

Academic Curriculum Vitae



Personal Information:

Full Name: **Sattar Othman Hasan**

Academic Title: **Professor**

Email: sattar.hasan@su.edu.krd

Mobile: **009647504514637**

Education:

- **2006-2007**: (**PH. D.** in Electromagnetic Theory- field of Communication). The title of the thesis is (**Analysis and Design of Compact Microstrip Antenna Using Cavity Model**). Department of Physics, College of **Science**, University of Salahaddin-Erbil, IRAQ.
- **1999-2000**: (**M. SC.** in Nuclear Physics). The title of the thesis (**The Background Function Effects on the Analysis of Gamma-Ray Spectrum**), Department of Physics, College of **Science**, University of Salahaddin-Erbil-IRAQ.
- **1990-1991**: (**B. SC.** in Physics), Department of physics, College of **Education**, University of salahaddin-Erbil-IRAQ.

Employment:

- **2023**, **Professor** of Electromagnetic Theory –Antenna Communication, Department of Physics, College of Education/ University of Salahaddin- Erbil, IRAQ.
- **2008**, **Assist. Professor** of Electromagnetic Theory -Field of Communication, Department of Physics, College of Education/ University of Salahaddin- Erbil, IRAQ.
- **2003**, **lecturer** of theoretical Nuclear Physics, Department of Physics, College of Education/ University of Salahaddin- Erbil, IRAQ.

- **1999**, **Assist. Lecturer** of Theoretical Nuclear Physics, Department of Physics, College of Education/ University of Salahaddin- Erbil, IRAQ.
- **2000-2002**, Registration unit manager of the Education College, Salahaddin University-Erbil, IRAQ.
- **2002-2003**, Deputy of Dean of the Education College, Salahaddin University-Erbil, IRAQ.
- **2003-2008**, representative of **Teaching** staff of the Education College, Salahaddin University-Erbil, IRAQ.
- **2008-2010**, **Dean** of the Tourism Technical Institute, Erbil Polytechnique University, IRAQ.
- **2010-2014**, **Dean** of the Erbil Technology Institute, Erbil Polytechnique University, IRAQ.
- **2015-2023**, Member of Scientific Promotion Committee, College of Education, University of Salahaddin-Erbil, IRAQ.
- Supervised **4th**- Class under graduation projects (Total **21**).
- Supervised, **M.Sc.** and **Ph.D.** students (total **6**).

Qualifications

- Teaching qualifications
- IT qualifications
- Language qualifications

Teaching experience:

- Advance **Electromagnetic** Theory, for **M. Sc.** and **ph. D.** students.
- **Antenna** Theory, for **M. Sc.** and **ph. D.** students.
- **Radio** wave Propagation, for **M. Sc.** students.
- **Mathematical** Physics, for **M. Sc.** and **ph. D.** students.
- **Numerical** Analysis, for **M. Sc.** students.
- **Quantum** Mechanics, **4th**-Class students.
- **Electromagnetic** Theory, **4th**-Class students.
- **Linear** Algebra, **1st**-Class students.
- General **mathematics**, **1st**-Class students.
- Advanced **Calculus**, **2nd**-Class students.
- **General** Physics, **1st**-Class students.
- Electricity Lab., **1st**-Class students.
- Advanced Electricity Lab., **2nd**-Class students.
- Mechanics and properties of matter Lab., **1st**-Class students.
- Atomic Lab., **3rd**-Class students.
- Illustration Lab., **4th**-Class students.

Research and publications

1. **Sattar O. Hasan**, "The Background Function Effects on the Analysis of Gamma-Ray Spectrum". M. Sc. Thesis, College of Science, University of Salahaddin (1999).
2. **Sattar O. Hasan** "Analysis and Design of Compact Microstrip Antenna Using Cavity Model", Ph.D. Thesis, College of Science, University of Salahaddin (2006).
3. **Sattar O. Hasan** and Azad H. Karem "Study of Some Nuclear properties of Isotopes $^{96-108}\text{Ru}$, $^{102-116}\text{Pd}$, $^{110-130}\text{Xe}$, $^{166-180}\text{HF}$ ", Journal of Pure and Applied Sciences, Salahaddin University- Hawler, Vol.14, No.2, 2002.
4. **Sattar O. Hasan**, "Multipole Mixing Ratios for Gamma-Transition Using Constant Statistical Tensor Method for $^{92}_{40}\text{Zr}(n, n'\gamma)$ ", Journal of Pure and Applied Sciences, Salahaddin University- Hawler, Vol.16, No.1, 2004.
5. **Sattar O. Hasan** and Jamal W. Salman and Mudhaffer M. Ameen, "Effect of Loss Tangent, Dielectric Substrate Permittivity and Thickness on the Performance of Circular Microstrip Antennas", Engineering and Development Journal, Al-Mustansiriya University-Baghdad, Vol.10, No.1, 2006.
6. **Sattar O. Hasan** and Jamal W. Salman and Mudhaffer M. Ameen, "Parametric Study of the Rectangular Microstrip Antenna Using Cavity Model". Engineering and Development Journal, Al-Mustansiriya University- Baghdad, Vol.10, No.2, 2006.
7. **Sattar O. Hasan**, "Evaluation of Electromagnetic Shielding Effectiveness for Various Types and Thickness of Materials at Different Frequencies". Journal of Pure and Applied Sciences, Salahaddin University- Hawler, Vol.19, No.3, pp. 81-93, December 2007.
8. **Sattar O. Hasan** , "Shielding Effectiveness via Electric and Magnetic Fields", Journal of Dohuk University, Scientific and Academic, Vol.10, No.2, pp. 104-111, 2007.
9. **Sattar O. Hasan** and Rashad H. Mahmud, "Radiation Characteristics of the Axial –mode Helical Antennas Operating at the X-band Frequencies", Journal of Pure and Applied Sciences, Salahaddin University- Hawler, Vol.24, No.1, 2012.
10. **Sattar O. Hasan** and Glara F. Hasan, "Optimization of 90 and 120 dB- Shielding Effectiveness for Plane Electromagnetic Waves at Center Frequencies (3 and 3000) MHz". ZANCO Journal of Pure and Applied Sciences, Salahaddin University-Erbil, ZJPAS (2016) 28 (2); 564-573, <http://dx.doi.org/10.21271/zjpas.v28i2.870>.
11. Saman K. Ezaddin and **Sattar O. Hasan** and Mudhaffer M. Ameen, "Design and Simulation of Microstrip Patch Antenna for 5G Application using CST Studio", International Journal of Advanced Science and Technology Vol. 29, No. 04, (2020), pp. 7193 – 7205, 2020, <https://www.researchgate.net/publication/357859126> .
12. **Sattar O. Hasan** and Sevan S. Abdulla, "Path Loss Estimation for Some Korek-Telecom Sites Operating at (1.8) GHz and (2.1) GHz for Urban and Suburban Area in Erbil City", Advances in Science, Technology and Engineering Systems Journal Vol. 5, No. 5, 869-875 (2020), <https://doi.org/10.25046/aj0505106>.
13. Yadgar I. Abdulkarim, Halgurd N. Awl, Fahmi F. Muhammadsharif, Muharrem Karaaslan, Rashad H. Mahmud, **Sattar O. Hasan**, Ömer Işık, Heng Luo and Shengxiang Huang, "A Low-Profile Antenna Based on Single-Layer Metasurface for Ku-Band Applications", International Journal of Antennas and Propagation, 2020, Article ID 8813951, 8 pages, <https://doi.org/10.1155/2020/881395> .
14. **Sattar O. Hasan** and Sevan S. Abdulla, "Comparison Between Measured and Empirically Predicted Radio Wave Pathloss in Rural Environment ", ZANCO Journal of Pure and Applied Sciences, Salahaddin University-Erbil, ZJPAS (2021), DOI: <http://dx.doi.org/10.21271/zjpas>.
15. Saman K. Ezaddin and **Sattar O. Hasan** and Mudhaffer M. Ameen, "Optimization of Rectangular Microstrip Antenna Substrate Parameters to Operate at High Radiation Performances for 5G Applications", Advances in Mechanics, Volume 9, Issue 2, Page 273-286, 2021, <https://www.researchgate.net/publication/357859141>.
16. Saman K. Ezaddin and **Sattar O. Hasan** and Mudhaffer M. Ameen, "Optimization of rectangular microstrip antenna patch parameters to operate with high radiation performances for 5G applications", AIP Conference Proceedings 2386, 070002 (2022); Published Online: 11 January 2022, <https://doi.org/10.1063/5.0066800>.
17. Saman K. Ezaddin and **Sattar O. Hasan** and Mudhaffer M. Ameen, "Microstrip patch antenna design, simulation and fabrication for 5G applications", Simulation Modelling Practice and Theory, January, 116 (2022) 102497, <https://doi.org/10.1016/j.simpat.2022.102497>
18. Bushra A. Rahman and **Sattar O. Hasan**, "Simulation Design of Low-Profile Equilateral Triangle Microstrip Patch Antenna Operating at 28 GHz", International Journal on Communications Antenna and Propagation (IRECAP), Vol. 12, N. 2, April 2022, <https://doi.org/10.15866/irecap.v12i2.21964>.

19. Bushra A. Rahman and **Sattar O. Hasan**, “Radiation Performance of Different Triangular Microstrip Patch Antenna Configuration Shapes Operating at 28 GHz.”, *ZANCO Journal of Pure and Applied Sciences*, Salahaddin University-Erbil, Vol. 34, No.6, pp. 45-55(2022), DOI: : <http://dx.doi.org/10.21271/ZJPAS.34.6.6>.
20. **Sattar O. Hasan**, “Design and Comparison Study of Circular and Elliptical Microstrip Patch Antennas for 5G Applications “, *International Journal on Communications Antenna & Propagation (IRECAP)*”, Vol. 12, N. 6, December 2022, DOI: <https://doi.org/10.15866/irecap.v12i6.22701>.
21. **Sattar O. Hasan**, “Parametric Study of an Elliptical Microstrip Patch Antenna for X-band Applications”, *Journal of Zankoy Sulaimani Part-A- (Pure and Applied Sciences)*, Vol.25, No.1, March 2023.
22. **Skala H. Mohammed**, **Mudhaffer M. Ameen** and **Sattar O. Hasan**, “Simulation Design of Different Rectangular Horn Antenna Shapes Operating at 28 GHz Using CST and HFSS Techniques”, *International Journal on Communications Antenna & Propagation*”, Vol. 13, No. 2, April 2023, DOI: <https://doi.org/10.15866/irecap.v12i6.22701>.
23. **Skala H. Mohammed**, **Mudhaffer M. Ameen** and **Sattar O. Hasan**, “Optimization of Pyramidal and Conical Horn Antennas Parameters to Operate with High Radiation Performances for 5G Communication Using CST and HFSS Techniques”, *ZANCO Journal of Pure and Applied Sciences*, Salahaddin University-Erbil, ZJPAS (2023).
24. **Sattar O. Hasan**, **Saman K. Ezaddin**, **Rashad H. Mahmud** and **Mowfaq J. Ahmad**, “Design and Simulation of Microstrip Antenna Array Operating at S-band for Wireless Communication System”, *International Journal of Electrical and Computer Engineering Systems (IJECEs)*, Volume 14, Issue 5, Page 497-508, 2023, <https://doi.org/10.32985/ijeces.14.5.1>.
25. **Sattar O. Hasan**, **Saman K. Ezaddin**, **Othman S. Hamed** and **Rashad H. Mahmud**, “Design and Performance Analysis of Rectangular Microstrip Patch Antennas Using Different Feeding Techniques for 5G Applications”, *International Journal of Electrical and Computer Engineering Systems (IJECEs)*, Volume 14, Issue 8, Page , 2023,
26. **Saman K. Ezaddin**, **Sattar O. Hasan** and **Mudhaffer M. Ameen**, “Performance Analysis of Plasmonic Nano-antenna Based on Graphene with Different Dielectric Substrate Materials for Optoelectronics Application”, *Plasmonic*, September, (2023) 102497, <https://doi.org/10.1007/s11468-023-02030-5>.
27. **Sattar O. Hasan**, **Saman K. Ezzulddin**, **Hersh A. Khizir**, **Muhamad A. Hamad** and **Bushra A. Rahman**, “Design of Graphene-Based Tunable Plasmonic Antenna for Multiband Terahertz Application Systems”, *Plasmonic*, November, (2023) 102497, <https://doi.org/10.1007/s11468-023-02153-9>.

Conferences and courses attended

- Give details of any conferences you have attended, and those at which you have presented delivered poster presentations.

Funding and academic awards

- List any bursaries, scholarships, travel grants or other sources of funding that you were awarded for research projects or to attend meetings or conferences.

Professional memberships

- List any membership you hold of any professional body or learned society relevant to your research or other life activities.

Professional Social Network Accounts:

- 1992- till now member of Kurdistan Union Teacher.
- 2007- till now member of Kurdistan Physics Society.

Web of Science Researcher ID:

ORCID ID: 0000-0003-0336-1154

Academic Profile: <https://academics.su.edu.krd/sattar.hasan>