adel A. Ali and I.A. Al-Kadi, "On the use of Repetition Coding with Binary digital Modulation on Mobile Channels", IEEE Trans. on Vehicle. Tech., Vol.38, No.1, Feb. 1989, pp 14-18.
46. Adel A. Ali and A. S. Al Ruwais, "A Comparison of Digital Modulations for Mobile. Satellite Channels", Journal of Space Communications and Broadcasting, Elsevier Science Publisher, B.V. (North-Holland). No.6, 1989, pp.387-395.
47. Adel A. Ali and I.A. Kadi, "A Comparison of Multipath Effect on Digital Modulation for Mobile Channels", Proceedings of the 8th Conference on Electronics, June 13 1988, Stockholm, Sweden.
48. Adel A. Ali, "Digital Modulation and Coding for Mobile Communication", Proceedings of the 8th European Conference on Electronics, June 13-17, 1988, Stockholm, Sweden.
49. Adel A. Ali and A S. Al-Ruwais, "Investigation of Various Types of Fade Experienced on a Coastal Microwave Link along the Red Sea", Journal of Engineering Sciences, KSU, No.14, No.1, 1988, pp 57-65.
50. Adel A. Ali, M.A. Alhaider and Abobakr S. Ahmed, "Amplitude Scintillation's Measurement on A 40- GHz, 14 Km Link in an Arid Climate", The 12th International Conference on Infrared and Millimeter Waves, Dec. 14-18, 1987, Florida, USA.
51. Adel A. Ali, A.S. Al-Ruwais and I.A. Al-Kadi, "Simulation Study of Digital Modulations Subject to Multipath Fading", Proceedings of Symposium on Information Technology and its Applications "SITA-87", Japan, Nov. 1987.

52. Adel A. Ali, M A. Alhaider and A S. Ahmed, "Experimental Studies on Millimeter Wave and Infrared Propagation in Arid Climate", IEE, Fifth International Conference on Antennas and Propagation, ICAP-87, March 1987, pp.371-375.
53. A.S. Ahmed, Adel A. Ali and M. A. Alhaider, "Measurements of Atmospheric Particle Size Distributions During Sand/Dust storms in Riyadh, Saudi Arabia", The International Journal of Atmospheric Environment, Pergamon Press, Vol.21, No.12, 1987, pp.2723-2725.
54. A.S. Ahmed, Adel A. Ali and M. A. Alhaider, "Airborne Dust Size Analysis for Tropospheric Propagation of Millimetric Waves into Dust storms", IEEE Trans. on Geosciences and Remote Sensing, Vol.GE-25, Sept. 1987, pp.593-599.
55. Adel A. Ali, M. Hassan and M.A. Alhaider, "Experimental Studies of Terrestrial mm-Wave Links- A Review, Part 2: Fading, Diversity and Data Processing", Journal of Engineering Sciences, King Saud University, Vol.13, No.1, 1987. pp 139-153.
56. A.S. Al-Ruwais and Adel A. Ali "Analysis of the Fading Problem on Microwave Links along the West Coast of Saudi Arabia", The Arab Gulf Journal of Scientific Research, Section A, Vol.5, 1987, pp 225-237.
57. Adel A. Ali and I.A. Al-Kadi, "On the use of Repetition Coding with Binary Digital Modulations on Mobile Channels", Proc. of IEEE Vehicular Technology Conference, Florida, USA, June 1987.
58. Adel A. Ali, A S. Al-Ruwais and A. M.Yaqoub, "Coded M-ray PSK Performance over Band limited Non-Linear Satellite Channels", Journal of Space Communication and Broadcasting Elsevier Science Publisher B.V. (North-Holland), Vol.5, 1987,pp 371-377.
59. Adel A. Ali, M. A. Alhaider and M. M. Shatila, "Rain Map for Radio wave Propagation Design in Saudi Arabia", International Journal of Infrared and Millimeter Waves, Vol. 7, No.11, November 1986, pp.1777-1793.
60. Adel A. Ali, M Hassan and M.A. Alhaider, "Experimental Studies of Terrestrial mm-Wave Links- A Review Part 1: Attenuation due to Atmospheric Particles", Journal of Engineering Sciences, King Saud University, Vol.12, No.2, 1986, pp.197-212.
61. Sharaf, M.A. Alhaider, Adel A. Ali, "A Microcomputer-based Real-time Data System for Radio wave Propagation Studies", Journal of Microcomputer Applications, Academic Press, UK, 1986, pp.223-231.
62. Adel A. Ali, "Effect of Particle-Size Distribution on Millimeter Wave Propagation into Sandstorms", International Journal of Infrared and Millimeter Waves, Vol.7, No.6, June 1986, pp.857-868.
63. Adel A. Ali, "Reliability Analysis of mm-Wave Propagation Based on Long Term Rain Data in Riyadh", International Journal of Infrared and Millimeter Waves, Vol.7, No.3, March 1986, pp.339- 356.

64. Adel A. Ali, "Millimeter Wave Propagation in Arid Land - The Effect of Rain and Sandstorms", *International Journal of Infrared and Millimeter Waves*, Vol.7, No.3, March 1986, pp.323-337.
65. M. Shatila, Adel A. Ali and M A. Alhaider, "Rain Rate Model and Rain Cell-Size Based on 18-year Rain Data for Microwave Propagation in Saudi Arabia", *IEEE Montech'86*, Montreal, Canada, Vol. Communications II, Oct. 1986, pp.90-93.
66. A. Sharaf, M.A. Alhaider and Adel A. Ali, "Algorithms for real-time Data Acquisition Using a Small Microcomputer. A Case Study for the Radio wave Propagation Studies", *Ninth National Computer Conference*, Riyadh, Saudi Arabia, 1986.
67. Adel A. Ali, "Millimeter Wave Propagation in Arid Land - A Field Study in Riyadh", the 10th International Conference on Infrared and Millimeter Waves, December 1985.
68. M. Hassan, Adel A. Ali and M.A. Alhaider, "Rain Measurements for mm- Wave Propagation", *Journal of Engineering Sciences*, King Saud University, Vol.11, No.2, 1985, pp.179-200.
69. Adel A. Ali and M A. Alhaider, "Power Spectra and Necessary Bandwidth for Simultaneous FDM and PSK Signals", *Journal of Space Communication and Broadcasting*, Elsevier Science Publisher B.V. (North-Holland), Vol.7, No.3, 1985, pp.207- 219.
70. Adel A. Ali, "On the Selection of an Optimum Digital Modulation", *IEE Proceedings on Telecommunication Transmission*, Publication No.246, March 1985, pp.90-92.
71. Adel A. Ali, "Repeated Convolutions of Butterworth-Filtered Spectra", *IEEE Trans. Circuits and Systems*, Vol.CAS-31, No.6, July 1984, pp.584-587.
72. Adel A. Ali, "Spectral Analysis of Analog Video and Phase-Shift Keying Data Transmitted by FM ", *IEEE Trans. on Broadcasting*, Vol.BC-29, No.1, March 1983, pp 6-11.
73. Adel A. Ali and M.A. Alhaider, "Necessary Bandwidth for High-Index FM", *Proceedings of the IEEE*, Vol.71, No.1, January 1983, pp.184-186.
74. Adel A. Ali, "FM Spectrum of Video Signals", *Proc. of the IEEE*, Vol.70, No.3, March 1982, pp.306-307.
75. Adel A. Ali and M.A. Alhaider, "FM Spectrum and Necessary Bandwidth for Color TV and Sound Sub-carriers", *Journal of Engineering Sciences*, King Saud (Riyadh) University, Vol.8, No.1, 1982, pp1-7.
76. Adel A. Ali, "RF Spectrum of Simultaneous FDM and PSK", *Proc. of the Canadian Communication and Power Conference*, Montreal, Canada, October 1980. Also published in the *Journal of Engineering Sciences*, King Saud (Riyadh) University, Vol.8, No.1, 1982, pp 31-36.

77. Adel A. Ali, "FM Spectrum of Analog Video and Digital Signals", Proceedings of the First European Conference on Signal Processing Lausanne, Switzerland, Sept.1980.
78. Adel A. Ali, "Necessary Bandwidth for the Transmission of Video and FM Sub carriers above Video", IEE Conference Publication Number 188 London, England, July 1980, pp 80-83.
79. Adel A. Ali, "Band limiting Distortion in Transmitting Video, Audio, and Digital Signals over Radio Relay Links", Proc. of North American Radio Science Meeting, Quebec, Canada, June 1980.
80. Adel A. Ali and H.K. Kim, "Comments on Cost Function Minimization in RC Ladder Networks, Reply by the Authors, IEEE Trans. Circuits and Systems, July 1977.
81. Adel A. Ali and H.K. Kim, "RC Ladder Realization with Equal-valued Capacitors", Int. J. of Circuit Theory and Applications, Vol.4, No.4, October 1976, pp 371-379.
82. Adel A. Ali and H.K. Kim, "Cost Function Minimization in RC Ladder Networks", IEEE Trans. Circuits and Systems, Vol.CAS-23, No.1, January 1976, pp 39-45.
83. Adel A. Ali, "Cost Function Minimization in RC Ladder Networks", Ph.D. Thesis, the University of Manitoba, June 1976.
84. Adel A. Ali and H.K. Kim, "Cost Function Minimization in RC Ladder Networks", IEEE International Conference on Circuits and Systems, Munich, June 1976.
85. Adel A. Ali and H.K. Kim, "Continuous Gain Adjustment of RC Low-pass Ladder Network", IEEE Trans. Circuits and Systems, Vol.CAS-22, October 1975, pp 831-833.
86. Adel A. Ali and H.K. Kim, "RC Ladder Realization with Non-uniformly Lossy Capacitors", Proc.17th Midwest Symposium on Circuit Theory, August 1974.
87. Adel A. Ali and H.K. Kim, "An Approach to the Canonical Realization of RC Network", Proc. 16th Midwest Symposium on Circuit Theory, April 1973.
88. Adel A. Ali, "An Approach to the Canonical Realization of RC Network", M.Sc. Thesis, the University of Manitoba, April 1973.

Books

Translated to Arabic "Modern Digital and Analog Communication Systems - B.P. Lathi" (Jointly with A.S. Al Ruwais and I.A. Al-Kadi), 1989.