

**RKDF University, Bhopal**  
**Faculty Profile**



| Basic Information                     |  |                |                                    |  |
|---------------------------------------|--|----------------|------------------------------------|--|
| <b>Name</b>                           | <b>Dr. Akant Kumar Raghuwanshi</b>                 |                |                                    |  |
| <b>Date of Birth</b>                  | <b>25.05.1986</b>                                  |                |                                    |  |
| <b>Designation</b>                    | <b>Assistant Professor</b>                         |                |                                    |  |
| <b>Department</b>                     | <b>Electronics &amp; Communication Engineering</b> |                |                                    |  |
| <b>Experience</b>                     | <b>15 year</b>                                     |                |                                    |  |
| <b>Email ID</b>                       | <b>akantthakur7@gmail.com</b>                      |                |                                    |  |
| <b>Contact. No.</b>                   | <b>9752825636</b>                                  |                |                                    |  |
| Educational Qualifications            |  |                |                                    |  |
| <b>Description</b>                    | <b>Year</b>  | <b>%</b>       | <b>Institute/University</b>        |  |
| (UG)-B. E.                            | 2009   | 69.19          | <b>RGPV, Bhopal</b>                |  |
| (PG)- M. Tech                         | 2014   | 7.08           | <b>RGPV, Bhopal</b>                |  |
| <b>M. Phil.</b>                       | NA   | NA             | -                                  |  |
| (Ph. D.)                              | 2023   | -              | <b>RKDF University,<br/>Bhopal</b> |  |
| <b>Post Doctorate</b>                 | NA   | NA             | -                                  |  |
| <b>NET Qualified/GATE</b>             | -  | -              | -                                  |  |
| Experience Detail                     |  |                |                                    |  |
| Experience<br>(Teaching/Research<br>) | Designation  | Duration       |                                    | Name of Institute/University   |
|                                       |  | From           | To                                 |  |
| <b>Teaching</b>                       | Lecturer   | 01.07.201<br>4 | 30.07.201<br>7                     | <b>Vedica Institute of<br/>Technology, RKDF<br/>University, Bhopal</b> |
| <b>Research</b>                       | Ph. D.<br>Scholar                                  | 01.08.201<br>7 | 08.01.202<br>3                     | <b>RKDF University, Bhopal</b>   |
| <b>Teaching</b>                       | Assistant<br>Professor                             | 09.01.202<br>3 | Till Date                          | <b>Vedica Institute of<br/>Technology, RKDF<br/>University, Bhopal</b> |
| Publications                          |  |                |                                    |  |
| <b>No.ofPapersPublished</b>           | <b>37</b>  |                |                                    |  |

|  |   |                          |                          |
|--|---|--------------------------|--------------------------|
| <b>No.ofBooks Published</b>  | <b>NA</b>                                     |                          |                          |
| <b>Books Chapters Published</b>  | <b>NA</b>                                     |                          |                          |
| <b>No. of Patents Published/Grant</b>  | <b>02</b>                                     |                          |                          |
| <b>Ph. D/M. Phil Project supervised</b>  |   |                          |                          |
| <b>ResearchProgram</b>   | <b>Award</b>                                  | <b>Under Supervision</b> | <b>Nameof University</b> |
| <b>Ph. D (Provide detail i.e. name, title etc)</b>   | NA  | NA                       | NA                       |
| <b>M. Phil</b>   | NA  | NA                       | NA                       |
| <b>PG Thesis/Dissertation</b>  | 10  | 1                        | <b>RKDF University</b>   |
| <b>Area of Expertise (100 words)</b>   |   |                          |                          |
| <p>Expertise in developing and optimizing power-aware routing protocols to enhance the lifetime and energy efficiency of Wireless Sensor Networks (WSNs). Focus on minimizing energy consumption while maintaining reliable communication, using techniques like adaptive routing, energy-aware algorithms, and dynamic power control. Expertise includes evaluating trade-offs between energy and performance, ensuring optimal sensor deployment, and designing protocols that address energy constraints to extend network longevity and improve overall performance in resource-limited environments. Applying genetic algorithms to optimize digital circuit performance, focusing on parameter tuning, design refinement, and resource management to maximize efficiency, speed, and power consumption while ensuring reliability.</p> |   |                          |                          |
| <b>Awardand Achievement</b>  |   |                          |                          |
| <b>Nameof Award</b>  | <b>Description(WithcertifiedofCopy award)</b> |                          |                          |
| <b>National</b>  | NA  |                          |                          |
| <b>International</b>   | NA  |                          |                          |
| <b>Conference/Seminar/Workshops/FDP</b>  |   |                          |                          |
| <b>Description</b>   | <b>No.</b>                                    |                          |                          |
| <b>Conference/Seminar p a p e r presentation</b>   | 6   |                          |                          |
| <b>Conference/Seminarattended/ organized</b>   | NA  |                          |                          |
| <b>Workshopattended/organized</b>  | NA  |                          |                          |
| <b>FDPAttended/ organized</b>  | NA  |                          |                          |
| <b>ResearchProject</b>   |   |                          |                          |
| <b>Name of Project</b>   | <b>FundingAgencies</b>                        | <b>Amount</b>            |                          |
|  |   |                          |                          |



- **Anyother Achievement**

- **List of Patent :**

1. Patentdesignnumbered**202321064948**  
Title**“Wireless power transfer strategy for implantable biomedical devices”**.
2. Patentdesignnumbered**6435770**  
Title**“AI Based Portable Wireless Communication Device”**.

## PUBLICATIONS/CONFERENCES

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1. **Akant Kumar Raghuwanshi**, Ajay Barapatre and Balajee Sharma (2025) Wireless Sensor Networks and Its Clustering Algorithm. Annual International Conference on Recent advanced in Engineering Technology , Healthcare& Management (AIC-RAETHM 2025) *Jan10,11 2025*.
2. Balajee Sharma, **Akant Kumar Raghuwanshi** and Ajay Barapatre (2025) Emerging Trends in 5G and Beyond-5G Wireless Networks. Annual International Conference on Recent advanced in Engineering Technology, Healthcare& Management (AIC-RAETHM 2025) *Jan10,11 2025*.
3. Ajay Barapatre,Balajee Sharma and **Akant Kumar Raghuwanshi** (2025) A Study on Security Requirements of IOT. Annual International Conference on Recent advanced in Engineering Technology , Healthcare& Management (AIC-RAETHM 2025) *Jan10,11 2025*.
4. Vishal Baraiya, **Akant Kumar Raghuwanshi**, “Review of Existing Fingerprint Recognition Techniques and an Enhanced Methodology. “Research Journal of Engineering Technology and Management (ISSN : 2582-0028, Volume 07, Issue 03, June-2024.
5. SangeetaNiranjan, **Akant Kumar Raghuwanshi**, “An Enhanced Data Security Using RSA Algorithm with Integration of Vedic Multiplier. “Research Journal of Engineering Technology and Management (ISSN : 2582-0028, Volume 07, Issue 03, June-2024.
6. Shivhari Arya, **Akant Kumar Raghuwanshi**, “Review of Recent Advanced Image Encryption Techiques. “Research Journal of Engineering Technology and Management (ISSN : 2582-0028, Volume 07, Issue 03, June-2024.
7. Shivhari Arya, **Akant Kumar Raghuwanshi** “Review of Recent Advanced Image Encryption Techiques. “ShodhSangam – A RKDF University Journal of Science and Engineering” ISSN No. 2581-5806, Vol-08, No. 04, July-Aug – 2024.
8. SangeetaNiranjan, **Akant Kumar Raghuwanshi** “An Enhanced Methodology for Data Security Using RSA Algorithm. “ShodhSangam – A RKDF University Journal of Science and Engineering” ISSN No. 2581-5806, Vol-08, No. 04, July-Aug – 2024.
9. Vijay Baraiya, **Akant Kumar Raghuwanshi** “An Advanced Fingerprint Recognition Using Hybrid Deep Learning. “ShodhSangam – A RKDF University Journal of Science and Engineering” ISSN No. 2581-5806, Vol-08, No. 04, July-Aug – 2024.
10. Balajee Sharma and **Akant Kumar Raghuwanshi** (2024) Advancements in AI-driven Techniques for MIMO-OFDM Systems: A Comparative Analysis. *International Journal of Innovative Research in Technology and Science, 11(02)*.
11. **Akant Kumar Raghuwanshi** and Balajee Sharma(2024) Investigating Power-

Aware Protocols for Wireless Sensor. *International Journal of Innovative Research in Technology and Science*, 11(02).

12. **A.K. Raghuwanshi** and V.S. Chaudhary, "Relative Entropy Based Energy Efficient Multi-Hop Forwarding Routing Protocol for WSN" Accepted and will be published in *Samriddhi Journal*, Volume 14(4), 2022.
13. **A.K. Raghuwanshi** and V.S. Chaudhary, "Energy Efficient Access Control MAC Layer Protocol over Wireless Sensor Network" *Samriddhi Journal*, Volume 14(3), 2022, pp. 270-279
14. **A.K. Raghuwanshi** and V.S. Chaudhary, "Comparative analysis of Energy Efficient Routing Protocol over WSN," *International Conference on Computational Intelligence and computing applications (ICCICA)*, 2021, pp. 1-6 (Scopus Index)
15. **A.K. Raghuwanshi** and V.S. Chaudhary, "Comparative analysis of Energy Efficient Routing Protocol over WSN," *International Conference on Contemporary Technological Solutions towards fulfillment of Social Needs*, 2018, pp. 38-41.
16. Patel HirenkumarSureshbhai, **Akant Kumar Raghuwanshi** "Research Journal of Engineering Technology and Medical Sciences (ISSN : 6212), Volume 05, Issue 02, June 2022.
17. Patel HirenkumarSureshbhai, **Akant Kumar Raghuwanshi** "Methods of Cognitive Spectrum Sensing in DWT based MIMO-OFDM: A Review. "ShodhSangam – A RKDF University Journal of Science and Engineering" ISSN No. 2581-5806, Vol-05, No. 04, August – 2022.
18. RupaliBende, **Akant Kumar Raghuwanshi**, "Deep Learning Based Compressed Sensing in WBAN, "Research Journal of Engineering Technology and Medical Sciences (ISSN: 2582-6212), Volume 04, Issue 03, September-2021.
19. RupaliBende, Akant Kumar Raghuwanshi, "Compressed Sensing based on Deep Learning in Wireless Body Networks "ShodhSangam – A RKDF University Journal of Science and Engineering"
20. Pradeep Kumar Suryawanshi, Akant Kumar Raghuwanshi, "Cyclostationary Spectrum Sensing in Cognitive Radio : A Review. "ShodhSangam – A RKDF University Journal of Science and Engineering" ISSN No. 2581-5806, Vol-03, No. 01, Jan - 2020.
21. Anil Kumar Malviya, Akant Kumar Raghuwanshi, "Compressed Sensing Space Time Block Code OFDM System for Optical Communication. "Research Journal of Engineering Technology and Management (ISSN : 2582-0028, Volume 03, Issue 02, June-2020.
22. Anil Kumar Malviya, Akant Kumar Raghuwanshi, "A Novel Orthogonal Frequency Division Multiplexing (OFDM) System for Optical Communication "ShodhSangam – A RKDF University Journal of Science and Engineering" ISSN No. 2581-5806, Vol-03, No. 04, July - 2020.
23. Pradeep Kumar Suryawanshi, Akant Kumar Raghuwanshi, "Cyclostationary Spectrum Sensing using AIC Block in Cognitive Radio "Research Journal of Engineering Technology and Management (ISSN : 2582-0028), Special Issue I (2019)
24. Vishnu DuttGautam, Prof Akang Kumar Raghuwanshi, "Underwater Acoustic Communication using multiple input multiple out orthogonal frequency division multiplexing. ISSN (Online) : 2278-3814, Volume8, Issue-5, May, 2019.
25. Vishnu DattGautam, Mr. Akant Kumar Raghuwanshi "A Comparative Analysis of Different UWAC Techniques" "ShodhSangam – A RKDF University Journal of Science and Engineering"

26. Raksha Sharma, Akant Kumar Raghuwanshi, "A Review over Digital Image Processing with Enhancement Approaches, Engineering Universe for Scientific Research and Management (International Journal) Vol. 7 Issue 2 February 2017.
27. Raksha Sharma, Akant Kumar Raghuwanshi, "An Approach to Digitize Historical Document Using DWT. "Engineering Universe for Scientific Research and Management (International Journal) Vol. 7 Issue 4 April 2017.
28. Nitesh Bathma, Akant Kumar Rathuwanshi, "A Critical Review on Voice Based Recognition System using Computationally Efficient Algorithms". International Journal of Innovative Trends in Engineering (IJITE) ISSN : 2395-2946 Issue : 50, Volume 30, Number 01, 2017.
29. Nitesh Bathma, Akant Kumar Rathuwanshi, "A Voice Based Recognition System Using Vector Quantization And Mel Frequency Cepstral Coefficients", International Journal of Scientific Progress and Research (IJSPR) ISSN : 2349-4689 Issue 105, Volume 36, Number 03, 2017.
30. Trapti Saxena, Akant Kumar Raghuwanshi, "International Journal of Engineering Sciences & Management", "Downlink Precoding Methods for Multi-user Multiple Input-Multiple Output (MU-MIMO) ISSN : 2277-5528, 6(3) : July-Sep, 2016.
31. Trapti Saxena, Akant Kumar Raghuwanshi, "International Journal of Engineering Sciences & Management", "A Review of Downlink Precoding Techniques and Methods for MIMO" ISSN : 2277-5528, 6(3) : July-Sep, 2016.
32. Akant Kumar Raghuwanshi, Sandeep Shrivastva, "A Review on Genetic Approach over Digital Circuit" International Journal of Computational Intelligence and Information Security, September 2013 Vol. 4 No. 7

#### • List of Conference:

33. **Akant Kumar Raghuwanshi**, Ajay Barapatre and Balajee Sharma (2025) Wireless Sensor Networks and Its Clustering Algorithm. Annual International Conference on Recent advanced in Engineering Technology , Healthcare & Management (AIC-RAETHM 2025) *Jan10,11 2025*.
34. Balajee Sharma, **Akant Kumar Raghuwanshi** and Ajay Barapatre (2025) Emerging Trends in 5G and Beyond-5G Wireless Networks. Annual International Conference on Recent advanced in Engineering Technology, Healthcare & Management (AIC-RAETHM 2025) *Jan10,11 2025*.
35. Ajay Barapatre, Balajee Sharma and **Akant Kumar Raghuwanshi** (2025) A Study on Security Requirements of IOT. Annual International Conference on Recent advanced in Engineering Technology , Healthcare & Management (AIC-RAETHM 2025) *Jan10,11 2025*.
36. **A.K. Raghuwanshi** and V.S. Chaudhary, "Comparative analysis of Energy Efficient Routing Protocol over WSN," International Conference on Computational Intelligence and computing applications (ICCICA), 2021, pp. 1-6 (Scopus Index)
37. **A.K. Raghuwanshi** and V.S. Chaudhary, "Comparative analysis of Energy Efficient Routing Protocol over WSN," International Conference on Contemporary Technological Solutions towards fulfillment of Social Needs, 2018, pp. 38-41.