

Bio – Data

1. **Name in full** : Prof. Raj Kumar
2. **Father's name** : Late Jai Jai Ram Tiwari
3. **Date of birth** : 22. 07. 1960
4. **Nationality** : Indian
5. **Category** : General
6. **Marital status / sex** : Married / Male
7. **Present status** : Professor, Director IET and Ex-Head
8. **Official address** : Prof. Raj Kumar
Professor
Department of Physics & Electronics
Dr. R.M.L. Avadh University,
Faizabad – 224001, U.P., India
9. **Permanent address** : Shiv Nagar Coloney, 3rd Row
Near Bal Vidhya Mandir School
Faizabad -224001 U.P. India
10. **Educational qualification** :



Exam. passed	Board/Univ.	Year	Division/Position	% of Marks	Subjects
High school	U.P.Board ,Allahabad	1976	First	63.2	Hindi, Maths, Sci, Biology, English
Intermediate	U.P.Board ,Allahabad	1978	First	67.8	Gen. Hin. Phy. Eng. Chem., Maths.
B.Sc.	Allahabad University	1980	First	64.7	Physics, Maths. Chemistry
M.Sc.	Allahabad University	1982	First (First Position)	72.4	Physics(Electronics)
N.E.T	CSIR, New Delhi	1983	JRF		Physics
Ph.D.	Dr. R.M.L. Avadh University, Faizabad	1986	SRF		Studies in Matrix Spectra due to Polar Impurities in Alkali Halide Crystal
		1994	--		

11. **Specilization:** Electronics, Condensed Matter Physics

- **Field of Interest:-** Electronic circuit simulation, Reversible logic technology.

12. **Teaching Experience:** More than 30years(Four year U.G. and more than twenty Six year P.G.)

1. Lal Bahadur Shastri P.G.College,Gonda, Lecturer selected from Higher Education Commission, Allahabad, January 16,1987 to April 30,1991
2. Dr.Ram Manohar Lohia Avadh University,Faizabad, Lecturer in the department of Physics and Electronics,from may 01,1991 to January16,1995
3. Dr.Ram Manohar Lohia Avadh University, Faizabad, Senior Lecturer in the department of Physics and Electronics, from January16, 1995 to January16, 2000.
4. Dr.Ram Manohar Lohia Avadh University, Faizabad, Associate Professor in the department of Physics and Electronics, from January16, 2000 to 2004.
5. Dr.Ram Manohar Lohia Avadh University, Faizabad, presently working as a Professor in the department of Physics and Electronics.

13. **Professional and Academic Awards/Medals**

- (a) Integrated Scholarship from 1974 to 1976.
- (b) **Silver Medal** for obtaining First Position in M.Sc. Previous examination 1981, Allahabad University, Allahabad (U.P.),India.
- (c) **Ward Vidyant Memorial Gold Medal** for securing highest marks and First position in M.Sc. final examination 1982, Allahabad University, Allahabad (U.P.), India.
- (d) Qualified **National Entrance Test** 1983 held by Council of Scientific and Industrial Research (C.S.I.R.), New Delhi.
- (e) “**Junior Research Fellowship**” by C.S.I.R. New Delhi India from January 1984 to December 1985.

(f) “**Senior Research Fellowship**” by C.S.I.R. New Delhi India from January 1986 to December 1986.

14. Member of academic bodies :

- (1). Founder member of International Academy of Physical Sciences, Allahabad.
- (2). Life member of Vigyan Parisad Prayag, Allahabad.

15. Research project :

- (1) One major research project obtained recently on 22 January, 2015 from UGC, the project amount Rs.1063000 and project entitled “**Design and Development of High Speed Low Power CMOS Circuit and their Application**”
- (2) Two minor research project provided by the Dr. R. M. L. Avadh University of Rs.2000 and 5500 under U.G.C., scheme.

16. Participation in conferences, seminars, workshops, Orientation and refresher courses

1. **Seventeenth orientation** program held at Allahabad University, Allahabad, 1992.
2. Computer operation and software development held at Dr. R.M.L. Avadh University Faizabad, 12-13 October, 1995.
3. **Sixth refresher course** in Physics held at B.H.U. Varanasi, December 18, 1995 To January 6, 1996.
4. Theoretical development of $\langle n10 \rangle$ tunneling model, IAPS conference held at MGKV Varanasi, Octo.14-15, 1996.
5. Simultaneous occurrence of potential minima and expression for polarization for $\langle 111 \rangle + \langle 100 \rangle$ model, 2nd conference of IAPS, Dec.13-14, 1997.
6. Diploma in computer application Teachers Training Program Modules (1), 1998.
7. Electric field effect in KI:OH⁻ system, national seminar on emerging trends in Electronics and computer, Dr.R.M.L. Avadh University, Faizabad, March 11-12, 1999
8. $\langle n10 \rangle$ tunneling model and paraelectric resonance in KBr:Li⁺ system, 3rd conference of international academy of physical sciences, Allahabad, December 17-19, 1999
9. **Refresher course in Physics** held at Sardar Patel University, Vallabh Vidhya Nagar

Gujrat December 27, 1999 to January 15, 2000.

10. Energy eigen value and specific heat for <111>+<100> tunneling model, Mahatma Gandhi Chitrakoot Vishwavidhyalaya, CONIAPS IV, Feb.25-27, 2001
11. Expression for entropy for <111> tunneling model, National conference on Technology and Management in rural area, Ambikapur (C.G.), 2002
12. Simulation of Push-Pull amplifier using PSPICE, National conference on Technology and Management in rural area, Ambikapur (C.G.), 2002
13. National seminar on materials and its applications held by the department of Physics and Electronics, Dr.R.M.L. Avadh University, Faizabad, Feb.27-28, 2003
14. Short course for spice models for advanced VLSI circuit simulation, South Campus, New Delhi, Nov.11-12, 2005
15. Assessment of pollution of Saryu river at Ayodhya through dielectric constant measurement and their effect on human health in nearby urban and rural areas, National Conference on impact of Electronics and Communication on Rural Development, Chouksey Engg. College, Bilaspur, Dec. 17-18., 2005.
16. The theoretical study of the effect of parasitic elements to increase the bandwidth of ring micro-strip antenna, 9th conference of International academy of Physical sciences, Feb.3-5, 2007
17. Simulation of CMOS current mirror circuit, national conference held at IET Mathura, March 23-25, 2007
18. Study of variation of concentration of nanoparticle with sintering time, national conference held at IET Mathura, March 23-25, 2007
19. National conference on current trends on Mathematics with special focus on operation research on computer held by department of mathematics and statistics, Dr. R.M.L. Avadh University Faizabad, March 28-29, 2010
20. Highly linear transconductor structure for nano-scale CMOS technology, 2nd National Conference on Nanomaterials and Nanotechnology, Dec.21-23, 2009
21. A VHDL based simulation of reversible logic gate property, National seminar on emerging applications on next generation networks, Jan.23-24, 2010

22. Study of polarization and specific heat for $\langle n|0\rangle$ tunneling model, 12th International Conference of International Academy of Physical Sciences Held at Jaipur, Dec. 22-24, 2010
23. National conference on climate change and its impact on biological community, organized by Department of Environmental Science, Dr. R. M. L. Avadh University, Faizabad, Feb. 12-13, 2011
24. Seminar on Earth Day, organized by Department of Environmental Science, Dr. R. M. L. Avadh University, Faizabad, April 22, 2011.

17. Administrative Assignments:

- (a) Member of Executive Committee, Department of Physics Allahabad University, Allahabad 1982-83.
- (b) Member of Management Committee, L.B.S. Post Graduate College Gonda, 1987-88.
- (c) Member of *Vidhya Parisad*, Dr. R. M. L. Avadh University, Faizabad, 1992-93.
- (d) Member of *Executive Council* Dr. R. M. L. Avadh University, Faizabad from November 01 1992 to October 31, 1993.
- (e) *Assistant Dean Student Welfare (A.D.S.W.)* Dr. R. M. L. Avadh University, Faizabad from 26 August 1996 to September 1998.
- (f) Acting Dean Student Welfare from July 27 to August 1997.
- (g) Assistant Coordinator Central Evaluation, Dr. R. M. L. Avadh University, Faizabad 1995.
- (h) Coordinator Coding & Decoding Cell, Dr. R. M. L. Avadh University, Faizabad 1996.
- (i) Coordinator Coding & Decoding Cell, Dr. R. M. L. Avadh University, Faizabad 1997.
- (j) Center Superintendent, K. P.S. Degree College, Sultanpur 1998.
- (k) Center Superintendent of Entrance and annual examination, Dr. R. M. L. Avadh University, Faizabad 2000.
- (l) Center Superintendent of M. B. A. Examination, Dr. R. M. L. Avadh University, Faizabad 2000-2001.

- (m) Member of Executive Committee central school, Faizabad 2001.
- (n) Member of Enquiry Committee, Dr. R. M. L. Avadh University, Faizabad 2001.
- (o) Member of Departmental Purchase Committee, Department of Physics & Electronics, Dr. R. M. L. Avadh University, Faizabad 2001.
- (p) **Dean Student's Welfare**, Dr. R.M.L. Avadh University, Faizabad, July 10, 2002 to 17 July 2005.
- (q) Member of Executive Council, Dr. R. M. L. Avadh University, Faizabad, 2005-06
- (r) Center Superintendent examination (Private/ Regular), Dr. R.M. L. Avadh University, Faizabad, 2006- 2007
- (s) Coordinator, Department of M.Ed, Dr. R.M.L. Avadh University, Faizabad, 2006 to 2017.
- (t) Coordinator Coding and Decoding cell, Dr. R.M.L. Avadh University, Faizabad, 2008-09
- (u) Center Superintendent of examination (Private & Regular), Dr.R.M.L. Avadh University, Faizabad, 2009
- (v) Coordinator Central Evaluation LLB,BBA,BCA, Dr. R.M. L. Avadh University, Faizabad, 2009-10
- (w) Coordinator of LLB Entrance Examination, Dr. R.M.L. Avadh University, Faizabad, 2007, 2008, 2009
- (x) Coordinator Coding and Decoding Cell, Dr. R.M.L. Avadh University, Faizabad, 2009-10
- (y) Member of *Vidhya Parisad*, Dr. R.M.L. Avadh University, Faizabad, 2009-11
- (z) Coordinator of B.P.Ed. entrance examination, Dr. R.M.L. Avadh University, Faizabad, 2006-07
- (aa) Observer in various Medical and Dental Colleges affiliated to Dr. R.M.L. Avadh University, Faizabad, 2006, 2007, 2008, 2009 and 2010.
- (bb) Coordinator, Center of excellence, Department of Physics & Electronics, Dr. R.M.L. Avadh University, Faizabad, from 2010 to till date.
- (cc) Observer in Raja Mohan Girls P.G. College affiliated to Dr. R.M.L. Avadh University Faizabad -2011.
- (dd) Observer in Kumari Chandrawati Degree College affiliated to Dr. R.M.L. Avadh University, Faizabad, 2011.
- (ee) Coordinator, M. Ed. Entrance test 2012, Dr. R.M.L. Avadh University, Faizabad
- (ff) Convener, Research Development Committee, Department of Physics & Electronics, Dr. R.M.L. Avadh University, Faizabad. From 19th July 2011 to till date.
- (gg) Convener, Board of Study Department of Physics & Electronics, Dr. R.M.L. Avadh University, Faizabad. From 19th July 2011 to till date.
- (hh) Head of Department, Department of Physics & Electronics, Dr. R.M.L. Avadh

- University, Faizabad. From 19th July 2011 to till date.
- (ii) Coordinator, Residential campus Entrance Exam and Counseling 2014-15, Dr. R.M.L. Avadh University, Faizabad
 - (jj) Center Superintendent of Nandini Nagar P.G. College Nawabganj Gonda, 2015.
 - (kk) Center Superintendent of U.P. B.Ed Entrance examination, 2015.
 - (ll) Center Superintendent of U.P. C.P.M.T. Entrance examination, 2015.
 - (mm) Chairman of the session in an International conference on Science and Technology- 2015, organized by SRMS College of Engineering and technology Bareilly, 27-28 February 2015.
 - (nn) Director, Institute of Engineering and Technology, Dr. R.M.L. Avadh University, Faizabad 06 April 2015 to 05 April 2017 and now working as a Director Since July 2017 to till date.
 - (oo) Coordinator, central evaluation 2015, Dr. R.M.L. Avadh University, Faizabad
 - (pp) Coordinator, L.L.B., M.Ed., B. P. Ed. and Residential campus Entrance Exam and counselling 2015- 2016, 2016-2017 and 2017-2018 Dr. R.M.L. Avadh University, Faizabad.
 - (qq) Dean Science, Dr. R.M.L. Avadh University, Faizabad, Since 06 April 2017 to till date.
 - (rr) Member of executive council, Dr. R.M.L. Avadh University, Faizabad Since 06 April 2017 to till date.
 - (ss) Coordinator, central evaluation of Science 2017, Dr. R.M.L. Avadh University, Faizabad
 - (tt) Coordinator, TEQIP-III project of world Bank MHRD, IET Dr. R.M.L. Avadh University, Faizabad.
 - (uu) Member of Board of Governance RUSA Dr. R.M.L. Avadh University, Faizabad 2017.
 - (vv) Member of Examination reform committee, Dr. R.M.L. Avadh University, Faizabad 2017.

18.(a) **Curriculum Development:** Actively engaged to develop new courses at M.Sc. level as a member of board of studies and in other capacities. Developed various laboratories like Integrated analog Electronics and Digital Electronics lab, Electronic circuit and Devices lab, communication and Microprocessor lab. Many student at M.Sc. level completed their project work on various topic of Physics and Electronics.

(b) **Cultural/Extra curricular activities:** During period of ADSW, DSW and as a member of NSS committee organized various games and cultural programmes at University level. During this period student of residential Department and its affiliated colleges obtained Silver, Gold and Other medals in national and International youth Festival held at Gorakhpur and Jaipur respectively. It is first time in the history this University that the same team of the student are able to get Gold medal in the University level, National

and International youth festival due to impartial and fine judgement of our team.

(c)**Sports/community and extension service:** Promoted and organized various sport Activities in the university campus during period of Dean Student Welfare, 2002-2005

19. Ph. D. produced/ enrolled for Ph. D. :

Ph.D. produced : Twelve

1. Dr. P.N. Singh
2. Dr. Mukesh Upadhyaya
3. Dr. Ambikesh Tripathi
4. Dr. Dev Narayan Pandey
5. Dr. Siya Ram Shukla
6. Dr. Ganga Ram Mishra
7. Dr. Jyotsna Mishra
8. Dr. H.P. Shukla
9. Dr. Anil Kumar Shukla
10. Dr. Sachin Kumar
11. Dr. Santosh Kumar Agrahari
12. Dr. Gaya Prasad

Ph.D Submitted : 1. Er. Vandana Shukla, Amity University, Lucknow.

Enrolled for Ph.D : 1. Er. Shiksha Jain, Dr. R.M.L. Avadh University, Faizabad

20. Research paper published/ communicated/presented in national/international journals/conferences/seminars/ Book Chapter

Research Papers published between year -1986-1999

1. Simultaneous occurrence of potential minima along two crystallographic directions in octahedral potential, G.K.Pandey, K.L.Pandey, M.Massey And Raj Kumar, Physical, Rev.B, ISSN: 1098-0121 (Print),1550-235X (Online), 1538-4489 (CD Rom)Vol.34, P1277-1286,1986. Impact Factor: 3.664(2013)
2. Stress induced splitting of vibrational absorption of CN^- ions in alkali halide crystals, M.Massey, K.L.Pandey, G.K.Pandey And Raj Kumar, Physical Rev.B, ISSN: 1098-0121 (Print),1550-235X (Online), 1538-4489 (CD Rom)Vol. 39, P10300-10309,1989. Impact Factor: 3.664(2013)
3. $\langle \text{N}10 \rangle$ tunneling model and paraelectric resonance in KBr: Li^+ system, proceeding of third conference of International Academy of Physical Sciences, Allahabad, P113-117, 1999.

Research Papers published between year -2000-2004

4. Energy eigen value and specific heat for $\langle 111 \rangle + \langle 100 \rangle$ tunneling model, Raj Kumar Tiwari and Prem N. Singh, journal of International Academy of Physical Science, Vol.4,P57-60, 2000
5. Possibility of simultaneous occurrence of potential minima for $\langle 111 \rangle + \langle 100 \rangle$ model, Raj Kumar Tiwari and Prem N. Singh Nat. Acad. of Science Allahabad, India,71(A), I , 2001.
6. Paraelectric Resonance In KI: OH⁻ System, Raj Kumar, L.K. Singh, and P.N.Singh, Physical Society of Japan, ISSN: 1347-4073(Online), 0031-9015(Print), Vol. 70, No.1, 2001.
7. Expression for energy and specific heat for $\langle 111 \rangle + \langle 100 \rangle$ tunneling model, Raj Kumar P.N.Singh and Mukesh Upadhyaya, Journal of Ultra Sci., ISSN: 0970-9150,Vol.14 (3), P545-548, 2002.
8. Expression for entropy for $\langle 111 \rangle$ tunneling model, Raj Kumar, Mukesh Upadhyaya and Ramanuj, proceeding of national conference on Technology and Management in Rural area, Ambikapur (C.G.), Octo.2002
9. Simulation of Push-Pull amplifier using PSPICE, Raj Kumar Tiwari, Ramanuj and Mukesh Upadhyaya, abstract published in the proc. of National Conference On Technology And Management in Rural area, Ambikapur (C.G.), Octo.2002
10. Behaviour of dielectric constant with temperature of $\langle 110 \rangle$ and $\langle 110 \rangle + \langle 111 \rangle$ tunneling model with applied uniaxial stress in $\langle 110 \rangle$ direction, Raj Kumar and Mukesh Upadhyaya, Bulletin of Pure and applied sciences, ISSN:0970-6569, Vol. 22(D), No.2, P115-119, 2003.

Research Papers published between year -2005-2009

11. The theoretical study of effective apertures and radiation of ring micro-strip antenna, Raj Kumar and Ambikesh Tripathi, Journal of Ultra Sci., ISSN: 0970-9150,Vol.17 (3), P 497-499, 2005.
12. Analysis of wall admittance for a ring micro-strip patch antenna and effect of surface waves, Raj Kumar and Ambikesh Tripathi, Bulletin of Pure and Applied Sci., ISSN:0970-6569, Vol. 24d, No.2, 2005.
13. Assessment of pollution of Saryu river at Ayodhya through dielectric constant measurement and their effect on human health in nearby urban and rural areas, Raj Kumar Tiwari, national conference on impact of electronics and communication on rural development, Chouksey Engg. College. Bilaspur, 17-18 Dec., 2005.
14. Dielectric constant for $\langle 100 \rangle$ tunneling model by applying electric field in $\langle 100 \rangle$, $\langle 110 \rangle$ and $\langle 111 \rangle$ crystallographic directions, Raj Kumar, Mukesh Upadhyaya, S.R.Shukla and D.N. Pandey, Jour, of Ultra Sci. ISSN: 0970-9150, Vo.18,No.3, P401-404, 2006.
15. Theoretical analysis of antenna gain for a ring micro-strip patch antenna, Raj Kumar Tiwari and Ambikesh Tripathi, Journal of Ultra Sci., ISSN: 0970-9150, Vol.18, No.3, P409-411, 2006.

16. Study of electric and magnetic polarization for various tunneling model in presence of electric and magnetic field separately and their comparison, Raj Kumar Tiwari, Mukesh Upadhyaya, S.R.Shukla, D.N. Pandey and Ambikesh Tripathi, Bulletin of Pure and Applied Science, ISSN:0970-6569, Vol. 25d,No.1,P21-24, 2006.
17. Behaviour of dielectric constant and refractive index for $\langle 110 \rangle$ and $\langle 110 \rangle + \langle 111 \rangle$ tunneling model, Raj Kumar, S.R.Shukla and Dev Narayan Pandey, Acta Ciencia Indica, ISSN: 0253-732X, Vol XXXIIP, No.3,P415-418, 2007.
18. Study of variation of electrical pressure for system $\langle 100 \rangle$ with applied electric field in different crystallographic directions, Raj Kumar Tiwari, D.N.Pandey and S.R. Shukla, Accepted, Asian Journal of Physics, ISSN:0971-3093, 2007.
19. The theoretical study of the effect of parasitic elements to increase the bandwidth of ring micro-strip antenna, Raj Kumar and Ambikesh Tripathi, 9th Conference of International Academy of Physical Sciences, Feb. 03-05, 2007.
20. Study of transmittance and quantum efficiency of alkali halide crystals, Raj Kumar, D.N.Pandey and S.R.Shukla, Journal of Ultra Sci, ISSN: 0970-9150, Vol 19, No2, P247-250, 2007.
21. Simulation of CMOS current mirror circuit, Raj Kumar Tiwari and Ganga Ram Mishra, Proceeding of National Conference on "Nano, Bio and Information Technology Integration" held at Siemet Mathura 23-25 March, 2007.
22. Study of variation of concentration of nanoparticle with sintering time, national conference on "Nano, Bio And Information Technology Integration" Held at Siemet Mathura, March 23-25, 2007.
23. A comparative study of BJT and CMOS current mirror circuit, Raj Kumar Tiwari and Ganga Ram Mishra, Bulletin of Pure and applied Sciences, ISSN:0970-6569, Vol.27d(No.1), P47-53, 2008
24. Study of electrical properties of impurity added systems using $\langle n10 \rangle$ tunneling model, Raj Kumar and S.R.Shukla, Jour. of Ultra Sci., ISSN: 0970-9150, Vol.20(1),P131-134,2008
25. A high performance low voltage level shifted cascode current mirror, R.K.Tiwari and Ganga Ram Mishra, Journal of Ultra Sci. of Phy. Sciences, ISSN: 0970-9150, Vol.21(1), P167-172 (2009)
26. A high performanace low voltage CMOS differential amplifier, R.K.Tiwari and Ganga Ram Mishra Journal of Ultra of Phy. Sci. ISSN: 0970-9150, Vol.21(3), P493-498, 2009
27. Energy efficient portable electronic devices using reversible logic gates, jour. of ultra Sci. of Phy. Sci., ISSN: 0970-9150, Vol.21(2),P 443-450, 2009
28. An introduction to emerging reversible logic technology and its applications, jour. of ultra sci. of Phy. Sci., ISSN: 0970-9150, Vol.21(3),P461-466, 2009
29. A new high performance CMOS differential amplifier, Ganga Ram Mishra and R.K.Tiwari, International Journal of Electronics Engineering Research (IJEER), ISSN:0975-6450, Vol.1, No.3, P177-184, 2009

Research Papers published between year-2010 To 2015

30. Highly linear transconductor structure for nano-scale CMOS technology, Anil Kumar Shukla Ganga Ram Mishra, Raj Kumar Tiwari and N.K.Mishra, Proceeding of 2nd National Conference on Nanomaterials and Nanotechnology, P89-93, Dec.21-23, 2009
31. A new approach for design of cell-phone battery backup time using reversible logic technology, H.P.Shukla and R.K.Tiwari international jour. of emerging technology and application in ,(IJ-ETA-ETS), ISSN:0974-3588, Vol.3,P70-73, 2010
32. An approach for designing of n:1 reversible multiplexer, R.K.Tiwari and H.P.Shukla, international jour. of emerging technology and application in (IJ-ETA-ETS), ISSN:0974-3588Vol.3,P92-95, 2010
33. A VHDL based simulation of reversible logic gate property, H.P Shukla and R.K.Tiwari, national seminar on emerging applications on next generation networks, Jan.23-24, 2010.
34. A new model for distortionless push-pull amplifier, Raj Kumar Tiwari and Joytsana Mishra, Bulletin of Pure and Applied Sciences, ISSN:0970-6569,Vol.29d (1),P53-61, 2010.
35. Study of polarization and specific heat for $\langle n10 \rangle$ tunneling model, Raj Kumar Tiwari,12th International Conference of International Academy of Physical Sciences Held at Jaipur,Dec.22-24, 2010.
36. Paraelectric behavior of $KI:OH^-$ system, Raj Kumar, Mukesh Upadhyaya and Suman, Jour. of Ultra Sci., ISSN: 0970-9150, Vol.22(2) P323-326, 2010.
37. Behavioural study of an opamp based square wave generator, Raj Kumar Tiwari and Joytsana Mishra, Jour. of Ultra Sci. ISSN: 0970-9150, Vol.22(2)P363-368, 2010.
38. Simulation studies of high frequency small signal amplifiers, Raj Kumar Tiwari and Joytsana Mishra , Jour. of Ultra Sci. ISSN: 0970-9150,Vol.22(2),P419-424, 2010.
39. A new design of opamp based regulator circuit, Raj Kumar Tiwari and Joytsana Mishra , Acta Ciencia Indica, ISSN:0253-732X, Vol.XXXVIP,No.4,P477-481, 2010.
40. A new reversible 'STG' gate and it's application for designing components of low power ALU, H.P.Shukla and R.K.Tiwari, accepted for Conatel 2011, San Pablo University, Arequipa, Peru
41. Raj Kumar Tiwari, Anil Shukla and Gaya Prasad paper entitled "Double differential pair CMOS Transconductor under nanoscale CMOS Techonology" in 3rd national conference on nanamaterials and nanotechnology, Amity university Lucknow, December 21-23, 2010.
42. Raj Kumar Tiwari and Santosh Kumar Agrahari, "Web-controlled Embedded System using Mobile" published in 'International Journal of Electronics and Communication Engineering' ISSN 0974-2166 Volume 4, Number 3 (2011), pp. 295-303.
43. Raj Kumar Tiwari, Santosh Kumar Agrahari, "Low power ARM processor based embedded system" published in 'International Journal Of Electronics And Communication Engineering & Technology (IJECET)', ISSN 0976 – 6464 (Print) ISSN 0976 – 6472 (Online), Volume 3, Issue 2, July- September (2012), pp. 369-374.

Journal Impact Factor (2012): 3.5930 (Calculated by GISI)

44. Raj Kumar Tiwari and Gaya Prasad, "A critical analysis of BJT, FET and nMOS parasitic capacitance circuit", Published in bulletin of pure and applied science, New Delhi, ISSN:0970-6569, Vol.31D (Physics) Issue (No.1), P. 59-63, 2012
45. Raj Kumar Tiwari, "Theoretical approach towards more generalized tunneling model", Published in bulletin of pure and applied science, New Delhi, ISSN:0970-6569, Vol.31D (Physics) Issue (No.2), P. 219-223, 2012.
46. Vandana Shukla, O. P. Singh, G. R. Mishra, R. K. Tiwari, "Design of a 4-bit 2's Complement Reversible Circuit for Arithmetic Logic Unit Applications", Special Issue of International Journal of Computer Applications The International Conference on Communication, Computing and Information Technology (ICCCMIT) pp. 1-5,2012.
47. Raj Kumar Tiwari, Sachin Kumar and G.R. Mishra, "A Study on Techniques of improvement in current mirrors using Wilson scheme" International Journal of Electronics and Communication Engineering & Technology (IJECET), ISSN 0976-6464 (Print), ISSN 0976-6472 (Online) Volume 3, Issue 2, July – September (2012), © IAEME, Impact Factor 3.5930.
48. Raj Kumar Tiwari, Sachin Kumar and G.R. Mishra, "A High Performance Novel PMOS Wilson Current Mirror", International Journal of Electronics Engineering, 4(2), 2012, Pp. 173-176, Serials Publications, ISSN: 0973-7383, Impact Factor 0.45.
49. Raj Kumar Tiwari, Sachin Kumar and G. R. Mishra, "A Class AB CCII Topology Based on Differential Pair with Modified Output Stage", International Journal of Electrical Engineering and Technology (IJEET), ISSN 0976-6545 (Print), ISSN 0976-6553 (online) Volume 4, Issue 1, January-February (2013), © IAEME, Impact Factor 3.2031.
50. Raj Kumar Tiwari, Gaya Prasad and Vineet Tiwari, "A Comparative Study of Multilevel Darlington Pair FET Amplifier" Published in Invertis Journal of Science and Technology, ISSN: 0973-8940, Vol.6, No. 4, pp. 205-210, 2013.
51. Raj Kumar Tiwari, H.P. Shukla, A. G. Rao and Vineet Tiwari, "Application of Reversible Logic Techniques in Low Power Computing Devices" Presented in the Conference NCRDE-2013 in Delhi South Campus, 18-20 Jan. 2013.
52. Raj Kumar Tiwari and Gaya Prasad, "A High Quality Factor Tuned Amplifier Circuit at High Frequency", Published in Acta Ciencia Indica, Vol. XXXIX, ISSN:0253-732X, pp. No.01-05, 2013.
53. Vandana Shukla, O. P. Singh, G. R. Mishra, R. K. Tiwari, "Novel Design of Optimized Multiplexer Circuit Using Reversible Logic" Proceeding of National Conference on "Challenges & Opportunities for Technological Innovation in India (COTII-2013)" 16th February, 2013.
54. Raj Kumar Tiwari, Sachin Kumar, G.R. Mishra, "A Modified Approach to Noise Analysis in CCII", Bulletin of Pure and Applied Sciences, pp. 23-35, Vol. 32D (Physics)

Issue (No.1), 2013, UGC Journal No. 9548, ISSN: 0970-6569 (Print version) ISSN:2320-3218 (online version).

55. Vandana Shukla, O. P. Singh, G. R. Mishra, R. K. Tiwari, "Novel Design of 4:1 Multiplexer Circuit Using Reversible Logic" International Journal of computational Engineering Research, pp.30-35, Vol. 03 Issue, 10, October 2013, UGC Journal No.47631, ISSN:2250-3005
56. Raj Kumar Tiwari, Santosh Kumar Agrahari, "ARM Processor based Embedded System for Remote Data Acquisition", International Journal of Electronics Communication and Computer Engineering (IJECCCE), ISSN: (Online):2249-071X, (Print) 2278-4209, Vol.5, Issue1(2014), pp.8-11(IJECCCE ICV 5.48) (Impact Factor:1).
57. Raj Kumar Tiwari and Gaya Prasad, "A New Circuit Model Of Low Voltage High Current Gain CMOS Compound Pair Amplifier" Published in International Journal of Electronics and Communication Engineering & Technology (IJECEET), ISSN 0976 – 6464(Print), ISSN 0976 – 6472(Online), Volume 5, Issue 4, April (2014), pp. 65-71 © IAEME, Journal Impact Factor (2014): 7.2836 (Calculated by GISI)
58. Raj Kumar Tiwari, Gaya Prasad and Monika Tiwari, "Low Input Voltage High Gain Wideband CMOS Push-Pull Amplifier for Tuned High Pass Filter" Published in International Journal of Research in Electronics & Communication Technology, Volume-2, Issue-3, May-June, 2014, pp. 27-31, © IASTER 2014, ISSN Online: 2347-6109, Print: 2348-0017.
59. Raj Kumar Tiwari, Gaya Prasad, "CMOS Compound Pair Wide Band Bio-Amplifier" Published in International Journal of Computational Engineering Research (IJCER), Vol.-04, Issue- 6, June-2014, pp. 57-62 ISSN (e): 2250-3005. Impact Factor: 1.145, (Computed by African Quality Centre for Journals).
60. Raj Kumar Tiwari, Santosh Kumar Agrahari, "Arduino Compatible World Wide Web Controlled Embeded System", International Journal of Engineering and Innovative Technology (IJEIT), ISSN: 2277-3754, Vol.3, Issue 9(2014), (Impact Factor:1.895) (ISO9001:2008 Certified).
61. Vandana Shukla, O. P. Singh, G. R. Mishra, R. K. Tiwari, "An optimized circuit of 8:1 multiplexer circuit using reversible logic gate", International conference on communication computing and information technology (ICCCMIT), 2014.
62. Vandana Shukla, O. P. Singh, G. R. Mishra, R. K. Tiwari, "A Novel Approach to design Decimal to BCD encoder with reversible logic", International conference of power control and embedded system IEEE, 2014.

63. Vandana Shukla, O. P. Singh, G. R. Mishra, R. K. Tiwari, "A Novel Approach to design Decimal to BCD encoder with reversible logic", Paper Published, 978-1-4799-5912-9/14/531.00 @2014 IEEE.
64. V Shukla, M. Tiwari, O. P. Singh, G. R. Mishra, R. K. Tiwari, "Design of a 4-bit arithmetic logic unit using reversible logic circuits", IRMS International conference of Science and Technology, 2015.
65. Raj Kumar Tiwari, Gaya Prasad, Ganga Ram Mishra and Monika Tiwari, "Large Bandwidth Low Power Two Stage CMOS Operational Amplifier", in an International conference on Science and Technology-2015, organized by SRMS College of Engineering and technology Bareilly, 27-28 February 2015.
66. Vandana shukla, O.P. Singh, G. R. Mishra, R.K.Tiwari, "A Novel Approach to Design 2-Bit Binary Arithmetic Logic Unit (ALU) Circuit using Optimized 8:1 Multiplexer with Reversible Logic", Journal of Communications software and system, pp 104-109, Vol.11, No.2 June, 2015, Scopus Indexed Journal UGC Journal No. 22065, ISSN:1845-6421.
67. Vandana shukla, O.P. Singh, G. R. Mishra, R.K.Tiwari, "Novel Approach to Design a 4-Bit Binary Comparator Circuit with Reversible Logic using CDSM Gate", International Journal of Business Data Communications and networking, 11(1), pp.36-49, January-March 2015, A Scopus Indexed Journal UGC Journal No.2665., ISSN: 1548-0631/ EISSN:1548-064X.
68. Vandana shukla, O.P. Singh, G. R. Mishra, R.K.Tiwari, "Application of CSMT gate for efficient reversible realization of binary to gray code converter circuit", IEEE UP Section Conference on Electrical Computer and Electronics (UPCON), Published by IEEE Explore, pp 1-6, 2015.
69. Vandana shukla, O.P. Singh, G. R. Mishra, R.K.Tiwari, "A Novel approach to design a redundant binary signed digit adder cell using reversible logic gates", IEEE UP Section Conference on Electrical Computer and Electronics (UPCON), Published by IEEE Explore, 2015.
70. Vandana shukla, O.P. Singh, G. R. Mishra, R.K.Tiwari, "Design and Implementation of Four Bit Binary Shifter Circuit Using Reversible Logic Approach", International Journal of Reconfigurable and Embedded System (IJRES), pp. 213-218, Vol.4, No.3, November 2015 ISSN:2089-4864.

Research Papers published between year-2016 to till date.

71. Vandana shukla, O.P. Singh, G. R. Mishra, R.K.Tiwari, "An Efficient Approach for Reversible Realization of 1:4 Demultiplexer Circuit", International Conference on Emerging Trends in Electrical, Electronics & Sustainable Energy Systems (ICETEESES-2016), pp.48-55.
72. Vandana shukla, O.P. Singh, G. R. Mishra, R.K.Tiwari, "A Novel Approach for Reversible Realization of 8-Bit Adder-Subtractor Circuit with Optimized Quantum Cost", Published by IEEE Explorer.

73. Rajinder Tiwari, G.R. Mishra, R.K.Tiwari, "A Novice Approach of Design of CMOS based Comparator using 0.18um CMOS technology for ASP applications", Sylwan, pp.330-341, Vol.160 Issue.1, Jan 2016, A SCI Indexed Journal UGC Journal No.22345, ISSN: 0039-7660.
74. Vandana shukla, O.P. Singh, G. R. Mishra, R.K.Tiwari, "Realization of Optimized Eight-Bit Binary Shifter using Reversible Logic Approach", International Journal of Services Technology and Management, pp:1-12, Vol. X No.Y, xxxx, Scopus Indexed Journal, UGC Journal No. 22065, ISBN/ISSN No. online:1741-525X, print:1460-6720.

Book Chapter

1. Vandana Shukla, O. P. Singh, G. R. Mishra, R. K. Tiwari, "Application of VSMT gate for optimization of multiplexer circuits using reversible logic gate", Book Chapter, ICETIT- 2015, Baba Saheb Bhim Rao Ambedkar Central University, Lucknow.