

PROF. ABDUL-KADIR M. HAMID

Electrical and Computer Engineering Department
College of Engineering, University of Sharjah, Sharjah, UAE.

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EDUCATION

Ph.D. Degree in Electrical Engineering,

University of Manitoba, Winnipeg, Manitoba, Canada, May 1991

Thesis Title: "Electromagnetic Wave Scattering by Many-Sphere Systems with Application to Simulation of Three-Dimensional Bodies".

M.Sc. Degree in Electrical Engineering

University of Manitoba, Winnipeg, Manitoba, Canada, May 1988

Thesis Title: "Moment Method Solution for Multiple-Step Discontinuities in Waveguides".

B.Sc. Degree in Electrical Engineering

West Virginia University & Institute of Tech., Montgomery, West Virginia, U.S.A., May 1985

EXPERIENCE

UNIVERSITY OF SHARJAH, UAE

July 2000 to present

Acting Dean, College of Engineering – Sept. 2018-2019

Full Professor - Jul 2007 – present

Electrical Engineering Department – College of Engineering

Coordinator - Sept. 2011 to Oct. 2013

Sustainable and Renewable Energy Engineering Program-College of Engineering

Department Head - Sep 2007 to Sep 2008

Electrical and Computer Engineering Department - College of Engineering

Associate Dean, College of Engineering - Sep 2006 to Aug 2007

Associate Professor - Jul 2000 to Jun 2007

Electrical and Computer Engineering Department

KING FAHAD UNIVERSITY OF PETROLEUM & MINERALS, KSA

Jan. 1994 - June 2000

Faculty Member of the Electrical Engineering Department

QUANTIC LABORATORIES INC, CANADA

Mar 1991 - Dec 1993

Winnipeg, Manitoba, Canada R3B OX1

A Computer-Aided Engineering Software Company

UNIVERSITY OF MANITOBA, CANADA

Sep 1986 – Aug 1993

Sessional Lecturer and Part-time Postdoctoral Fellow - Aug 1991 – Aug 1993

Department of Electrical and Computer Engineering

Researcher and Teaching Assistant and Part-time Lecturer - Sep 1986 – Aug 1991

Department of Electrical and Computer Engineering

Courses taught at the University of Sharjah:

0402202: Circuit Analysis I 0402205: Circuit Analysis II
0402206: Circuit Analysis II Lab 0402320: Field Analysis
0402350: Electronic Devices 0402353: Electronic Circuits
0402450: Power Electronics 0402420: Microwave & Optical Transmission
0402454: Optoelectronics 0402430: Instrumentation and Measurements
0402415: Grid connected PV system
0402635: Advanced PV system in smart Grid
0403300: Engineering Ethics
0402225: Applied Electronics for Renewable Energy
0406320: Solar Photovoltaic Systems

Courses taught at KFUPM:

EE200: Digital Logic Design EE201: Electric circuits I
EE203: Electronics I. EE303: Electronics II.
EE340: Electromagnetics EE420: Optical Fiber Communications
EE445: Industrial Electronics. EE530: Radiation & Propagation of Electromagnetic Waves
EE455: Analog Communication Electronics

Courses taught at the University of Manitoba:

EE224: Engineering Analysis.
EE428: Engineering Electromagnetic.
EE225: Electronic Circuits & Devices

RESEARCH SKILLS

- Electrical energy management using grid connected PV optimized system.
- Fractional nonlinear synergetic control for dc link voltage regulator of three phase inverter Grid-tied PV system
- Forecasting Power Demand and Control Energy Flow in Large-Scale Grid Connected PV System.
- Characteristics of Solar Antennas using Metamaterials
- Electromagnetic Compatibility Using Finite Difference Method
- Scattering and Inverse Scattering Using Analytical and Neural Network
- Moment Solution for Waveguide Discontinuities and Waveguide Coupling Antennas
- Simulation of printed circuit boards using boundary-element and finite element methods.
- Microwave Integrated circuits
- Simulation of Thermal PV systems

OTHER TEACHING RESPONSIBILITIES

- Supervising and Examining Junior/Senior Projects, Summer Training and Coop. Reports
- Supervising and Examining MS Thesis

COURSE COORDINATION ASSIGNMENT

- Coordinator of 0402635 Advanced PV system in smart Grid
- Coordinator of 0402415 Grid connected PV system
- Coordinator of 0402225 Applied Electronics for Renewable Energy
- Coordinator of Power Electronics
- Coordinator of 0406320 Solar Photovoltaic Systems and its lab
- Coordinator of EE203 (Electronics I) at KFUPM.

- Coordinator of EE303 (Electronics II) at KFUPM
- Coordinator of Circuits I and Circuits II
- Coordinator of Field Analysis
- Coordinator of Power Electronics
- Coordinator of Electronic Devices
- Coordinator of Microwave & Optical Transmission

UNIVERSITY, DEPARTMENTAL AND PUBLIC SERVICE:

Departmental Committees at KFUPM

- Project/Seminar & Speaker Committee, member.
- Planning & Continuing Education committee, member.
- Graduate Admission Committee, member.
- Laboratory Supervision and Development Committee, member.
- Coordinator of Electromagnetic Group.
- Coordinator of Electronics Group.

Departmental Committees at UOS

- Staffing Committee, Chair/member.
- Graduate Program Committee, Chair/member.
- Local Accreditation committee: Chair/member.
- ABET Accreditation committee, Member
- Teaching and Learning committee, Member

University Committees at KFUPM

- College of Engineering Ad-hoc Committee to Study the Engineering Faculty Load, Member.
- College of Engineering Ad-hoc Committee to look into the Implementation of a Database System for the College of Applied Engineering, Member.

College/University Committees at UOS

- College Research Committee: member.
- Students disciplinary committee: member
- External affairs & marketing: member.
- Examination committee: member.
- College Graduate Studies and Research Committee: chair.
- College Board, member.
- College Graduate Studies and Research Committee: member.
- College Accreditation committee: member.
- Assessment and Continuous Program Improvement (ACPI) Committee, member.
- University curriculum committee.
- College ABET committee for Civil, Electrical and Computer Engineering programs.
- College preparing new Mechanical and Energy (Sustainable/Renewable and Nuclear) Engineering programs committee.
- College promotion committee.

PRIZES AND AWARDS

- Received the **Research Incentive Award** of the University of Sharjah in **2012/2013** for Excellence Performance in Research.
- Received the **Bonus Award** of the University of Sharjah in **2005/2006** for Excellence Performance in Teaching, Research and Community service
- Received the **Research Award** of the University of Sharjah in **2002/2003**.
- Received a **Technical Contribution Certificate** from the

- Mediterranean Microwave Symposium 2000.
- Distinguished Performance in Teaching, Research and Publications at KFUPM.
- Nominated for the best distinguished student advising award at KFUPM, 2000.
- Who's Who in the World, 22nd Edition, 2005
- Assistantship throughout Graduate Work.

PROFESSIONAL MEMBERSHIPS

Member of the Institute of Electrical and Electronic Engineers (IEEE).
 Member of Jordan Engineers Association since 1985 to present
 Member of the Applied Computational Electromagnetics Society

ACTIVITIES

- Editors and Reviewers Board of the Journal of Electromagnetic Waves and Applications (JEWA).
- Reviews occasionally for the International Journal of Electronics.
- Reviewers regularly for the Applied Computational Electromagnetic Society Journal (ACES).
- Reviews occasionally for the Canadian Journal of Physics.
- Reviews occasionally for the Radio Science Journal.
- Reviewed and chaired sessions for 10th IEEE International Conference on Electronics, Circuits and System, ICECS 2003, Dec. 14-17 Sharjah, U.A.E.
- Reviewed for the International Conference on Information and Computer Science, ICIS 2004, Nov. 28-30, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia
- Member of the Technical Committee for ACES 2003 Conference, Monterey, CA, Mar 2003
- Conference General Secretary of ISSPA2007, Feb 07, 2007, Sharjah/Dubai, UAE.
- Chair of 2008 International Conference on Microelectronics: ICM 2008; Sharjah, United Arab Emirates, 14 - 17 December 2008.
- Chair of UOS 9th-11th Research Forum, May 4-5, 2015-2017.

FUNDED RESEARCH PROJECTS AT KFUPM

- H. Ragheb and **A-K. Hamid**, 'Propagation and Radiation from Elliptical Waveguide Partly Filled with Nonconfocal Dielectric,' KFUPM Funded Project, starts June 1, 1998 to Oct. 1, 2000.
- M. AlSunaidi and **A-K. Hamid**, "Study of the Electromagnetic Radiation and Interference from High-Speed Digital Systems and Methods to Minimize it for Work Safety and Environmental Protection", SABIC Funded Project, From April 1999 to April 2001.

FUNDED RESEARCH PROJECTS AT UOS:

- **A-K. Hamid** et al, 3KW PV/T Hybrid System with Front and Back Cooling, Funded Research Project, UOS, 2015-2018
- **A-K. Hamid** and M. Bettayeb, 'Electromagnetic Radiation from Cellular Phones in the Presence of the Human Head and Methods to Minimize Its Effects', University of Sharjah Funded Project, From May 2001 to 2005.
- M. Bettayeb, **A-K. Hamid**, et. al., "Intelligent Systems and Infrastructures," University of Sharjah Funded Project, From May 2004 to 2009.
- **A-K. Hamid et al**, "Energy Efficiency Research Center", Coordinator, University of Sharjah, 2012.
- **A-K. Hamid et al**, Sustainable Energy Development Group, UOS, 2019.
- **A-K. Hamid et al**, 3KW PV/T System Using Front (Optical Filter) and Bank Nano Fluid Colling, Hybrid System with Front and Back Cooling, Funded Research Project, UOS, 2019-2021.

PUBLICATIONS

M.Sc. Thesis: A-K. Hamid, "Moment Method Solution for Multiple-Step Discontinuities in Waveguides", University of Manitoba, Winnipeg, Canada, 1988

Ph.D. Thesis: A-K. Hamid, "Electromagnetic Wave Scattering by Many-Sphere Systems with Application to Simulation of three-dimensional Bodies", University of Manitoba, Winnipeg, Canada, 1991

JOURNAL PAPERS

- [1] Fahad Fraz Ahmed, Chaouki Ghenai, **A-K. Hamid**, Maamar Bettayeb, "Application of Sliding Mode Control for Maximum Power Point Tracking of Solar Photovoltaic Systems: A Comprehensive Review", Annual Reviews in Control journal, vol. 49, 173-196, 2020.
- [2] Waleed Obaid, **A-K. Hamid** and Chaouki Ghenai, "Hybrid Solar/Wind Water Pumping System with Solar Irradiance Forecasting: A Case Study in Sharjah, United Arab Emirates", International Journal of Electrical and Computer Engineering (IJECE), accepted
- [3] Walid Obaid, **A-K. Hamid** and Chaouki Ghenai, "Hybrid Solar/Wind/Diesel Water Pumping System: A Case Study in Dubai United Arab Emirates", International Journal of Electrical and Computer Engineering (IJECE), accepted.
- [4] Fahad Faraz Ahmad, Mohamed Abdelsalam, **Abdul Kadir Hamid**, Chaouki Ghenai, Obaid Waleed, Bettayeb Maamar, "Experimental Validation of PVSYST Simulation for Fix Oriented and Azimuth Tracking Solar PV System", International Conference on Modelling Simulation & Intelligent Computing (Mosaicom2020), Dubai, UAE, January 2020, published in a chapter in lecture notes in electrical engineering journal, vol. 659, pp 227-235, 2020.
- [5] Chaouki Ghenai, Maamar Bettayeb, Boris Brdjanin and **A-K. Hamid**, "Hybrid Solar PV/PEM Fuel Cell/Diesel Generator Power System for Cruise Ship: A Case Study in Stockholm, Sweden", Case Studies in Thermal Engineering Journal, vol. 14, 2019.
- [6] **A-K. Hamid** and F. Cooray, "Scattering from a Buried PEMC Cylinder due to a Line Source Excitation above a Planar Interface Between Two Isorefractive Half Spaces", Advanced Electromagnetics Journal, vol. 8, 1-6, 2019.
- [7] Waleed Obaid, **A-K. Hamid** and Chaouki Ghenai, "Hybrid Solar/Diesel Power System Design for Electric Boat with MPPT System", International Energy Journal, vol. 19, 37-45, 2019.
- [8] **A-K. Hamid** and F. Cooray, "Scattering from a Buried PEMC Cylinder Illuminated by a Normally Incident Plane Wave Propagating in Free Space", Advanced Electromagnetics Journal, vol. 8, pp. 1-7, 2019.
- [9] **A-K. Hamid**, "LCP Plane Wave Scattering by a Chiral Elliptic Cylinder Embedded in Infinite Chiral Medium", Applied Computational Electromagnetics Society Journal, vol. 34, pp. 180-185, 2019.
- [10] Sumayya Al Mazrouei and **A-K. Hamid**, "Energy Control Strategy for Large-Scale Grid Connected PV System with Batteries", International Journal of Renewable Energy Research- IJRER, vol. 8, pp. 320-327, 2018.
- [11] **A-K. Hamid**, "Iterative Scattering by Two PEMC Elliptic Cylinders", Advanced Electromagnetics Journal, Vol. 8, pp. 49-52, 2018.
- [12] **A-K. Hamid** and Waleed Obaid, "Hexa-Band MIMO CPW Bow-Tie Aperture Antenna Design using Particle Swarm Optimization", International Journal of Electrical and Computer Engineering (IJECE), vol. 8, pp. 3118-31128, 2018.

- [13] **A-K. Hamid**, "Dielectric Coated Slotted Elliptic Antenna Embedded Partly in Infinite Ground Plane", *Advanced Electromagnetics Journal*, Vol. 6, pp. 53-58, 2017.
- [14] **A-K. Hamid** and Waleed Obaid, "RCS of Chiral Elliptic Cylinder Embedded in Infinite Chiral Medium", *International Journal of Electrical and Computer Engineering (IJECE)*, vol. 7, no. 5, pp. 2731-2737, 2017.
- [15] **A-K. Hamid** and F. Cooray, "Two-Dimensional Scattering by a Homogeneous Gyrotropic-Type Elliptic Cylinder", *Advanced Electromagnetics Journal*, vol. 5, 3, pp. 106-112, 2016.
- [16] **A-K. Hamid**, "Series Solution to the Radiation from Slotted Antenna on Elliptic Cylinder Coated by Biaxial Anisotropic Material", *Applied Computational Electromagnetics Society Journal*, vol. 30, 12, pp. 1301-1305, 2015.
- [17] **A-K. Hamid** and F. Cooray, "Scattering of a Plane Wave by a Homogeneous Anisotropic Elliptic Cylinder", *IEEE Transactions on Antennas and Propagation*, vol. 63, 8, pp. 3579 – 3587, 2015.
- [18] **A-K. Hamid**, "Scattering from an Arbitrarily Incident Plane Wave by a PEMC Elliptic Cylinder Confocally Coated with a Chiral Material", *Applied Computational Electromagnetics Society Journal*, vol. 30, 5, pp. 503-509, 2015.
- [19] Ahmed Hachicha, Chaouki Ghenai and **A-K. Hamid**, "Enhancing the Performance of a Photovoltaic Module Using Different Cooling Methods", *International Journal of Environmental, Chemical, Ecological, Geological, and Geophysical Engineering*, Vol. 9, no.9, pp. 999-1002, 2015.
- [20] **A-K. Hamid**, "Elliptic Slotted Antenna with Anisotropic Plasma dielectric Coating", *International Journal of Advanced Research in Computer and Communication Engineering*, vol. 4, no.2, pp. 1-4, 2015.
- [21] **A-K. Hamid** and F. Cooray, "Scattering from a Chirally Coated DB Elliptic Cylinder", *International Journal of Electronics and Communications, AEUE*, vol. 68, no. 11, pp. 1106-1111, 2014.
- [22] **A-K. Hamid**, "Scattering by a Nihility Elliptic Cylinder with Dielectric Coating and Under Line Source Illumination", *International Journal of Engineering Sciences*, Vol. 3, No 11, pp. 109-113 2014.
- [23] Amna A. Alzaabi, Nadine K. Badawiyeha, Hind O. Hantousha and **A-K. Hamid**, "Electrical/Thermal Performance of Hybrid PV/T System in Sharjah, UAE ", *International Journal of Smart Grid and Clean Energy*, vol. 3, no. 4, pp. 385-389, 2014.
- [24] **A-K. Hamid**, "Scattering of Chiral Semi-Elliptical Boss on a Ground Plane" *International Journal on Communications Antenna and Propagation (IRECAPI)*, vol. 3, pp. 16-20, 2013.
- [25] **A-K. Hamid**, "Scattering by Chiral Lossy Metamaterial Elliptic Cylinders" *Applied Computational Electromagnetics Society Journal*, vol. 27, pp. 603-609, 2012.
- [26] F. Cooray and **A-K. Hamid**, "Scattering from a Coated Perfect Electromagnetic Conducting Elliptic Cylinder", *International Journal of Electronics and Communications, AEUE*, vol. 66, pp. 472-479, 2012.
- [27] **A-K. Hamid** and F. Cooray, "TE Exact Scattering by a Perfect Electromagnetic Conducting Semi-Elliptic-Cylindrical Boss on a Perfectly Conducting Ground Plane", *International Journal of Electromagnetics and Mechanics*, vol. 38, pp. 1-8, 2012.
- [28] **A-K. Hamid**, "Elliptic Cylinder with Slotted Antenna Coated by Magnetic Materials", *International Journal of Antennas and Propagation*, vol. 2011, 5 pages, 2011.

- [29] H. Hamad and **A-K. Hamid**, "Multiband Monopole Antenna for Wireless Communication", High Frequency Electronics, vol.10, no. 5, pp. 520-527, 2011.
- [30] **A-K. Hamid**, "EM Scattering by Nihility Circular or Elliptical Cylinders with Lossy Metamaterials Coating", Journal of International Review on Modelling and Simulations (IREMOS), vol.4, no. 2, pp. 891-895, 2011.
- [31] H. Hamad and **A-K. Hamid**, "Size Reduction of Mobile Monopole Antenna Using Magnetic Coating", Canadian Journal on Electrical & Electronics Engineering, vol. 2, pp. 43-46, 2011.
- [32] **A-K. Hamid** and M.I. Hussein, "TM Scattering by a Perfect Electromagnetic Conducting Strip", Journal of Applied Physics A, Materials Science & Processing, vol. 103, Number 3, pp. 571-573, 2011.
- [33] **A-K. Hamid** and F.R. Cooray, "Exact Scattering by a Perfect Electromagnetic Conducting Semi-Elliptic-Cylindrical Boss on a Perfectly Conducting Ground Plane", International Journal of Electronics and Communications, AEUE, vol. 65, pp. 277-280, 2011.
- [34] **A-K. Hamid**, "EM Scattering by a Lossy Dielectric-Coated Nihility Elliptic Cylinder", Applied Computational Electromagnetics Society Journal, vol. 25, pp. 444-449, 2010.
- [35] **A-K. Hamid**, "Scattering by Nihility Elliptic Cylinder Coated by Metamaterials", Canadian Journal on Electrical & Electronics Engineering, vol. 1, pp.1-6, 2010.
- [36] **A-K. Hamid** and F.R. Cooray, "Scattering by a Perfect Electromagnetic Conducting Elliptic Cylinder", Progress In Electromagnetic Research, PIER, Vol. 10, 59-67, 2009.
- [37] **A-K. Hamid** and F.R. Cooray, "Axially Slotted Antenna on a Spheroidal with an Isorefractive Coating", International Journal of Electromagnetics and Mechanics, vol. 29, no. 2, pp. 109-116, 2009.
- [38] **A-K. Hamid** and F.R. Cooray, "Scattering from a Metamaterial Hemispherical Boss on an Infinite Plane", The Open Electrical and Electronic Engineering Journal, vol.2, no. 8, pp.72-79, 2008.
- [39] **A-K. Hamid** and F.R. Cooray, "Scattering of Electromagnetic Waves by a Perfect Electromagnetic Conducting Spheroid", IET Proc. on Microwaves, Antennas & Propagation, vol. 2, no. 7, pp. 686-695, 2008.
- [40] **A-K. Hamid**, "Scattering from a Semi-Elliptic Channel in a Ground Plane Loaded by a Lossy or Lossless Dielectric Elliptic Shell", Applied Computational Electromagnetics Society Journal, vol. 22, no. 3, pp. 414-419, 2007.
- [41] **A-K. Hamid** and F.R. Cooray, "Radiation Characteristics of a Spheroidal Slot Antenna Coated with Isorefractive Metamaterials," J. of Electromagnetic Waves and Applications, vol. 21, no. 12, pp. 1605-1619, 2007.
- [42] **A-K. Hamid**, M.I. Hussein and M. Hamid, "Exact Radiation by Isorefractive Slotted Elliptic Cylindrical Antenna" Applied Computational Electromagnetics Society Newsletter, technical article, Vol. 22, no. 2, 2007.
- [43] **A-K. Hamid** and M.I. Hussein, "Exact Radiation for Slotted Circular or Elliptical Antenna Coated by Concentric Isorefractive Metamaterials" International Journal of Electromagnetics and Mechanics, vol. 26, nos. 1 and 2, pp. 101-111, 2007.
- [44] **A-K. Hamid**, "Multi-Dielectric Loaded Axially Slotted Antenna on Circular or Elliptic Cylinder," J. of Electromagnetic Waves and Applications, Vol. 20, number 9, pp. 1259-1271, 2006.

- [45] **A-K. Hamid** and Q. Nasir, "Transverse Electric Plane Wave Scattering by Two Infinitely Long Conducting Elliptic Cylinders: Iterative Solution," Proceedings of SCEE 2004, Scientific Computing in Electrical Engineering, Special issue of Mathematics in Industry Journal, pp. 195-203, 2006.
- [46] **A-K. Hamid** and M. Bettayeb, "TE Plane Wave Scattering by a Lossy Dielectric Loaded Semi-Elliptic Channel in a Ground Plane," International Journal of Electromagnetics and Mechanics, vol. 22, pp. 159-167, 2005.
- [47] **A-K. Hamid**, "EM Scattering from a Semi-Circular or Elliptical Channel in a Ground Plane Loaded with a Lossy Dielectric Layer," University of Sharjah Journal of Pure & Applied Sciences, vol. 2, no. 3, pp. 41-52, 2005.
- [48] **A-K. Hamid**, "Study of Lossy Effects on the Characteristics of Axially Slotted Circular or Elliptical Cylindrical Antenna Coated with Metamaterials," IEE Proc. on Microwaves, Antennas & Propagation, vol. 152, no. 12, pp. 485-490, 2005.
- [49] **A-K. Hamid**, "Axially Slotted Antenna on a Circular or Elliptic Cylinder Coated With Metamaterials," Progress In Electromagnetic Research, Special issue on Metamaterials, PIER 51, pp. 329-341, 2005.
- [50] **A-K. Hamid**, "Loss Effects on the RCS of a Conducting Circular or Elliptic Cylinder with a Metamaterial Coating," Applied Computational Electromagnetics Society Newsletter, technical article, Vol. 20, no. 2, pp. 61-65, 2005.
- [51] **A-K. Hamid**, "Electromagnetic Scattering from a Dielectric Coated Elliptic Cylinder Loading a Semi-Elliptic Channel in a Ground Plane," J. of Electromagnetic Waves and Applications, vol. 19, no.2, pp. 257-269, 2005.
- [52] **A-K. Hamid**, "RCS of Two Lossy Dielectric Loaded Semi-Elliptic Channels in a Conducting Plane," Applied Computational Electromagnetics Society Journal, vol. 19, no. 3, pp. 170-176, 2004.
- [53] **A-K. Hamid**, "Scattering by Two Infinitely Long Dielectric Coated Confocal Conducting Elliptic Cylinders," J. of Electromagnetic Waves and Applications, vol. 18, no. 11, pp. 1427-1441, 2004.
- [54] **A-K. Hamid** and M.I. Hussein, "Iterative Solution to the Multiple Scattering by A System of Two Infinitely Long Conducting Strips," Applied Computational Electromagnetics Society Journal, vol. 19, no. 1, pp. 32-38, 2004.
- [55] M.I. Hussein and **A-K. Hamid**, "Radiation Characteristics of N Axial Slots on a Conducting Elliptical Antenna Coated by a Lossy Dielectric Layer," Canadian Journal of Physics, vol. 82, no. 2, pp. 141-149, 2004.
- [56] **A-K. Hamid**, "Iterative Solution to the TM Scattering by Two Infinitely Long Lossy Dielectric Elliptic Cylinders," J. of Electromagnetic Waves and Applications, vol.18, no.4, pp. 529-546, 2004.
- [57] **A-K. Hamid**, M.I. Hussein, and M. Hamid, "Electromagnetic Scattering by a System of Dielectric Spheres Each Coated with a Dielectric Shell," Applied Computational Electromagnetics Society Journal, vol. 18, no. 4, pp. 91-96, 2003.
- [58] **A-K. Hamid** and M.I. Hussein, "Electromagnetic Scattering by a Lossy Dielectric Coated Elliptic Cylinder," Canadian Journal of Physics, Vol. 81, no. 5, pp. 771-778, 2003.
- [59] **A-K. Hamid** and M.I. Hussein, "Echo Pattern Width of a Conducting Strip Loaded with a Lossy Dielectric Layer," International Journal of Electromagnetics and Mechanics, Vol. 18, no. 4, pp. 177-186, 2003.

- [60] **A-K. Hamid** and M.I. Hussein, "Iterative Solution to the Electromagnetic Plane Wave Scattering by Two Parallel Conducting Elliptic Cylinders," J. of Electromagnetic Waves and Applications, Vol. 17, no. 6, pp. 813-828, 2003.
- [61] **A-K. Hamid**, M.I. Hussein, and M. Hamid, "Radar Cross Section of a System of Conducting Spheres Each Coated with a Dielectric Layer," J. of Electromagnetic Waves and Applications, vol. 17, no. 4, pp. 431-445, 2003.
- [62] M. Hamid and **A-K. Hamid**, "On the Eigenvalues of Pyramidal Waveguides", Electronics Letters, Vol. 38., no. 25, pp. 1685-1686, 2002.
- [63] **A-K. Hamid**, M.I. Hussein, H. Ragheb, and M. Hamid, "Mathieu Functions of Complex Arguments and Their Applications to the Scattering by Lossy elliptic Cylinders," Applied Computational Electromagnetics Society Journal, Vol. 17, no. 3, pp. 209-217, 2002.
- [64] **A-K. Hamid** and M. Hamid, "Electromagnetic Scattering by a Dielectric Sphere Partially Buried in an Infinite Plane", Canadian Journal of Physics, vol. 80, no.9, pp. 979-986, 2002.
- [65] M.I. Hussein, and **A-K. Hamid**, "Electromagnetic Scattering by a Lossy Dielectric Elliptic Cylinder", J. of Electromagnetic Waves and Applications, vol. 15, no. 11, pp. 1469-1482, 2001.
- [66] H. Ragheb and **A-K. Hamid**, "Cutoff Wave Numbers of Elliptical Waveguide Loaded with Non-Confocal Elliptic Metallic Core", J. of Electromagnetic Waves and Applications, Vol. 15, no. 1, pp. 25-40, 2001.
- [67] **A-K. Hamid** and M. Hamid, "A Plane Electromagnetic Wave Scattering by A Conducting Sphere Partially Buried in A Ground Plane", J. of Electromagnetic Waves and Applications, vol.14, pp. 617-629, 2000.
- [68] M. AlSunadi and **A-K. Hamid**, "FDTD Simulation of Antenna Coating Effects on The Radiation Properties of Cellular Phones, Microwave and Optical Technology Letters, pp. 52-54, Oct. 5, 1999.
- [69] **A-K. Hamid** and M. AlSunadi, "Determination of the Dielectric Permittivity of Spherical Scatterers Using a Neural Network Approach", The Arabian Journal for Science and Engineering, vol. 24, pp. 89-94, 1999.
- [70] **A-K. Hamid**, "Scattering from a Spherical Shell with a Circular Aperture Using Neural Network Approach", Canadian Journal of Physics, vol.76, pp. 63-67, 1998.
- [71] **A-K. Hamid**, "Moment Method Solution of Electromagnetic Field Coupling Between Two Flanged Waveguides", The Arabian Journal for Sciences and Engineering, vol.22, no. 2B, pp. 321-328, 1997.
- [72] **A-K. Hamid**, "A Neural Network Approach to the Inverse Scattering Problem from a Circular Conducting Cylindrical Scatterer", Microwave and Optical Technology Letters, vol.13, no.6, pp. 380-382, 1996.
- [73] **A-K. Hamid**, "Modeling the Scattering from a Dielectric Spheroid by System of Dielectric Spheres", J. of Electromagnetic Waves and Applications, vol.10, no.5, pp. 723-729, 1996.
- [74] **A-K. Hamid**, "Multiple Scattering of a Plane Electromagnetic Wave by Hemispherical Bosses on an Infinite Plane", Canadian Journal of Physics, vol.74, pp.108-113, 1996.
- [75] **A-K. Hamid**, "Generalized Scattering Method for Cascaded Waveguide Junctions", Int. J. of Electronics, vol.80, no.3, pp. 471-477, 1996.

- [76] **A-K. Hamid** and A. Wexler, "3D Structures and PCB Transmission Line Effects", *Electronics Product Design*, pp. 19-21, December 1992.
- [77] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Analytic Solutions of The Scattering by Two Multilayered Dielectric Spheres", *Canadian Journal of Physics*, vol. 70, pp. 696-705, 1992.
- [78] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Iterative Solution of the Scattering by an Arbitrary Configuration of Conducting or Dielectric Spheres", *IEE Proc., Part H*, vol. 148, pp. 565-572, 1991.
- [79] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Electromagnetic Scattering by an Arbitrary Configuration of Dielectric Spheres", *Canadian Journal of Physics*, vol. 68, pp. 1419-1428, 1990.
- [80] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Multiple Scattering by a Linear Array of Conducting Spheres", *Can. J. Phys.*, vol. 68, pp. 1157-1168, 1990.
- [81] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Generalized Network Formulation for Symmetric Double-Step Waveguide Discontinuities", *Int. J. Electronics*, vol. 67, pp. 427-435, 1989.
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PAPERS IN REFREED CONFERENCE PROCEEDINGS

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