

Curriculum Vitae

Dr. Hamsakutty Vettikalladi, PhD, HDR (France)

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| <p>Professor, Department of Electrical Engineering King Saud University, Office 2C-28, P. O. Box 800, Riyadh - 11421 Saudi Arabia, Tel: +966552534730 (Mobile), +96614676805 (Office) E-mail: hvettikalladi@ksu.edu.sa, vhamsakutty@yahoo.com Website: https://engineering.ksu.edu.sa/en/Faculty_EE http://fac.ksu.edu.sa/hvettikalladi/home Googlescholar : Hamsakutty Vettikalladi - Google Scholar Nationality : Indian</p> | |
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Professional experience in academic circles

- ❖ **September 2022 to present - Professor**, Department of Electrical Engineering (ABET), King Saud University, KSA
- ❖ **Jan 2017 to Sept 2022**: Associate Professor, Department of Electrical Engineering (ABET), King Saud University, KSA
- ❖ **Nov 2012 to Dec 2016**: Assistant Professor, Department of Electrical Engineering (ABET), King Saud University, KSA
- ❖ **2015-Present ABET/NCAAA** Accreditation committee member, Department of Electrical Engineering, King Saud University, KSA
- ❖ **Sept 2008 to October 2012**: CNRS Postdoctoral Scientist, Institute of Electronics and telecommunication of Rennes(IETR), University of Rennes1, France
- ❖ **Jan 2008 to May 2008**: Postdoctoral Research Associate, Bell engineering department, University Arkansas, USA

Academic Degrees

- ❖ **University of Rennes1, Rennes, France**
DSc equivalent (Post-PhD degree) : HDR (Habilitation a diriger des Recherches) in Electronics : June 2018
Title: Antennas to Nantennas: high speed wireless communication to energy harvesting.
- ❖ **Cochin University of Science and Technology (CUSAT) ,Kochi, India**
PhD in Electronics Engg.(Communication Engineering) : Jan 2008
Title: Hexagonal Dielectric Resonator Antenna- A novel DR antenna for wireless communication.
- ❖ **Cochin University of Science and Technology, (CUSAT) ,Kochi, India**
MSc in Electronics Engg (Communication) : May 1999
First Rank with Gold Medal, CGPA -8.52/10.
Title: Reconfigurable Digital Hardware for Rapid Prototyping

General Skills

- ❖ Microwave, Millimeter wave and optical Technology, Antenna design for various applications (from Antennas to Nantennas).
- ❖ Various Project Management for academic and Industry

Teaching Activities

Undergraduate Courses

Engineering Electromagnetics I - EE 213 (2 semesters), Engineering Electromagnetics II - EE 214 (14 semesters), Antennas and Wave propagation - EE 423 (10 semesters), Computational techniques in EE - 211 (10 semesters), Communication Laboratory - EE 421 (8 semesters), Introduction to Engineering Design - GE 105 54 semesters), Graduation Project I - EE 496 (14 semesters), Graduation Project II - EE 497 (12 semesters).

Master's and PhD Courses

GE 501 - Computer Simulation of Engineering Systems (7 semesters), EE 521 - Electromagnetic fields (2 semesters), EE 577 - Selected topics in Electromagnetic fields (2 semesters), EE 624 - Antenna theory and design (2 semester), Master thesis - EE 600 (12 semesters), PhD Research - EE 700 (8 semesters).

Educational and Administrative Responsibilities

Establishment of Education and Training Laboratory on Millimeter wave Antennas at Electrical Engineering Department, KSU, through one of the National Project-NPST (with Anritsu Network Analyzer 145GHz).

Member of ABET and NCAAA (national) Committee Accreditation preparations in the Electrical Engineering Department, Since 2014.

Member, Graduate committee, EE department Since 2015 January

Reviewer of National Projects, (NPST,KACST) of Kingdom of Saudi Arabia.

Selection committee member of the prestigious Custodian of the Two Holy Mosques Award for honoring the inventors and talents in the kingdom of Saudi Arabia.

Question Paper preparation committee member, National Center for Assessment (QIYAS), KSA

Activities Related to Research

Student Supervision

Supervised/Co-supervised graduate PhD/MS students (already graduated):

1. **Supervision (PhD):** Waleed Tariq Sethi, 2018 February 16 (60% supervision and 40% by Prof. Mohamed Himdi)
Title: Optical Antennas for Harvesting Solar Radiation Energy, University of Rennes1, France, 2014/2017
Associated publications: [J34, J33, J31, J30, J28, C32, C27, B02]
2. **Co-Supervision (PhD):** Mohamed Kamran Saleem , 2016 (60% supervision and 40% by Prof Majeed Alkanhal)
Title: Dielectric Integrated Microwave and Millimeter Wave Pattern Reconfigurable Antennas, King Saud University, KSA, 2013/2016
Associated publications: [J32, J26, C24, B03]
3. **Co-Supervision(PhD):** Tristan Sarrazin, 2013 (20% supervision and 30% by Prof. M. Himdi, and 50% Prof. O. Lafond)
Title: Conception and realization of reconfigurable antennas based on MEMS for heterogeneous 3D integration for millimeter communication systems, University of Rennes1, France, 2010/2013
Associated publications: [J20, C19]
4. **Supervision (MS):** Abdul Wahid, 2017 (80% supervision and 20% by Prof Majeed Alkanhal)

Title: Millimeter wave antenna for high speed WLAN/WAPAN in 5G Networks, King Saud University, KSA, 2015/2017

Associated publications: [C35]

5. **Supervision (MS) :** Yahya Al Suwailum started 2017 (100% supervision)

Title: Design of a Ka band transceiver antenna for satellite communication, King Saud University, KSA, 2016/2017

Associated publications: [C34]

6. **Supervision (MS):** Basem Aqlan, 2016 (80% supervision and 20% by Prof Majeed Alkanhal)

Title: 79 GHz Short Range Radar (SRR) Antenna Design for Next Generation Intelligent Automotive Radar System, King Saud University, KSA, 2014/2015

Associated publications: [J29, C31, C30, C29]

7. **Supervision(MS):** Nadeem Ashraf, 2015 (80% supervision and 20% by Prof Majeed Alkanhal)

Title: Substrate Integrated Waveguide Antennas for 60 GHz High Speed Communication Systems, King Saud University, KSA, 2014

Associated publications: [J25, C28, C26, C23, C22]

8. **Supervision(MS):** Waleed Tareq Sethi , 2014(100% supervision)

Title: Millimeter wave antenna Design for short range Gigabit wireless communication systems, King Saud University, KSA, 2014

Associated publications: [J24, J23, C25, C21]

Supervision/Co-Supervision of PhD/MS students (on-going):

Supervision (ongoing PhD):

1. Basem Aqlan, started 2018 (80% supervision, 20% by Prof. Mohamed Himdi-IETR France) King Saud University, KSA

Title: Sub-THz antenna design, 2018/2022

2. Yahya Alharizi, Started 2021 (100% supervision), King Saud University, KSA

Title: Antennas for 5G/6G **Internet of Things** Applications

Jury Member in the Examination Committee of external PhD/MS students

1. **Examination Committee (PhD):** Robin Augustine
Electromagnetic modelling of human tissues and its application on the interaction between antenna and human body in the BAN context, University of Paris-East, 2009
2. **Examination Committee (PhD):** Nizam Uddin
Adaptive Wideband System for Localized Hyperthermia Treatment of Cancer, King Saud University, 2018
3. **Examination Committee(PhD):** Sajjad Ur Rehman
System-based Characterization and Design of Antennas and Passive Electromagnetic Structures, King Saud University, KSA, 2018
4. **Examination Committee(PhD):** Wazie Mohammed
Efficient Chipless RFID tags for IOT, King Saud University, KSA, 2020
5. **Examination Committee(MS):** Abdul Malik Hameed
MMwave measurements and channel modeling for the fifth generation (5G) cellular communications, King saud University, KSA, Dec 2015
6. **Examination Committee(MS):** Zeshan Ali
Compact Planar Multi-Band Bandpass Filters with Enhanced Performance for Modern Wireless Communication Systems, King Saud University, KSA, 2015
7. **Examination Committee(MS):** Muhamed Alzabidi

Development of UWB Applicator array for hyperthermia treatment and microwave imaging of brain tumor, King Saud University, KSA, 2014

Supervision of undergraduate student for capstone design projects:

1. *Sulyman Al-bani and Ahmed Alorainy*, Microwave antenna design for 23GHz point - point fixed radio system, King Saud University, KSA, *Spring and fall 2013*
2. *Yahya Assuwailaum*, Design of Superstrate Antennas for High Speed WPAN Wireless Communication Systems, King Saud University, KSA, *fall 2013 and spring 2014*
3. *Nasser Addosri*, Antenna Design for Short Range CAR Radar Application, King Saud University, KSA, *Spring and fall 2014*
4. *Mohamed Al Rashi and Nasser Hamood*, Antenna Design for Automotive Radar Application, King Saud University, KSA, *spring and fall 2015*
5. *Abdulwahid Alkhamis and Faisal Alfayyeda*, Design of Substrate Integrated Waveguides and Antennas for millimeter wave WLAN/WPAN Applications, *fall 2015 and spring 2016*
6. *Khalid Al Turki, Saud Al harbi and Hossem Adel*, Study and the design of Sub-THz antennas for 5G high speed wireless communication, *fall 2016 and spring 2017*
7. *Hamad Albibi*, 300 GHz antenna design for 5G high speed wireless communication, *fall 2017 and spring 2018*
8. *Abdullah Al Dosari and Ibrahim bin Ajaj*, Design of Substrate integrated waveguide antennas for millimeter wave application, *fall 2018 and spring 2019*
9. *Talal Saad Al Mutairi and Abdullah Ali Al Motlag*, Design of Sub-THz antennas for 5G communication, *fall 2018 and spring 2019*
10. *Salman Khaled and Abdulrahman Al Eidi*, Design and placement of UAV antenna, *fall 2018 and spring 2019*
11. *Muhanna Alotaibi and Abdullah Alotaibi*, Target Radar Cross section Analysis, design, and measurements, *fall 2018 and spring 2019*
12. *AHMAD HAMAD ALSAIKHAN, ALI GHATHAN ALGARNI*, Beam forming Antennas for 5G communications, *fall 2020 and spring 2021*
13. *Khalid Alfozan Student, Abdullah Alanazi*, Radar Targets Modeling and Design, *fall 2020 and spring 2021*
14. *Rayan Yousef Aldosari, Abdullah Suleiman Almousa*, Antennas for **Internet of Things** (IOT Antennas), *fall 2020 and spring 2021*
15. *Ibrahim Al Romizan, Abdul Azeez Al Moqhim, Faizal Al ruwaili*, Antennas for **5G Internet of things** applications, *fall 2022 and spring 2023*
16. *Naif, Saud and Mishari*, Rectenna for energy harvesting, *spring 2022 and fall 2022*.

Scientific Collaborations

International Collaborations:

2013- present: Collaborative research work on Millimeter wave antenna and also optical antenna for energy harvesting, Prof. Mohamed Himdi, IETR, University of Rennes1, France.

2014-Present: IETR, University of Rennes1, France, collaboration on PhD thesis: Optical Antennas for Harvesting Solar Radiation Energy with Prof. Mohamed Himdi.

2017- Present: Collaborative research work of channel modelling, Prof. Sudhan Mahji, Indian Institute of Technology (IIT), India.

2018-Present : Collaborative research work on Millimeter wave filter design, Prof Abdullah, School of Engineering, Cochin university of Science and technology, India

Local Collaborations

Prototyping a Novel Rectenna/Nantenna based Next Generation Green Energy Harvesting System at RF and Optical/Solar Frequencies with Prof. Habib Fatahallah, KACST Technology Innovation Center (TIC) in Radio Frequency and Photonics for the e-Society (RFTONICS), KSA

Prototyping Ka band satellite transceiver with Prof. Hatim King Abdul Azeez city for Science and Technology(KACST), KSA.

Involvement in Research Project

University: **King Saud University, Riyadh, KSA**

- **2020-2022:** Luneburg Lens and Substrate Integrated Waveguide Based Beam Steerable Antenna Array for 60-GHz High-Speed Indoor Communication Systems, funded by National Plan for Science and Technology, KSA. Value of grant :1.98M SR (528K US\$) *Investigators* : **Hamsakutty Vettikalladi (PI)** and Majeed Alkanhal (CO-I). *Consultant:* **Prof Mohamed Himdi, IETR, University of Rennes1, France**
- **2014-2016:** 79 GHz Short Range Radar Antenna Design for Next Generation Intelligent Automotive Radar System, funded by King Abdul Aziz City for Science & Technology, KSA. Value of the grant: 1.74M SR (464K US\$). *Investigators* : **Hamsakutty Vettikalladi (PI)** and Majeed Alkanhal (CO-I). *Consultant:* **Prof Mohamed Himdi, IETR, University of Rennes1, France**
- **2015-2017:** Prototyping a Novel Rectenna / Nantenna based Next Generation Green Energy Harvesting System at RF and Optical/Solar Frequencies, funded by KACST Technology Innovation Center (TIC) in Radio Frequency and Photonics for the e-Society (RFTONICS), KSA. Value of the grant: 2.1M SR (560US\$). *Investigators* : **Hamsakutty Vettikalladi (Co-I)** and Habib Fatahallah (PI). *Consultant:* **Prof Mohamed Himdi, IETR, University of Rennes1, France**
- **2014:** BCB-Si based millimeter wave antenna design for 60GHz high speed indoor communication system funded by Research Center , College of Engineering, KSU, value of grant :SR 29950. *Investigator:* **Hamsakutty Vettikalladi (PI)**
- **2015:** 94 GHz innovative antenna design for next generation high speed Point to point fixed radio system funded by Research Center , College of Engineering, KSU, value of grant :SR 17500. *Investigator:* **Hamsakutty Vettikalladi (PI)**
- **2016:** Study and the design of Sub-Terahertz antennas for extra high speed wireless communication after 2020 funded by Research Center , College of Engineering, KSU, value of grant :SR 18000. *Investigator:* **Hamsakutty Vettikalladi (PI)**

Completed Projects from France and USA

IETR, Université of Rennes1 and Industries

- **2011-2012:** Development of 79GHz CAR Radar Antenna, funded by Valeo, Germany . *Investigator* : **Hamsakutty Vettikalladi (Postdoc), Mohamed Himdi (PI)** and Olivier Lafond(Co-I)

- **2009-2011:** Development of 60 GHz millimeter antenna array for beam scanning, funded by CANON, France. *Investigator* : **Hamsakutty Vettikalladi (Postdoc), Mohamed Himdi (PI) and Olivier Lafond (Co-I)**
Summary: This project was to develop a 60 GHz beam scanning antenna for CANON using Luneburg lens.
- **2010-2012:** Development of 24GHz array antenna for Wireless backhaul systems of mobile cellular network (Standard ETSI Range 3, class 3), funded by BOUYGUES Telecom, France. *Investigator* : **Hamsakutty Vettikalladi (Postdoc), Mohamed Himdi (PI)**
Summary: This product is **commercialized** and is used now by Orange and Bouygues Telecom, for inter-tower communication in mobile application, in France since 2012.
- **2010-2011:** Development 13.5GHz bipolar antenna array with 10° and 40° tilt, for earth observation aircraft application funded by LATMOS/CNES France. *Investigator* : **Hamsakutty Vettikalladi (Postdoc), Mohamed Himdi (PI) and Olivier Lafond (Co-I)**
- **2008-2009:** Study and Development of millimeter wave antennas at 60GHz communication funded by Brittany Regional Project, France. *Investigator* : **Hamsakutty Vettikalladi (Postdoc), Mohamed Himdi (PI) and Olivier Lafond (Co-I)**
- **2008 Jan- 2008 May :** Measurement of Dielectric parameters of Radom sample from US Airforce using free space measurement technique for the complete band from C to W band funded by US airforce, at Bell Engineering department, University of Arkansas, USA. *Investigator* : **Hamsakutty Vettikalladi (Postdoc), Vasundara Varadan (PI)**

Grants, Honors & Awards

CNRS (Centre national de la recherche scientifique - France) Postdoc fellowship to do Research at Institute Fresnel, and IETR University of Rennes1, France 2007 and 2009

First Rank Holder, Masters degree examination, Cochin University of Science and Technology (CUSAT) Kochi, India 1999

NET _UGC exam qualified, Mandatory to get Assistant Professor job in universities in India.

Recipient of K.G Nair Endowment gold medal for securing First Rank in Masters degree in Electronics, which is one of the honorable award given to the most talented student of the Department of Electronics, CUSAT, India 1999

M.E.S Merit Scholarship for studying Masters degree 1996-1999

Membership of Societies, Boards & Committees

Member European Microwave Association , EuMA Since 2010 (No: AM1736)

Guest Editor International Journal of Antennas and Propagation, for the special issue on 'New Antenna Structure with Circular Polarization' 2011-2012

Editorial board member, International journal of Electromagnetics and Applications (USA), 2011-2012

Reviewer, IEEE transactions on Antennas and Propagation, IEEE Antennas and wireless Propagation letters, International Journal Progress in electromagnetic Research and Electromagnetic Waves and Application and of many IEEE microwave and antenna conferences. Since 2010

Invited Talk: Resource Person in Course/Workshop

21- 25 May 2012: IETR, University of Rennes1, France, Organized by European school of antennas

Topic: Course on Millimeter wave Antenna design and Technologies

Courses given

Course 1. Special Millimeter wave antenna technologies (2 hours)

Course 2. Millimeter wave Material characterization using free space technique (lab training) - one complete day

Course 3. Slotted wave, leaky wave and horn antennas (2hours)

May 31- June 4, 2010: IETR, University of Rennes1, France, Organized by European school of antennas

Topic: Course on Microwave and Millimeter Wave Antenna Design

Courses given

course 1. Millimeter wave antenna measurements and training on Agilent Network Analyzer HP8510C - One complete day.

List of Publications

A total of **89 scientific publications and technical reports** have been published in international Journals (**ISI**), and Conferences.

a. International JOURNAL PUBLICATIONS (Published/Accepted)

- [J45] **H Vettikalladi**, WT Sethi , W Ko ,Sub-terahertz (THz) antenna for Internet of Things and 6G communication, Frequenz, 2022
- [J44] **H Vettikalladi**, WT Sethi, M Himdi, M Alkanhal ,60 GHz beam-tilting coplanar slotted SIW antenna array, Frequenz, 2022
- [J43] BASEM AQLAN , MOHAMED HIMDI , **HAMSAKUTTY VETTIKALLADI** , AND LAURENT LE-COQ, A Circularly Polarized Sub-Terahertz Antenna With Low-Profile and High-Gain for 6G Wireless Communication Systems, IEEE Access, Accepted Aug 2021
- [J42] Basem Aqlan , Mohamed Himdi, **Hamsakutty Vettikalladi**, Laurent Le-Coq, Experimental Realization of Sub-THz Circularly Polarized Antenna Based on Metasurface Superstrate for 6G Wireless Communications, MDPI Material, Accepted 2021 August.
- [J41] B Aqlan, M Himdi, **H Vettikalladi**, L Le-Coq, A 300-GHz low-cost high-gain fully metallic Fabry-Perot cavity antenna for 6G terahertz wireless communications, Scientific Reports 11 (1), 1-9, 2021
- [J40] Waleed T. Sethi, Olivier D. Sagazan , Mohamed Himdi , **Hamsakutty Vettikalladi** and Habib Fathallah, Experimental Investigation of NanoantennaCoupled Thermoelectric Sensor for Infrared Detection, Electronics, 2020
- [J39] B Aqlan, M Himdi, L Le Coq, **H Vettikalladi**, Sub-THz circularly polarized horn antenna using wire electrical discharge machining for 6G wireless communications, IEEE Access 8, 117245-117252,2020

- [J38] I Serhsouh, M Himdi, H Lebbar, H Vettikalladi, Reconfigurable SIW antenna for fixed frequency beam scanning and 5G applications, *IEEE Access* 8, 60084-60089, 2020
- [J37] Khaled Issa, Habib Fathallah, Muhammed Ashraf, **Hamsakutty Vettikalladi**, Saleh Alshebeili, Broadband High-Gain Antenna for Millimetre-Wave 60-GHz Band, *MDPI-Electronics: Microwave and Wireless Communications*, 2019, 8, 1246 (1-12).
- [J36] **Hamsakutty Vettikalladi**, Waleed Tariq Sethi, Ahmad Fauzi Bin Abas, Wonsuk ko, Majeed A. Alkanhal, and Mohamed Himdi, Sub-THz Antenna for High Speed Wireless Communication Systems, *International Journal of Antennas and Propagation*, 2019
- [J35] Palash Sarkar, Sudhan Majhi, **Hamsakutty Vettikalladi**, Abu Syed Mahajumi: A Direct Construction of Inter-Group Complementary Code Set. *IEEE Access* 6: 42047-42056 (2018)
- [J34] Sethi Waleed, Sagazan Olivier, **Vettikalladi Hamsakutty**, Himdi Mohamed, and Habib Fathallah, Yagi -Uda Nantenna for 1550 nm Optical Communication Systems, *Microwave and Optical Technology Letters*, 60 (9), 2236-2242 2018
- [J33] Waleed Tariq Sethi, **Hamsakutty Vettikalladi**, Habib Fathallah, Mohamed Himdi, Hexa-band printed monopole antenna for wireless applications, *Microwave and Optical Technology Letters*, 59, 2816-2822, 2017.
- [J32] M Kamran Saleem, **Hamsakutty Vettikaladi**, Majeed AS Alkanhal, Mohamed Himdi, Lens Antenna for Wide Angle Beam Scanning at 79 GHz for Automotive Short Range Radar Applications, *IEEE Transactions on Antennas and Propagation*, 65, 2041-2046, April 2017.
- [J31] Waleed Tariq Sethi, **Hamsakutty Vettikalladi**, Habib Fathallah, and Mohamed Himdi, optimizing Nantenna array at 1550 nm band, *IEE Micro and nano Letters*, Aug 2016.
- [J30] Waleed Tariq Sethi, **Hamsakutty Vettikalladi**, Habib Fathallah, and Mohamed Himdi, Nantenna for Standard 1550 nm Optical Communication Systems, *International Journal of Antennas and Propagation*, July 2016
- [J29] Basem Aqlan, **Hamsakutty Vettikalladi**, and Majeed A.S Alkanhal, Millimeter Wave Antenna with Frequency Selective Surface (FSS) for 79 GHz Automotive Radar Applications, *International journal of microwaves and wireless technologies*, 2016
- [J28] Waleed Sethi, **Hamsakutty Vettikalladi**, Habib Fathallah and Mohamed Himdi, Equilateral Triangular Dielectric Resonator Nantenna at Optical Frequencies for Energy Harvesting, *International Journal of Antennas and Propagation*, 2015
- [J27] **Hamsakutty Vettikalladi**, High Gain Superstrate loaded Membrane Antenna based on Substrate Integrated Waveguide Technology, *International Journal of Antennas and Propagation*, Vol.2015, pp.1-7.
- [J26] **H. Vettikalladi**, M. Kamran Saleem and Majeed A.S. Alkanhal, Membrane Antenna Array based on Substrate Integrated Waveguide Technology for 94 GHz Communication Systems, *International journal of microwaves and wireless technologies*, 2015, pp.1-9.
- [J25] Nadeem Ashraf, **Hamsakutty Vettikalladi**, and Majeed A. S. Alkanhal, A DR Loaded Substrate Integrated Waveguide Antenna for 60 GHz High Speed Wireless Communication Systems, *International Journal of Antennas and Propagation*, Vol.2014, pp.1-9
- [J24] **Hamsakutty Vettikalladi**, Waleed Tariq Sethi and Majeed A. Alkanhal, High gain and High Efficient Stacked Antenna Array with Integrated Horn for 60 GHz Communication Systems, *International Journal of Antennas and Propagation*, Vol. 2014, pp.1-8.
- [J23] Sethi, W, **Vettikalladi H**, Alkanhal MAS, Millimeter Wave Antenna with Mounted Horn Integrated on FR4 For 60 GHz Gbps Communication Systems, *International Journal of Antennas and Propagation*, volume 2013:1-5, 2013.
- [J22] **Vettikalladi, H**, Alkanhal MAS, BCB-Si Based Wide Band Millimeter wave Antenna fed by Substrate Integrated waveguide, *International journal of Antennas and Propagation*, Volume 2013, Article ID 816050, 4 pages, 2013.
- [J21] **Hamsakutty Vettikalladi**, Olivier Lafond, Mohamed Himdi, Membrane Antenna Arrays fed by Substrate Integrated Waveguide for V-band Communication, *Microwave and optical technology Letters*, vol.55, No.8, 2013

- [J20] T. Sarrazin, **Hamsakutty Vettikalladi**, Olivier Lafond, Mohamed Himdi and N. Rolland, Low Cost 60 GHz New Thin Pyralux Membrane Antennas fed by Substrate Integrated Waveguide, *Progress in Electromagnetics Research B*, Vol. 42, 207-224, 2012
- [J19] **Hamsakutty Vettikalladi**, Laurent Le Coq, Olivier Lafond, Mohamed Himdi, Efficient and High-Gain Aperture Coupled Superstrate Antenna Arrays for 60 GHz Indoor Communication Systems, *Microwave and optical technology Letters*, Vol 52, No.10, Oct. 2010
- [J18] **Hamsakutty Vettikalladi**, Olivier Lafond, Mohamed Himdi, High-Efficient and High-Gain Superstrate Antenna for 60 GHz Indoor Communication, *IEEE Antennas and Wireless Propagation Letters*, vol.8, pp.1422-1425, 2009.
- [J17] A.V. Praveen Kumar, **V. Hamsakutty**, Jaimon Yohannan and K. T. Mathew, "A Wideband Conical Beam Cylindrical Dielectric Resonator Antenna's", *IEEE Antennas and Wireless Propagation Letters*, vol.6, 2007, pp. 15-17.
- [J16] **V. Hamsakutty**, A.V. Praveen Kumar, Jaimon Yohannan, K. T. Mathew, " Hexagonal Dielectric Resonator Antenna for 2.4GHz WLAN Applications", *Microwave and Optical Technology Letters (USA)*, 20 Nov, 2006.
- [J15] A.V. Praveen Kumar, **V. Hamsakutty**, Jaimon Yohannan and K. T. Mathew, "A strip loaded dielectric resonator antenna for circular polarization", *Microwave and Optical Technology Letters(USA)*, **Volume 48, Issue 7 , Pages 1354 – 1356, July 2006.**
- [J14] A.V.Praveen Kumar, **V. Hamsakutty**, Jaimon Yohannan, K. T. Mathew, "Microstripline Fed Cylindrical Dielectric Resonator Antenna With a Coplanar Parasitic Strip", *Progress in Electromagnetic Research(USA)*, 60, 143-152, 2006.
- [J13] **V. Hamsakutty**, A.V. Praveen Kumar, Jaimon Yohannan, G. Bindu and K. T. Mathew, "Coaxial Fed Hexagonal Dielectric Resonator Antenna for multi- frequency operation", *Microwave and Optical Technology Letters(USA)*, **Volume 48, Issue 5 , Pages 878 – 880, May 2006.**
- [J12] A. V. Praveen Kumar, **V. Hamsakutty**, Jaimon Yohannan, K. T. Mathew, "Microstripline fed Half-Cylindrical Dielectric Resonator Antenna for 2.4 GHz WLAN application", *Microwave and Optical Technology Letters(USA)*, **Volume 48, Issue 4 , Pages 724 – 726, April 2006**
- [J11] **V. Hamsakutty**, A.V. Praveen Kumar, Jaimon Yohannan, K. T. Mathew, "Coaxial Fed Hexagonal Dielectric Resonator Antenna for Circular Polarization", *Microwave and Optical Technology Letters (USA)*, **Volume 48, Issue 3 , Pages 581 – 582, March 2006**
- [J10] A. Lonappan, V. Thomas, G. Bindu, **V. Hamsakutty**, and K. T. Mathew "Analysis Of Human Breast Milk At Microwave Frequencies", *Progress in Electromagnetic Research (USA)*, 60, 2006
- [J09] **V. Hamsakutty**, A.V. Praveen Kumar, G. Bindu, Vinu Thomas, Anil Lonappan, Jaimon Yohannan, K. T. Mathew "A Multi- Frequency Coaxial Fed Metal Coated Dielectric Resonator Antenna", *Microwave and Optical Technology Letters(USA)*, **Volume 47, Issue 6 , Pages 573 - 575 Dec- 2005.**
- [J08] Vinu Thomas, C. Gopakumar, Jaimon Yohannan, Anil Lonappan, G. Bindu, A.V. Praveen Kumar, **V. Hamsakutty**, K. T. Mathew "A Novel Technique for Localizing the Scatterer in Inverse Profiling of Two Dimensional Circularly Symmetric Dielectric Scatterers Using Degree of Symmetry and Neural Networks" *Journal of Electromagnetic Waves and Applications(USA)*, Vol. 19, No. 15, 2113-2121, 2005
- [07] G.Bindu , Anil Lonappan, Vinu Thomas, A. V. Praveen Kumar, **V Hamsakutty**, C.K. Aanandan, K.T Mathew " Two Dimensional Microwave Tomographic Imaging of Low Water Content Tissues" , *Microwave and Optical Technology Letters (USA)* Vol. 46, No.6, pp 599-601, 20th September 2005
- [J06] Vinu Thomas, C. Gopakumar, A. V. Praveen Kumar, **V. Hamsakutty**, Anil Lonappan, G. Bindu, K. T. Mathew "A novel technique for reducing the imaging domain in microwave imaging of two dimensional circularly symmetric scatterers" , *Microwave and Optical Technology Letters (USA)* Vol. 44, No. 5, pp 423-427, 5th March 2005
- [J05] G.Bindu , Anil Lonappan, **V Hamsakutty**, Vinu Thomas, C.K. Aanandan, K.T Mathew " Microwave Characterisation of Breast Phantom Materials" , *Microwave and Optical Technology Letters (USA)* Vol. 43, No.6, pp 506-508, 20th December 2004

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