Sunil Kumar Khah, PhD
Professor
Controller of Examinations, Incharge IQAC
Electromagnetic Analysis Lab.
Department of Physics and Materials Science
Jaypee University of Information Technology
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Administrative Responsibilities

Controller of Examinations	Jaypee University of Information Technology	April 2012 till date
Incharge/Director Internal Quality Assurance Cell (IQAC)	Jaypee University of Information Technology	July 2017 till date
Incharge Online Education Cell	Jaypee University of Information Technology	May 2020 till date
Member Academic Council	Jaypee University of Information Technology	June 2017 onwards

Academic Positions (Full Time)

Professor	Dept. of Physics and Materials Science, Jaypee University of Information Technology	July 2011 till date
Associate Professor	Dept. of Physics and Materials Science, Jaypee University of Information Technology	July 2008-June 2011
Assistant Professor	Dept. of Physics and Materials Science, Jaypee University of Information Technology	July 2005-June 2008
Sr. Lecturer	Dept. of Physics and Materials Science, Jaypee University of Information Technology	April 2003-June 2005
Lecturer	Dept. of Physics and Materials Science, Jaypee University of Information Technology	Aug 2002- April 2003
Post Doctoral Fellow	Radiofrequency Laboratory, Institute for Plasma Research, (A DAE Institute) Bhatt, Gandhinagar	June 2001-July 2002
Guest Lecturer	Department of Instrumentation Daudayal Institute of Vocational Education Agra University	Sept 1996-Dec 2000

Visiting Position:

Visiting Professor	Department of Electrical and Computer Engineering, University of Dayton. Dayton. Ohio (USA)	Sept2012- June 2013
		June 2015- August 2015

RESEARCH INTEREST

Topics: ***Microstrip Antennas , Devices & Microwave components***

Projects:

S. No.	PI	Title	Funding Agency	Amount (INR)	Duration
1.	Dr Sunil Kumar Khah	Design of Ultralow Sidelobe Level Microstrip Antenna Array in X-Band	Directorate of ER&IPR, DRDO	21 lakhs	2010-2013
2.	Dr Sunil Kumar Khah	Shared Aperture Microstrip Antenna Array for L and S Band	CSIR, India	16.4 lakhs	2012-1015

Other Academic Activities:

S. No.	Co-ordinator	Programme	Funding Agency	Amount	Duration
1.	Dr Sunil Kumar Khah	Faculty Devlopement programme on Computer aided VHDL	AICTE	1.96 lakh	15 days

PhD Supervision Details:

S.No	Name of Scholar	Title of Thesis	Year of Award	Supervisors
1	Madhurika Mahajan	Some studies on circular and annular ring microstrip antennas.	Janurary, 2010	Dr. Sunil Kumar Khah
2	Rakesh Sharma	Study of Circular Ring Microstrip Antennas for	May 2014	Dr.Sunil Kumar Khah

		Wideband Applications Using Defected Ground Structures		
3	Abhishek Kandwal	Design of Gap Coupled Sectoral Antennas for Communication Systems	November 2014	Dr.Sunil Kumar Khah
4.	Johny Dhiman	Shared aperture based Microstrip patch Antenna design for L/S band	February 2020	Dr.Sunil Kumar Khah

Current Students

S.No	Name of Student	Area of Work	Supervisors
1	Achyut Sharma	Broad band Microstrip Antennas	Dr.Sunil Kumar Khah & Dr Sahyog Rawat

EDUCATION:

Ph.D., Dr.B.R.Ambedkar University Agra,1999

M.Phil., Agra University Agra, 1994

Master of Science, Agra University Agra, 1993

Bachelor of Science (Physics, Math, Electronics) , Kashmir University,1991

PUBLICATIONS:

Patent: (Published)

1. A Method and an Apparatus to increase antenna gain and reduce side lobe level in a Micro strip Antenna**. Patent Application No.2867/DEL/2013**
2. Design Submitted on two 2x2 patch array using shared aperture (Submitted through DST Himachal Pradesh Government)

Journals

Publications in Journals (SCI Indexed)

1. Jonny Dhiman, Sunil Kumar Khah (2020) Y-Shaped Microstrip Patch Antennas for L and S Band using Shared Aperture. Wireless Personal Communications, Vol 111, pp 1-8
2. Jonny Dhiman, Sunil Kumar Khah (2019) Parasitic coupled microstrip antenna using shared aperture technique,Micro & Nano Letters ,Vol 14(8) pp845-847

3. J. Dhiman, A. Sharma, and S. K. Khah (2019) Shared Aperture Microstrip Patch Antenna Array for L and S-Bands. Progress In Electromagnetics Research Letters, Vol. 86, pp 91-95,
4. Kaushik Annam, Sunil Kumar Khah, Steven Dooley, Charles Cerny and Guru Subramanyam, (2016) Experimental Design of Bandstop Filters Based on Unconventional Defective Ground Structures, Microwave Optical Technology Letters . Vol 58-No 5, pp 2969-2973
5. Jonny Dhiman, Sunil Kumar Khah (2016) Multifunctional shared aperture antenna for L and S band, Advanced Computational Techniques in Electromagnetics- 1(2016), 1-6
6. Abhishek Kandwal , Jai Verdhan Chauhan, Sunil Kumar Khah,2015 "Multiband-coupled sectoral antenna using high and low dielectric constant substrates" International Journal of Microwave and Wireless Technologies , Vol 7 (6) pp 721-726
7. Abhishek Kandwal , Jai Verdhan Chauhan, Sunil Kumar Khah, 2015. "Wideband gap coupled sectoral antenna for communication systems" Progress in Electromagnetics Research C. Vol 56, pp.73-82
8. Abhishek Kandwal, Sunil Kumar Khah,2014. "Using Parasitic Elements for Implementing Sectoral Patch Antenna Array for X-Band Applications" International Journal of Microwave and Wireless Technologies Vol6(5)-pp 491-496
9. Abhishek Kandwal , Jai Verdhan Chauhan, Sunil Kumar Khah,2013. "A New Compact Efficient Parasitically Coupled Notch Loaded Antenna Design" International Journal of Electronics Letters, 1 (3), 128-133.
10. R. Sharma , A. Kandwal, Sunil Kumar Khah, 2013. "Wideband DGS circular ring microstrip antenna design using fuzzy approach with suppressed cross-polar radiations" Progress in Electromagnetics Research C, 42 (), 177-190
11. R.Sharma, A. Kandwal, Sunil Kumar Khah,2013. "Bandwidth enhancement using Z-shaped defected ground structure for a microstrip antenna" Microwave and Optical Technology Letters, 55(10), 2251-2254.
12. A. Kandwal, Sunil Kumar Khah, 2013. "A novel design of gap-coupled sectoral patch antenna" IEEE Antennas and Wireless Propagation Letters, 12 (), 674-677.
13. Pawan Kumar , Subhash Chander Katyal, Sunil Kumar Khah, Nitin Rawat, Rajesh Kumar, 2013. "Magnetic thin film formation on the surface of solution induced via island growth of nanoparticles" Advanced Materials Letters, 4 (1), 74-77
14. Pawan Kumar, Sunil Kumar Khah, Rajesh Kumar, 2012, "Synthesis of magnetic thin films on glass substrates using NH3 vapor" Material Science Forum, 710 , 762-767

15. A. Kandwal, T. Chakravarty, Sunil Kumar Khah, 2012. “Circuital method for admittance calculation of gap-coupled sectoral antennas”Microwave and Optical Technology Letters, 54 (1), 210-213
16. M. Mahajan., Tapas Chakarvarty, Sunil Kumar Khah, 2011. “Asymmetrically loaded annular ring antenna”AEU - International Journal of Electronics and Communications, 65 (11), 954-957
17. Naveen Kumar Saxena, Nitendar Kumar, Pradeep Kumar Singh, Pourush, Sunil Kumar Khah, 2010. “Polarized Switchable Microstrip Array Antenna Printed on LiTi Ferrite”International Journal of Microwave and Optical Technology, 5 (3), 134-139
18. Naveen Kumar Saxena, Nitendar Kumar, Pradeep Kumar Singh, Pourush, Sunil Kumar Khah,2010. “Study of magnetic properties of substituted LiTiZn-ferrite for microwave antenna applications”Optoelectronics And Advanced Materials-Rapid Communications, 4 (3), 328-331
19. Sunil Kumar Khah, Chakarvarty T., Balamurali P, 2009. “Analysis of an electromagnetically coupled microstrip ring antenna using an extended feedline”Journal of Electromagnetic Waves and Applications, 2, 369-376
20. M.Mahajan, Sunil Kumar Khah, T.Chakarvarty A De, 2008. “Computation of resonant frequency of annular microstrip antenna loaded with multiple shorting posts”IET Microwaves Antennas & Propagation, 2 (1), 1-5
21. Sunil Kumar Khah, T.Chakarvarty A De,2008. “Closed-form expressions for computation of mutual admittance of a class of gap-coupled circular microstrip antennas” Microwave and Optical Technology Letters, 50 (4), 924-927
22. M.Mahajan, Sunil Kumar Khah, T.Chakarvarty A De, 2008. “Resonant frequency of asymmetrically loaded annular microstrip antenna” Microwave and Optical Technology Letters, 50(9), 2351-2353
23. M.Mahajan, Sunil Kumar Khah, T.Chakarvarty A De, 2008. “Extended cavity model for input impedance of annular microstrip antenna loaded with multiple shorting posts”Journal of Electromagnetic Waves and Applications, 22 (10), 1333-1340
24. Mahajan M., Chakravarty T., Sunil Kumar Khah, 2007. “Analysis of ferrite based planar array of rectangular patch microstrip antenna in X-band” Indian Journal of Physics, 81 (8), 787-792
25. Pradeep Kumar, Chakravarty T., Ghanshyam Singh, Sunil Vidya Bhooshan, Sunil Kumar Khah, De A, 2007. “Numerical computation of resonant frequency of gap coupled circular microstrip antennas”Journal of Electromagnetic Waves and Applications, 21 (10), 1303-1311

26. Mahajan M., Chakravarty T., Sunil Kumar Khah, 2007. “An improved method of approaching impedance computation of probe feeding resonator”Microwave and Optical Technology Letters, 49 (7), 1681-1684
27. Mahajan M., Chakravarty T., Sunil Kumar Khah, 2006. “Extended cavity model analysis of stacked circular disc” Progress in Electromagnetics Research, 65 , 287-308
28. Sunil Kumar Khah, 2004. “Experimental study of eight element circular array of circular patch antenna” Indian Journal of Physics, 78 (1) 71-73
29. Sunil Kumar Khah, P K S Pourush, 2001. “Notes-Eight element circular array of circular patch microstrip antenna in dielectric medium” Indian Journal of Physics, 75 (1) 63-66
30. Sunil Kumar Khah, Sandhya Gupta, P K S Pourush, 1998. “Four element linear array of annular slot antenna under superstrate cover” Indian Journal of Physics, 72 (3) 233-238
31. Sandhya Gupta, Sunil Kumar Khah and P.K.S.Pourush, 1998. “Four element linear array of microstrip annular slot antenna at 9GHz”Indian J. Radio and Space Physics, 27, 168-172
32. Sunil Kumar Khah and P.K.S.Pourush, 1999. “ Study of superstrate cover annular slot antenna array at 10 GHz” Journal Instrum.Soci.India, 29, 3, 125-130
33. Sunil Kumar Khah and P.K.S.Pourush, 1997. “Analysis of microstrip dipole antenna in X-Band” Journal Instrum.Soci.India, 27,4, 220-222
34. Jai Verdhan Chauhan, Abhishek Kandwal, Sunil Kumar Khah, 2014. “High Frequency Multilayer Equally Spaced Nano Dot Antenna Array” International Journal of Emerging Technology and Advanced Engineering, 4 (1), 336-338.
35. Rakesh Sharma, Abhishek Kandwal, Sunil Kumar Khah, 2014. “A Novel Wideband Circular Ring DGS Antenna Design for Wireless Communications” Radioelectronics & Informatics Journal, &I, No4, pp. 9-11
36. Abhishek Kandwal, Rakesh Sharma, Sunil Kumar Khah, 2013. “Dual Band Gap Coupled Antenna Design with DGS for Wireless Communications” Advanced Electromagnetics, 2 (3)
37. R.Sharma, A. Kandwal, Sunil Kumar Khah, 2012. “ Compact Wideband Circular ring Defected Ground Antenna” Advanced Computational Techniques in Electromagnetics Article ID acte-00107, 5 Pages doi: 10.5899/2012/acte-00107
38. M.Mahajan, T Chakravarty, Sunil Kumar Khah, 2011. “Input Impedance of Asymmetrically Loaded Annular Ring Antenna” Journal of Electromagnetic Analysis and Applications, 3 (3), 90-93.

39. S. Bhardwaj, H.P.Sinha, Sunil Kumar Khah, 2010. "Study of return loss of an array of stacked microstrip ring antennas" International Journal of Information Technology and Knowledge Management, 2 (2), 285-286

Papers in International Conferences (those held outside India)

S.No.	Author(s)	Year of Publication	Title of Paper	Name and Place of Conference
1	Aabhishek Kandwal, Sunil Kumar Khah	2012	Circular Patch Antenna with Square Shaped Defect for Wireless Communication.	Proceedings of the International Symposium on Electromagnetic Compatibility -Rome
2	Aabhishek Kandwal, Sunil Kumar Khah	2011	Improved characteristics of DGS ring antenna in L-band.	Proceedings of the Antennas and Propagation Conference - Loughborough, United Kingdom
3	Mahajan M., Chakarvarty T., Sunil Kumar Khah	2009	A circuit model to compute impedance of electromagnetically coupled ring antenna.	*Proceedings of the European Conference on Antennas and Propagation* - Berlin :
4	Mahajan M., Chakarvarty T., Sunil Kumar Khah	2008	Resonant frequency of annular ring pi antenna using shorting pins.	*Proceedings of the 2008 Asia-Pacific Symposium on Electromagnetic Compatibility and 19th International Zurich Symposium on Electromagnetic Compatibility, APEMC 2008* -Singapore

Papers in National And International Conferences In India

S.No.	Author(s)	Year of Publication	Title of Paper	Name and Place of Conference
1	Krishna Hari Sharma, Abhishek Kandwal, Sunil Kumar Khah	2013	A Novel Nano-Antenna Design for Pentahertz Freauency	*AIP-Proceedings of the Proceeding of International Conference on Recent Trends in Applied Physics and Material Science* Bikaner, Rajasthan, India
2	Abhishek Kandwal, Rakesh Sharma, Sunil Kumar Khah	2013	A 0.5-1.0 GHz Microstrip Antenna Design for Mobile Communications.	*Proceedings of the Mecon Proceedings* . Noida
3	Abhishek Kandwal, Rakesh Sharma, Sunil Kumar Khah	2013	A Novel Multiband DGS Antenna with Enhanced Bandwidth for Wireless Communication.	*Proceedings of the Mecon Proceedings* , Noida
4	Sunil Kumar Khah	2011	Stacked element microstrip antenna array for wideband applications.	*Proceedings of the 98th Indian Science Congress, Engineering Section* – Chennai
5	Pawan Kumar, Rajesh Kumar, S.C. Katyal, Sunil Kumar Khah	2011	Coating of magnetite nanoparticles on sand particles by chemical co-precipitation method	*Proceedings of the National Conference on Recent Trends in Materials Science-Delhi*
6	M. Mahajan, T Chakravarty, Sunil Kumar Khah	2008	Study of bandwidth and radiation Properties of loaded annular ring antenna.	*Proceedings of the 2008 International Conference of Recent Advances in Microwave Theory and Applications, MICROWAVE 2008* -Jaipur

7	M. Mahajan, T Chakravarty, Sunil Kumar Khah	2008	Study of return loss and radiation patterns of ring antenna using extended cavity model	*Proceedings of the 2008 International Conference of Recent Advances in Microwave Theory and Applications, MICROWAVE 2008* –Jaipur
8	M. Mahajan, T Chakravarty, Sunil Kumar Khah	2007	Analysis of planar array of rectangular and circular patch microstrip antenna in X-band	*Proceedings of the Optical and wireless communication, Conference* [Punjab Engineering College, Chandigarh
9	M. Mahajan, T Chakravarty, Sunil Kumar Khah	2007	Analysis of superstrate covered circular microstrip antenna..	*Proceedings of the Optical and wireless communication, Conference* [Punjab Engineering College, Chandigarh
10	Sunil Kumar Khah, Singh P., Rabra S., Saxena R., Chakarvarty T.	2007	Broadband impedance matching technique for microwave amplifiers.	*Proceedings of the 2007 IEEE Applied Electromagnetics Conference, AEMC 2007* – Kolkata
11	Himanshu, Jaideep, M.Mahajan, Sunil Kumar Khah	2006	C/C++ based software for the simulation of rectangular microstrip patch antenna.	*Proceedings of the Proceedings of Nat. Conf. Recent Adv. Microwave Techniques & Appl.* [University of Rajasthan Jaipur India
12	M.Mahajan, Sunil Kumar Khah	2006	Analysis of circular patch microstrip antenna with superstrate in X-band.	*Proceedings of the Proceedings of Nat. Conf. Recent Adv. Microwave Techniques & Appl.* [University of Rajasthan Jaipur India

13	Sunil Kumar Khah	2004	Effect of substrate permittivity on the radiation performance of circular array of microstrip circular patch antenna	*Proceedings of the International Conference on Microwave, Antenna, Propagation and Remote Sensing* Jodhpur
14	Sunil Kumar Khah	2003	Radiation from superstrate covered microstrip antenna	*Proceedings of the International Conference on Microwave, Antenna, Propagation and Remote Sensing* -Jodhpur
15	Sunil Kumar Khah and LHCD Group	2001	Design analysis, fabrication and high power RF testing of high power water dummy load	Proc.Nat. Conference.Microwave, Antenna and Propagation.- Jaipur
16	Sunil Kumar Khah and LHCD Group	2001	Design analysis, fabrication and high power RF testing of three stage waveguide transformer for SST1, LHCD system	Proc.Nat. Conference.Microwave, Antenna and Propagation.- Jaipur
17	Sunil Kumar Khah and LHCD Group	2001	Design analysis, fabrication and high power testing of matched magic tee	Proc.Nat. Conference.Microwave, Antenna and Propagation.- Jaipur
18	Sunil Kumar Khah, P K S Pourush	1995	Radiation performance of rectangular patch antenna under the effect of substrate permittivity.	Proc.National systems Conf.- DEI Agra

19	Sunil Kumar Khah, P K S Pourush	1995	Radiation from a printed circuit dipole antenna with displaced feed points n plasma medium	Proc.National systems Conf.- DEI Agra

Abstracts Published and Presented in Conferences

1. Theoretical analysis of microstrip antenna in plasma medium. International Conf. Industrial applications. Agra University. (1998)
2. Antenna scanning using the time division multiplexing in mobile communication systems. National Conf.Operation Research and Information Tech.DDIVE Dr.B.R.Ambedkar University. Agra (2000)
3. Frequency division multiplexing in communication systems at high frequencies. National Conf.Operation Research and Information Tech.DDIVE Dr.B.R.Ambedkar University. Agra (2000)
4. Microprocessor based speed control systems. National Conf.Operation Research and Information Tech.DDIVE Dr.B.R.Ambedkar University. Agra (2000)
5. Study of line coding in optical fiber links. National Conf.Operation Research and Information Tech.DDIVE Dr.B.R.Ambedkar University. Agra (2000)
6. Theoretical study of dual band microstrip array antenna. Annual Conference of Operations Research, Indian Institute of Management Ahmedabad India (2000)

Other Activities.

1. Rersource Person : Academic Staff College . Himachal Pradesh University
2. Member Broad of Studies. Eternal University, Jaypee University of Information Technology
3. Faculty Counselor IEEE JUIT Chapter

4, Invited Talks Given more than 15

Memberships

1. Life Member MRSI, PSSI
2. Senior Member IEEE
3. Chairperson Himachal Chapter MRSI

Administrative:

1. Member IQAC from 2006 till date
2. Warden of the Students Hostel (2004-2008)
3. Involved in the examination conduction board from 2002 till date.
4. Time Table Committee. (2002-2005)
5. Faculty Club Incharge Funds
6. Student Monitoring Board member
7. Incharge Youth Club (Finance) 2006
8. All other duties assigned by the university time to time.

Sunil Kumar Khah