

PRPOF. ABDUL-KADIR M. HAMID

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

akhamid@sharjah.ac.ae [Website](#)

[Google](#), [Research Gate](#), [Scopus](#), [ORCID](#), [mendeley](#), [linkedin](#)

EDUCATION

Ph.D. Degree in Electrical Engineering,

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

M.Sc. Degree in Electrical Engineering

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

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
0402714: Advanced Power Electronics Applications

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

- Reviewers for the Journal of Electromagnetic Waves and Applications (JEWA).
- Reviews occasionally for the International Journal of Electronics.
- Reviews for Sustainable Energy Technologies and Assessments
- Review for Waves in Random and Complex Media
- 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, 2019-2022.

- **A-K. Hamid** et al, Real time detection and localization of infrared hot spots installed 3KW PV system, Funded Research Project, UOS, Nove. 1, 2020-2022.

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] Waleed Obaid, **A-K. Hamid** and Chaouki Ghenai, "Hybrid Solar/Wind/Diesel Water Pumping System: A Case Study in Dubai, United Arab Emirates", Case Studies in Thermal Engineering, vol 26, 2021.
- [2] **Abdul Kadir Hamid**, Fahd N. Al-Wesabi, Nadhem NEMRI, Ammar Zahary and Imran Khan, "An Optimized Algorithm for Resource Allocation for D2D in Heterogeneous Networks", Computers, Materials & Continua, 2021.
- [3] **Abdul Kadir Hamid**, Fahd N. Al-Wesabi, Nadhem NEMRI, Ammar Zahary and Imran Khan, "A Joint Resource Allocation Algorithm for D2D Communications", Computers, Materials & Continua, 2021.
- [4] Chaouki Ghenai, Fahad Faraz Ahmad, Oussama Rejeb, **Abdul Kadir Hamid**, "Sensitivity Analysis of Design Parameters and Power Gain Correlations of bi-facial solar PV system Using Response Surface Methodology", Solar Energy Journal, Volume 223, 15, Pages 44-53, 2021.
- [5] Tareq Salameh, Muhammad Tawalbeh, Adel Juaidi, Ramez Abdallah, **A-K. Hamid**, "A novel three-dimensional numerical model for PV/T water system in hot climate region", Renewable Energy, Renewable Energy, Vol. 164,1, Pages 1320-1333, 2021.
- [6] Fahad Faraz Ahmad¹, Chaouki Ghenai, **Abdul Kadir Hamid**, Oussama Rejeb and Maamar Bettayeb, "Performance Enhancement and Infra-Red (IR) thermography of Solar Photovoltaic Panel Using Back Cooling from the Waste Air of Building Centralized Air Conditioning System", Case Studies in Thermal Engineering Journal, vol. 24, 2021.
- [7] Waleed Obaid, **A-K. Hamid**, Chaouki Ghenai and Mamdouh El Haj Assad, "Design of a Thermoelectric Energy Source for Water Pumping Applications: A Case Study in Sharjah, United Arab Emirates", International Journal of Electrical and Computer Engineering (IJECE), vol. 11, no. 6, 4751-4758, 2021.
- [8] Mohamed Abdelsalam, Fahad Faraz Ahmad, **Abdul Kadir Hamid**, Chaouki Ghenai, Oussama Rejeb, Monahel Alchadirchy, Obaid Waleed and Mamdouh El Haj Assad, "Experimental Study of the Impact of Dust on Azimuth Tracking Solar PV in Sharjah", International Journal of Electrical and Computer Engineering (IJECE), Vol.11, No.5, October2021, pp. 3671-3681, 2021
- [9] Mamdouh El Haj Assad, Ali Khosravi, Mohammad AlShabi, Bassam Khuwaileh, **Abdul-Kadir Hamid**, "Energy and Cost Analysis of Processing Flat Plate Solar Collectors", Energy Engineering. Vol.118, no.3, pp.447-458, 2021.
- [10] 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), vol. 11, no. 4, pp. 2752-2759, 2021.

- [11]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), vol. 11, no.3, pp. 2062-2067, 2021.
- [12] 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.
- [13]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", lecture notes in electrical engineering journal, vol. 659, pp. 227-235, 2020.
- [14]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.
- [15]**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, pp. 1-6, 2019.
- [16]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, pp. 37-45, 2019.
- [17]**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.
- [18]**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.
- [19]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.
- [20]**A-K. Hamid**, " Iterative Scattering by Two PEMC Elliptic Cylinders", Advanced Electromagnetics Journal, Vol. 8, pp. 49-52, 2018.
- [21]**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.
- [22]**A-K. Hamid**, "Dielectric Coated Slotted Elliptic Antenna Embedded Partly in Infinite Ground Plane", Advanced Electromagnetics Journal, Vol. 6, pp. 53-58, 2017.
- [23]**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.
- [24]**A-K. Hamid** and F. Cooray, "Two-Dimensional Scattering by a Homogeneous Gyrotropic-Type Elliptic Cylinder", Advanced Electromagnetics Journal, vol. 5, no. 3, pp. 106-112, 2016.
- [25]**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.
- [26]**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, no. 8, pp. 3579 – 3587, 2015.

- [27] **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, no. 5, pp. 503-509, 2015.
- [28] 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.
- [29] **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.
- [30] **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.
- [31] **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.
- [32] 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.
- [33] **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.
- [34] **A-K. Hamid**, "Scattering by Chiral Lossy Metamaterial Elliptic Cylinders" *Applied Computational Electromagnetics Society Journal*, vol. 27, pp. 603-609, 2012.
- [35] 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.
- [36] **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.
- [37] **A-K. Hamid**, "Elliptic Cylinder with Slotted Antenna Coated by Magnetic Materials", *International Journal of Antennas and Propagation*, vol. 2011, 5 pages, 2011.
- [38] H. Hamad and **A-K. Hamid**, "Multiband Monopole Antenna for Wireless Communication", *High Frequency Electronics*, vol.10, no. 5, pp. 520-527, 2011.
- [39] **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.
- [40] 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.
- [41] **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.
- [42] **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.

- [43] **A-K. Hamid**, "EM Scattering by a Lossy Dielectric-Coated Nihility Elliptic Cylinder", Applied Computational Electromagnetics Society Journal, vol. 25, pp. 444-449, 2010.
- [44] **A-K. Hamid**, "Scattering by Nihility Elliptic Cylinder Coated by Metamaterials", Canadian Journal on Electrical & Electronics Engineering, vol. 1, pp.1-6, 2010.
- [45] **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.
- [46] **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.
- [47] **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.
- [48] **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.
- [49] **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.
- [50] **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.
- [51] **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.
- [52] **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.
- [53] **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.
- [54] **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.
- [55] **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.
- [56] **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.
- [57] **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.

- [58] **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.
- [59] **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.
- [60] **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.
- [61] **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.
- [62] **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.
- [63] **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.
- [64] 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.
- [65] **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.
- [66] **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.
- [67] **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.
- [68] **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.
- [69] **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.
- [70] **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.
- [71] M. Hamid and **A-K. Hamid**, "On the Eigenvalues of Pyramidal Waveguides", *Electronics Letters*, Vol. 38., no. 25, pp. 1685-1686, 2002.
- [72] **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.
- [73] **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.

- [74] 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.
- [75] 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.
- [76] **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.
- [77] M. AlSuniadi 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.
- [78] **A-K. Hamid** and M. AlSunaidi, "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.
- [79] **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.
- [80] **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.
- [81] **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.
- [82] **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.
- [83] **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.
- [84] **A-K. Hamid**, "Generalized Scattering Method for Cascaded Waveguide Junctions", Int. J. of Electronics, vol.80, no.3, pp. 471-477, 1996.
- [85] **A-K. Hamid** and A. Wexler, "3D Structures and PCB Transmission Line Effects", Electronics Product Design, pp. 19-21, December 1992.
- [86] **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.
- [87] **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.
- [88] **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.
- [89] **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.
- [90] **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.

[91] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Moment Method Solution of Double-Step Discontinuities in Waveguides", Int. J. Electronics, vol. 65, pp. 1159-1169, 1988.

PAPERS IN REFREED CONFERENCE PROCEEDINGS

- [1] Mena Maurice Farag, Fahad Faraz Ahmad, **Abdul Kadir Hamid**, Chaouki Ghenai and Maamar Bettayeb, Monadhel Alchadirchy, "Performance Assessment of a Hybrid PV/T System During Winter Season under Sharjah Climate," International Conference on Electrical, Computer, Communications, and Mechatronics Engineering (ICECCME), MAURITIUS, 07th-08th of October, 2021.
- [2] Walid Obaid, **Abdul Kadir Hamid**, Chaouki Ghenai and Maamar Bettayeb, "Wind Power System Design with Seventy-two Pulse Rectifier for Electric Boats," 5th International Conference on Smart Grid and Smart Cities, ICSGSC 2021, Tokyo, Japan, June 18-20, 2021.
- [3] Walid Obaid, **Abdul Kadir Hamid**, Chaouki Ghenai and Maamar Bettayeb, "Wind Power System Design with Seventy-two Pulse Rectifier for Water Pumping Applications", 5th International Conference on Smart Grid and Smart Cities, ICSGSC 2021, Tokyo, Japan, June 18-20, 2021.
- [4] Walid Obaid, **Abdul Kadir Hamid**, Chaouki Ghenai and Maamar Bettayeb, 'Hybrid Fuel-Cell-Solar Power System Design for Water Pumping Applications with Fuzzy Energy Management and Weather Forecasting', Renewable and Sustainable Energy - 2020 Advances in Science and Engineering Technology (ASET) International Conferences, Dubai, United Arab Emirates, 2020.
- [5] Hamed Allaham, **Abdul Kadir Hamid**, Ali Cheaitou and Abdul Hai Al-Alami, Solar Energy Management: A technical and economic model for optimized photovoltaic system sizing", International conference on Energy, Environment and storage energy (ICEESEN 2020), Turkey, 2020.
- [6] Mohamed Abdelsalam, Walid Obaid, Abdul Kadir Hamid, Chaouki Ghenai, 'Modeling and Simulation of a Solar Powered Golf Cart Charging Station in Sharjah', Renewable and Sustainable Energy - 2020 Advances in Science and Engineering Technology (ASET) International Conferences, Dubai, United Arab Emirates, 2020.
- [7] 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.
- [8] Walid Obaid, **A-K. Hamid** and Chaouki Ghenai, "Hybrid MPPT Controlled Solar/Wind Power System for Pumping System", 2019 International Conference on Electrical and Computing Technologies and Applications (ICECTA), Ras Al Khaimah, UAE, 19-21 November 2019.
- [9] Walid Obaid, **A-K. Hamid**, "Liver Metastasis Segmentation by Anisotropic Diffusion Filtering, Chan-Vese Algorithm, and K-means Clustering", 2019 International Conference on Electrical and Computing Technologies and Applications (ICECTA), Ras Al Khaimah, UAE, 19-21 November 2019.
- [10] Waleed Obaid, **A-K. Hamid** and Chaouki Ghenai, "Hybrid Solar/Wind/Diesel Power System for Water Pumping Application", 7th International Renewable and Sustainable Energy Conference (IRSEC), Agadir, Morocco, November 27-30, 2019.
- [11] Walid Obaid, **A-K. Hamid** and Chaouki Ghenai, "Hybrid PEM Fuel-Cell-Solar Power System Design for Electric Boat with MPPT System and Fuzzy Energy Management", 2019 3rd International Conference on Communications, Signal Processing, and their Applications, AUS, March 19-21, 2019 - Sharjah, UAE.

- [12]Walid Obaid, Tala Bonny and **A-K. Hamid**, "FPGA Reconfigurable UWB CPW Bow-Tie Aperture Antenna for Wi-Fi Applications (4.9 GHz) by Rotating Slots", 2019 3rd International Conference on Communications, Signal Processing, and their Applications, AUS, March 19-21, 2019 - Sharjah, UAE.
- [13]**A-K. Hamid** and Francis Cooray, "Scattering from a Buried PEMC Cylinder Excited by a Line Source above a Planar Interface Separating Two Isorefractive Media", 2019 3rd International Conference on Communications, Signal Processing, and their Applications, AUS, March 19-21, 2019 - Sharjah, UAE.
- [14]Walid Obaid, **A-K. Hamid** and Chaouki Ghenai, "Hybrid Fuel-Cell-Solar Power System Design for Electric Boat with MPPT System and Fuzzy Energy Management", 2019 International Conference on Renewable and Sustainable Energy - 2019 Advances in Science and Engineering Technology (ASET) International Conferences, Dubai, United Arab Emirates, 26th to 28th March, 2019.
- [15]Abdelbasset Mehiri, Maamar Bettayeb, **A-K. Hamid**, "Fractional Nonlinear Synergetic Control based MPPT Algorithm for PV System", 2019 International Conference on Renewable and Sustainable Energy - 2019 Advances in Science and Engineering Technology (ASET) International Conferences, Dubai, United Arab Emirates, 26th to 28th March 2019
- [16]Eqab Almajali, **A-K. Hamid**, Saqar Alja'arfeh and Ashraf Tahat," Interpreting Trasmittarrays Far-Field Performance Using Its Near Focal Region Fields". 2019 International Conference on Aviation and Space Technology - 2019 Advances in Science and Engineering Technology (ASET) International Conferences, Dubai, United Arab Emirates, 26th to 28thMarch, 2019.
- [17]Hamed Allaham, **A-K. Hamid** and Ali Cheaitou," Renewable Energy Management: Technical and Economic Evaluation of an Optimized Photovoltaic System". International Conference on Industrial Engineering and Operations Management, Bangkok, Thailand, March 5-7, 2019.
- [18]Waleed Obaid, **A-K. Hamid** and Chaouki Ghenai," Wind-Fuel-Cell-Solar Hybrid Electric Boat Power Design with MPPT System", 8th International Conference on Modeling Simulation and Applied Optimization (ICMSAO), Bahrain, April 15-17, 2019.
- [19]Abdelbasset Mehiri, Maamar Bettayeb, **A-K. Hamid**, "*Fractional Nonlinear Synergetic Control for Three Phase Inverter Tied to PV System*", 8th International Conference on Modeling Simulation and Applied Optimization (ICMSAO), Bahrain, April 15-17, 2019.
- [20] Chaouki Ghenai, Israa Al-Ani, Farah Khalifeh, Tassnim Alamaari and **A-K. Hamid**, "Optimized Design of Hybrid Solar PV/Fuel Cell/ Diesel Generator Power System for Ferry Boat", 8th International Conference on Modeling Simulation and Applied Optimization (ICMSAO), Bahrain, April 15-17, 2019,
- [21] **A-K. Hamid** and Francis Cooray, "Scattering by Buried PEMC Cylinder Using Iterative Procedure", 18th Mediterranean Microwave Symposium (MMS2018), Istanbul, Turkey, 31 Oct-3 Nov. 2018.
- [22]Waleed Obaid and **A-K. Hamid**, "Hybrid PEM Fuel-Cell-Diesel-Solar Power System Design with Fuzzy Battery Management System and Weather Forecasting for Electric Boats", 6th International Renewable and Sustainable Energy Conference (IRSEC), Rabat, Morocco, December 05-08, 2018.
- [23]Waleed Obaid and **A-K. Hamid**, "Hybrid Power System Design for Electric Boat with Solar Irradiance Forecasting", 6th International Renewable and Sustainable Energy Conference (IRSEC), Rabat, Morocco, December 05-08, 2018.

- [24]Sumayya Al Mazrouei **A-K. Hamid**, "Predictive Energy Management in large-Scale Grid Connected PV-Batteries System", 5th International Conference on Renewable Energy: Generation and Applications, Al Ain, United Arab Emirates, 26-28 February 2018.
- [25]Abdelbasset Mehiri, Maamar Bettayeb, **A-K. Hamid** and Aghiles Ardjal, "Fractional Nonlinear Synergetic Control for DC-Link Voltage Regulator of Three Phase Inverter Grid-Tied PV System", 5th International Conference on Renewable Energy: Generation and Applications, Al Ain, United Arab Emirates, 26-28 February 2018.
- [26]Waleed Obaid and **A-K. Hamid**, "Hexa-Band CPW Bow-Tie Aperture Antenna and its Wi-Fi (2.4 GHz) applications", 17th Mediterranean Microwave Symposium (MMS2017), Marseille, France, 28-30 November 2017
- [27]**A-K. Hamid**, "Scattering by Two PEMC Elliptic Cylinders", 17th Mediterranean Microwave Symposium (MMS2017), Marseille, France, 28-30 November 2017.
- [28]Waleed Obaid and **A-K. Hamid**, "Mutual Coupling Reduction for MIMO CPW Bow-Tie Aperture Antennas", 2017 International Conference on Electrical and Computing Technologies and Applications (ICECTA), Ras Al Khaimah, UAE, 21-23 November 2017.
- [29]Waleed Obaid and **A-K. Hamid**, "Hepta-Band CPW Bow-Tie Aperture Antenna for Wi-Fi (2.4 GHz and 5.5 GHz) and Other Bands)", 2017 International Conference on Electrical and Computing Technologies and Applications (ICECTA), Ras Al Khaimah, UAE, 21-23, November 2017.
- [30]Abdelbasset Mehiri, **A-K. Hamid** and Sumayya Al Mazrouei, "The Effect of Shading with Different PV Array Configurations on the Grid-Connected PV System", 5th International Renewable and Sustainable Energy Conference (IRSEC), Tangier, Morocco, December 04-07, 2017.
- [31]Sumayya Al Mazrouei, **A-K. Hamid** and Abdelbasset Mehiri, "Energy Management for Large-Scale Grid Connected PV-Batteries System", 5th International Renewable and Sustainable Energy Conference (IRSEC), Tangier, Morocco, December 04-07, 2017.
- [32]**A-K. Hamid**, "Scattering by a Chiral Elliptic Cylinder Placed in another Infinite Chiral Medium", 2017 International Applied Computational Electromagnetic Society (ACES), Firenze, Italy, March 26-30, 2017.
- [33]**A-K. Hamid** and Waleed Obaid, "Penta-Frequency CPW Bow-Tie Aperture Antenna for Mobile Communications", Seventh International Conference on Modeling, Simulation, and Applied Optimization - 2017 (ICMSAO'17), American University of Sharjah, Sharjah, UAE, 4-6 April 2017.
- [34]Chaouki Ghenai, Tareq Samir Zaki Salameh, Adel Merabet and **A-K. Hamid**, "Modeling and Optimization of Hybrid Solar-Diesel-Battery Power System", Seventh International Conference on Modeling, Simulation, and Applied Optimization - 2017 (ICMSAO'17), Sharjah, American University of Sharjah, UAE, 4-6 April 2017.
- [35]Walid Obaid and **A-K. Hamid**, M. Abdul Samad "Multi-Frequency CPW Bow-Tie Aperture Antenna with Rectangular and U Shape Metal Strips," 5th International Conference on Electronic Devices, Systems, and Applications (ICEDSA-2016), Ras Al Khaimah, UAE, 6-8 December 2016.
- [36]M. Abdul Samad and **A-K. Hamid**, "Miniaturization of Waveguide Antenna Using Square/Circular Arrays Of SRR," 5th International Conference on Electronic Devices, Systems, and Applications (ICEDSA-2016), Ras Al Khaimah, UAE, 6-8 December 2016.

- [37]Waleed Obaid and **A-K. Hamid**, "Simulation of CPW Bow-Tie Aperture Antenna Loaded with Metal Strips", 16th Mediterranean Microwave Symposium (MMS2016)", Al Ain University of Science and Technology (AAU), Abu Dhabi City - United Arab Emirates (UAE), November 14th-16th, 2016.
- [38]**A-K. Hamid**, "Metamaterial Coated Slotted Elliptic Antenna Embedded Partially in a Ground Plane", 16th Mediterranean Microwave Symposium (MMS2016)", Al Ain University of Science and Technology (AAU), Abu Dhabi City - United Arab Emirates (UAE), November 14th-16th, 2016.
- [39]**A-K. Hamid**, "Backscattering of PEMC Elliptic Cylinder with Anisotropic Dielectric Coating", 2016 IEEE International Conference on Wireless Information Technology and Systems (ICWITS) and Applied Computational Electromagnetics (ACES-2016)", Sheraton Waikiki Hotel and Resort, Honolulu, Hawaii, USA, March 13-17, 2016.
- [40]**A-K. Hamid**, "Scattering by a PEMC elliptic cylinder loaded with a chiral material", 2nd International conference on communications, signal processing, and their applications (ICCSP15), American University of Sharjah, Sharjah, UAE, Feb. 17-19, 2015
- [41]**A-K. Hamid**, "Axially Slotted Antenna on Elliptic Cylinder Coated with Biaxial Anisotropic Material," 9th European Conference on Antennas and Propagation (EuCAP 2015), Lisbon, Portugal, April 12-17, 2015.
- [42]Amna A. Alzaabi, Nadine K. Badawiyeha, Hind O. Hantousha and **A-K. Hamid**, "Performance of Hybrid Photovoltaic/Thermal System in Sharjah, UAE", 7th International Forum on Engineering Education (IFEE2015) Jointly with 3rd Towards Sustainable Development (3rd TSD2015) Conference, 17-19 March 2015, University of Sharjah, United Arab Emirates.
- [43]Hamed Allaham, **A-K. Hamid** and Ali Cheaitou, "Technical and Economical Analysis of Photovoltaic System Applied to a UAE Data Centre," 7th International Forum on Engineering Education (IFEE2015) Jointly with 3rd Towards Sustainable Development (3rd TSD2015) Conference, 17-19 March 2015, University of Sharjah, United Arab Emirates.
- [44]**A-K. Hamid** and F. Cooray, "Dipole Scattering from a Coated Perfect Electromagnetic Sphere", 2013 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT-13), Dec. 3-5, 2013.
- [45]**A-K. Hamid**, "Radar cross section of chiral semi-elliptical cylindrical boss on ground plane, 1st International conference on communications, signal processing, and their applications (ICCSP13), American University of Sharjah, Sharjah, UAE, Feb. 12-14, 2013.
- [46]**A-K. Hamid**, "Scattering by Chiral Semi-Elliptic-Cylindrical Boss on a Ground Plane", 2nd Advanced Electromagnetics Symposium, AES 2013, 19-22 March, Sharjah - United Arab Emirates, 2013.
- [47]**A-K. Hamid**, "Scattering by PEMC Elliptic Cylinder Loaded by Metamaterial Coating", 2011 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), Dec. 6-8, pp. 139-143, 2011.
- [48] **A-K. Hamid**, "EM Scattering by Nihility Elliptic Cylinder with Metamaterials Coating", 17th Jordanian International Electrical and Electronics Engineering Conference (JIEEEEC 2011), April 11-14, pp. 27-30, Amman, Jordan, 2011
- [49]H. Hamad and **A-K. Hamid**, "Low Profile Small Size Monopole Antenna for Mobile Communication, IEEE GCC Conference & Exhibition (2011 IEEE GCC), 19-22 February, Dubai, United Arab Emirates (UAE), pp. 209-212, 2011.

- [50] **A-K. Hamid** and M.I. Hussein, "Scattering by a Nihility Elliptic Cylinder", 2nd International Conference on Metamaterials, Photonic Crystals and Plasmonics (META'10), 22-25 February, Cairo, Egypt, 2010.
- [51] **A-K. Hamid** and M.I. Hussein, "TM Scattering by a Perfect Electromagnetic Conducting Strip", 2nd International Conference on Metamaterials, Photonic Crystals and Plasmonics (META'10), 22-25 February, Cairo, Egypt, 2010.
- [52] **A-K. Hamid** and F.R. Cooray, "Scattering of a Plane Wave by a Perfect Electromagnetic Conducting Elliptic Cylinder", International Conference on Electromagnetics in Advance Applications (ICEAA 09), Sept. 14-18, Torino, Italy, 2009.
- [53] **A-K. Hamid** and F.R. Cooray, "Electromagnetic Scattering by a Metamaterial Hemispherical Boss on an Infinite Ground Plane", 5th IEEE GCC Conference and Exhibition, 17-19 March, Kuwait City, Kuwait, 2009.
- [54] **A-K. Hamid** and F.R. Cooray, "Radiation from a Spheroidal Slot Antenna Coated with a Metamaterial", 3rd International Conference on Modeling, Simulation, and Applied Optimization (ICMSAO'09), Jan. 20-22, AUS, Sharjah, UAE, 2009.
- [55] **A-K. Hamid** and F.R. Cooray, "Scattering from a Perfect Electromagnetic Conducting Spheroid", 3rd International Conference on Information & Communication Technologies: from Theory to Applications - ICTTA'08, April 7 - 11, 2008, Umayyad Palace, Damascus, Syria.
- [56] **A-K. Hamid**, "Radiation by Slotted Elliptic Antenna Coated by Lossy and Lossless Multi-Dielectrics Metamaterials", Third International Symposium on Communications, Control and Signal Processing (ISCCSP 2008), St. Julians, Malta, March 12-14, pp. 511-514, 2008.
- [57] **A-K. Hamid** and F.R. Cooray, "Radiation from an Axisymmetric Slot on a Spheroid Coated with an Isorefractive Material and Excited by a Delta Gap Source", 2007 IEEE International Conference on Signal Processing and Communication (ICSPC07), 24-27 November, Dubai, United Arab Emirates, pp. 364-367, 2007.
- [58] **A-K. Hamid** and M. Bettayeb, "Slotted Elliptic Antenna Coated with Magnetic Metamaterials", Second International Conference on Modeling, Simulation and Applied Optimization (ICMSAO'07), Petroleum Institute, March 24-27, Abu Dhabi, UAE, 2007
- [59] **A-K. Hamid**, "Radar Cross Section of a Semi-Elliptic Channel in a Ground Plane Loaded by Multi-Dielectric Layers," International Symposium on Signal Processing and its Applications (ISSPA07), Sharjah, UAE, February 12-15 , 2007.
- [60] A. Abu-Laban, M. Allulu, S. Arab and **A-K. Hamid**, "Web-Based Wireless Control of Flying Vehicle Loaded with Wireless Camera and Temperature Sensor," International Symposium on Signal Processing and its Applications (ISSPA07), Student paper, Sharjah, UAE, February 12-15 , 2007.
- [61] **A-K. Hamid**, "Axially Slotted Antenna on Elliptic Cylinder Coated by Two Dielectric Layers," Scientific Computing in Electrical Engineering Conference, SCEE 2006, Sinaia, Romania, Sept. 17-22, 2006.
- [62] A. Hussein and **A-K. Hamid**, "Autonomous Motion Planning in Global Dynamic Environment Using FDTD Method," International Conference on Robotics and Applications (RA 2006), Honolulu, USA, August 14 -16, 2006.
- [63] M. I. Hussein and **A-K. Hamid**, "Radiation by Slotted Elliptical Antenna Coated by a Concentric Isorefractive Elliptical Shell" Proceedings of the 6th Jordanian International Electrical and Electronics Engineering Conference (JIEEEEC 2005), Amman, Jordan, March 14-16, pp. 553-556, 2006.

- [64] **A-K. Hamid** and M. I. Hussein and, "Radiation of Slotted Circular or Elliptical Antenna Coated with Isorefractive Metamaterials Layers" 3rd IEEE-GCC 2006, Manama, Kingdom of Bahrain, 10-22 March, 2006.
- [65] **A-K. Hamid**, "High Gain Low Side-lobes Slotted Elliptic Antenna," The Second Annual Scientific Research Forum at The University of Sharjah, United Arab Emirates, May 2-3, pp. 91-92, 2006.
- [66] **A-K. Hamid** and M. Bettayeb, "Electromagnetic Radiation from Cellular Phones in the Presence of the Human Head and Methods to Minimize its Effect," The First Annual Scientific Research Forum at The University of Sharjah, Sharjah, United Arab Emirates, May 14-15, pp. 104-105, 2005.
- [67] **A-K. Hamid**, "Echo Pattern Width of Two Dielectric-Coated Confocal Conducting Elliptic Cylinders," 2nd IEEE-GCC 2004, Manama, Kingdom of Bahrain, 23-25 November, pp. 568-572, 2004.
- [68] **A-K. Hamid**, "Iterative Solution to the TE Scattering by Two Infinitely Long Conducting Elliptic Cylinders," Scientific Computing in Electrical Engineering Conference, SCEE 2004, Capo D'Orlando, Italy, 5-9 September, pp.87-88, 2004.
- [69] **A-K. Hamid** and M.I. Hussein, "Multiple Scattering by a System of Two Infinitely long Conducting Strips," Proceedings of the 5th Jordanian International Electrical and Electronics Engineering Conference (JIEEEEC 2003), Amman, Jordan, October 14-16, pp. 13-17, 2003.
- [70] M.I. Hussein and **A-K. Hamid**, "Radiation by Dual Axial Slots on Elliptical Antenna Coated by a Concentric Dielectric Elliptical Shell," 5th Jordanian International Electrical and Electronics Engineering Conference (JIEEEEC 2003), Amman, Jordan, October 14-16, pp. 31-34, 2003.
- [71] M.I. Hussein and **A-K. Hamid**, "Radiation by Axial Slot Elliptical Antenna Coated by a Lossy Dielectric Material," the 2003 IEEE International Symposium on Electromagnetic Compatibility (EMC)," Istanbul, Turkey, May 11-16, 2003.
- [72] **A-K. Hamid** and M.I. Hussein, "Electromagnetic Scattering by Two Parallel Conducting Elliptic Cylinders: Iterative Solution," the 2003 IEEE International Symposium on Electromagnetic Compatibility (EMC)," Istanbul, Turkey, May 11-16, 2003.
- [73] **A-K. Hamid** and M.I. Hussein, "Backscattering Echo Pattern Width of a Conducting Elliptic Cylinder or Strip Coated by a Lossy Dielectric Shell," Mediterranean Microwave Symposium (MMS'2003), Cairo, Egypt, pp. 78-81, May 6-8, 2003.
- [74] **A-K. Hamid**, M.I. Hussein, and M. Hamid, "Bistatic Cross Section of an Array of Dielectric Spheres Each Covered with a Dielectric Shell," the 19th Annual Review of Progress in Applied Computational Electromagnetics, Naval Postgraduate School, Monterey, California, U.S.A., pp. 77-81, March 24-28, 2003.
- [75] **A-K. Hamid** and M. Hamid, "A Survey of Eigenvalues of Pyramidal Waveguides," the 19th Annual Review of Progress in Applied Computational Electromagnetics, Naval Postgraduate School, Monterey, California, U.S.A., March 24-28, pp. 139-143, 2003.
- [76] M.I. Hussein and **A-K. Hamid**, "Axially Slotted Elliptical Antenna Partly Embedded in a Ground Plane," the 19th Annual Review of Progress in Applied Computational Electromagnetics, Naval Postgraduate School, Monterey, California, U.S.A., March 24-28, pp. 82-87, 2003.

- [77] M. Hamid and **A-K. Hamid**, "On the Eigenvalues of Pyramidal Horn Antennas," USNC/URSI National Radio Science Meeting, San Antonio, Texas, U.S.A., URSI Digest p. 34, June 16-21, 2002.
- [78] M.I. Hussein and **A-K. Hamid**, "Electromagnetic Scattering by a dielectric semi-elliptic boss over a ground plane," 9th Int. Conference on Electromagnetics Scattering of Complex Media, Marrakech, Morocco, May 8-11, 2002.
- [79] M.I. Hussein and **A-K. Hamid**, "Electromagnetic Scattering by a semi-elliptic boss over a ground plane," European Symposium on Numerical Methods in Electromagnetics, Toulouse, France, March 6-8, pp.302-307, 2002.
- [80] **A-K. Hamid** and M. AlSunaidi, "Electromagnetic Field Coupling Between Cellular Phones Using FDTD Analysis", Proc. of IEEE AP-S/URSI Int. Symp., Boston, Massachusetts, U.S.A., July 8-13, vol. 3, pp. 86-89, 2001.
- [81] H. Ragheb and **A-K. Hamid**, "Cutoff Frequencies of Uniform Elliptical Waveguide with Non-Confocal Annular Cross Section", 2001 URSI International Symposium on Electromagnetic Theory, Victoria, Canada, May 13-17, 2001.
- [82] **A-K. Hamid** and M. Hamid, "Electromagnetic Scattering by an Array of Conducting Spheres Each Coated with a Dielectric Layer", Proc. of IEEE AP-S/URSI Int. Symp., Boston, Massachusetts, U.S.A., July 8-13, vol. 1, pp. 228-231, 2001.
- [83] **A-K. Hamid** and M. Hamid, "Electromagnetic Scattering by a Dielectric Coated Sphere Partially Buried in a Ground Plane ", Proc. of IEEE AP-S/URSI Int. Symp., Salt Lake City, Utah, U.S.A., 1806-1809, July 16-21, 2000.
- [84] **A-K. Hamid** and M. Hamid, "Electromagnetic Scattering by a Dielectric Sphere Partially Buried in a Ground Plane ", Proc. of IEEE AP-S/URSI Int. Symp. Orlando, Florida, U.S.A., July 11-17, 1999.
- [85] M. AlSunaidi and **A-K. Hamid**, "FD-TD Analysis of Antenna Coating Effects on The Performance of Cellular Phones", Proc. of IEEE AP-S/URSI Int. Symp. Atlanta, Georgia, U.S.A., pp. 520-523, June 21-26, 1998
- [86] **A-K. Hamid** and M. AlSunaidi, "FD-TD Analysis of Electromagnetic Radiation through Slots in a PC Metallic Enclosure", Proc. of Progress in Electromagnetics Research Symposium (PIERS-98), Nantes, France, July 13-17, 1998.
- [87] **A-K. Hamid**, "Iterative Scattering by a Conducting Sphere Partially Buried in a Ground Plane", Proc. of IEEE AP-S/URSI Int. Symp., Atlanta, Georgia, U.S.A., pp. 994-997, June 21-26, 1998.
- [88] **A-K. Hamid** and M. AlSunaidi, "Inverse Scattering by Dielectric Circular Cylindrical Scatterers Using a Neural Network Approach", Proc. of IEEE AP-S/URSI Int. Symp., Montreal, Canada, pp. 2278-2281, July 13-18, 1997.
- [89] **A-K. Hamid**, "Determination of the Electrical Radius ka of a Circular Cylindrical Scatterer Using Neural Network", Proc. of Progress in Electromagnetics Research Symposium (PIERS-97), Telecommunication Research Center, City University of Hong Kong, Kowloon, Hong Kong, Jan. 1997.
- [90] **A-K. Hamid** and H. Al-Duwaish, "A Neural Network Approach to the Scattering from a Spherical Shell with a Circular Aperture", Proc. of IEEE AP-S/URSI Int. Symp., Baltimore, Maryland, U.S.A., pp. 1840-1843, July 21-26, 1996.

- [91] **A-K. Hamid**, "Electromagnetic Scattering by a Conducting Sphere Partially Buried in a Ground Plane", Proc. of IEEE AP-S/URSI Int. Symp., Newport Beach, California, U.S.A., pp. 406-409, June 18-23, 1995.
- [92] **A-K. Hamid**, "Generalized Scattering Matrix for Cascaded Waveguide Junctions", Proc. of Symp. on Antenna Tech. and Appl. Electromagnetics (ANTEM-94), Ottawa, Ontario, Canada, pp. 307-311, August 3-5, 1994.
- [93] **A-K. Hamid** and M. Hussein, "Iterative Solution to the Scattering by Hemispherical Bosses on a Conducting Surface", Proc. of IEEE AP-S/URSI Int. Symp., Seattle, Washington, U.S.A., pp. 225-228, June 19-24, 1994.
- [94] **A-K. Hamid** and M. Hamid, "Iterative vs. Simultaneous Application of Boundary Conditions in the Electromagnetic Scattering by a System of Spheres", 4th International Symposium on Recent Advances in Microwave Technology (ISRAMT-93), New Delhi, India, Dec. 15-18, 1993.
- [95] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Simulation of Three-Dimensional Scatterers by a System of Conducting or Dielectric Spheres", Proc. of Progress In Electromagnetics Research Symposium (PIERS-93), California Institute of Technology, Pasadena, California, U.S.A., page 319, July 1993.
- [96] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Electromagnetic Scattering by Hemispherical Bosses on an Infinite Plane Surface", Proc. of IEEE AP-S/URSI Int. Symp., Ann Arbor, Michigan, U.S.A., pp. 82-85, June 1993.
- [97] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Electromagnetic Wave Scattering by Two Dielectric Spheres with Concentric Dielectric Layers", Proc. of Symp. on Antenna Tech. and Applied Electromagnetics (ANTEM-92), Winnipeg, Manitoba, Canada, pp. 37-42, August 1992.
- [98] **A-K. Hamid** and Z. Mu, "Modelling and Simulation of Crossing Strips in Printed Circuit Boards or Multichip Modules", Proc. of Symp. on Antenna Tech. and Applied Electromagnetics (ANTEM-92), Winnipeg, Manitoba, Canada, pp. 391- 396, August 1992.
- [99] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Iterative Solution of The Scattering by a System of Multilayered Dielectric Spheres", Proc. of IEEE AP-S/URSI Int. Symp., Chicago, Illinois, U.S.A., pp. 172-175, July 1992.
- [100] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Iterative Technique for Scattering by a Linear Array of Spheres", Proc. of IEEE AP-S/URSI Int. Symp., London, Ontario, Canada, 30-33, June 1991.
- [101] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Backscattering Cross Section of Many-Sphere Systems", Proc. of Progress in Electromagnetics Research Symposium (PIERS-91), Cambridge, Massachusetts, U.S.A., p. 347, July 1991.
- [102] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Scattering by Systems of Small Conducting Spheres", Proc. of Progress in Electromagnetics Research Symposium (PIERS-91), Cambridge, Massachusetts, U.S.A., p. 346, July 1991.
- [103] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Scattering from Two Conducting Spheres Covered With a Dielectric Layer", Proc. of Seventh IEE International Conference on Antennas and Propagation (ICAP-91), University of York, U.K., pp. 600-603, April 1991.
- [104] **A-K. Hamid**, I.R. Ciric and M. Hamid, "Radar Cross Section of an Array of Dielectric Spheres", Proc. of Symp. on Antenna Tech. and Appl. Electromagnetics (ANTEM-90), Winnipeg, Manitoba, Canada, pp. 620-625, August 1990.

- [105]**A-K. Hamid**, I.R. Ciric and M. Hamid, "Scattering by a System of Dielectric Spheres", Proc. of Symp. on Antenna Tech. and Appl. Electromagnetics (ANTEM-90), Winnipeg, Manitoba, Canada, pp. 614-619, August 1990.
- [106]**A-K. Hamid**, I.R. Ciric and M. Hamid, "Analytic Solution of Scattering by an Array of Conducting Spheres", Proc. of IEEE AP-S/URSI Int. Symp., Dallas, Texas, U.S.A., pp. 1256-1259, May 1990.
- [107]**A-K. Hamid**, I.R. Ciric and M. Hamid, "Electromagnetic Field Coupling Between Two Parallel Flanged Waveguides", Proc. of Sixth IEE Intentional Conference on Antennas and Propagation (ICAP-89), University of Warwick, U.K., pp. 412-415, April 1989.
- [108]**A-K. Hamid**, I.R. Ciric and M. Hamid, "Analysis of Multiple-Step Discontinuities in Rectangular Waveguide", Proc. of Symposium on Antenna Technology and Applied Electromagnetics (ANTEM-88), Winnipeg, Manitoba, Canada, 8 pages, August 1988.

BIOGRAPHICAL DATA

Date of Birth: Sept. 9, 1963
Marital Status: Married with Five Children
Residence Status: Citizen of Canada
