

DR. SANDEEP KUMAR OJHA [C.V.]

Associate Professor

Microelectronics & VLSI Design

Electronics & Communication Engineering IoT

Gorakhpur, Uttar Pradesh, India

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Sandeep

PROFESSIONAL PROFILE

Dr. Sandeep Kumar Ojha is an academician, researcher and electronics professional with **more than two decades of combined industrial and academic experience** in Electronics & Communication Engineering, Microelectronics, VLSI Design, semiconductor devices, IoT and electronic circuits. He holds a **Ph.D. in Microelectronics & VLSI Design** from Madan Mohan Malaviya University of Technology (MMMUT), Gorakhpur, an **M.Tech. in VLSI Design**, and a **B.Tech. in Electronics & Communication Engineering** from J.K. Institute, University of Allahabad.

His doctoral research focused on **analytical modeling and parameter extraction of Organic Light-Emitting Transistors (OLETs)**. His research interests include microelectronics, VLSI design, organic semiconductor devices, semiconductor device modeling, IoT and intelligent electronic systems.

He has held academic, research, departmental leadership and industrial positions, including **Associate Professor, Assistant Professor, Head of Department, Engineer, Senior Engineer, Circle Head, Manager and Senior Executive**. His industrial experience provides a strong foundation for application-oriented teaching, laboratory development, project supervision and industry-academia collaboration.

RESEARCH INTERESTS

- Microelectronics and VLSI Design
- Semiconductor Device Modeling
- Organic Electronics and Organic Semiconductor Devices
- Organic Light-Emitting Transistors (OLETs)
- Parameter Extraction of Electronic Devices
- VLSI Circuit Design

- IoT and Intelligent Sensor Systems
- Electronic Devices and Circuit Theory
- Linear Electronic Circuits
- Basic Electronics

CURRENT RESEARCH AREA

Analytical Modeling and Parameter Extraction of Organic Light-Emitting Transistors (OLETs)

The research focuses on analytical modeling, electrical characteristics and parameter extraction of advanced organic semiconductor devices, with emphasis on developing device-level models useful for the analysis and design of emerging electronic and optoelectronic systems.

EDUCATIONAL QUALIFICATIONS

Degree	Specialization	University Institute	/ Year	Percentage / CGPA	Division
Ph.D.	Microelectronics & VLSI Design	M.M.M.U.T., Gorakhpur	2022	80%	First
M.Tech.	VLSI Design	A.K.T.U., Lucknow	2015	75.05%	First
B.Tech.	Electronics & Communication Engineering	J.K.Institute, University of Allahabad	2002	63%	First
B.Sc.	Mathematics & Chemistry	DDU Gorakhpur University	1998	75%	First
Class XII	Mathematics	U.P. Board	1993	50%	Second
Class X	Mathematics & Science	U.P. Board	1991	60.2%	First

Ph.D. DETAILS

Degree: Doctor of Philosophy (Ph.D.)

Specialization: Microelectronics & VLSI Design

University: Madan Mohan Malaviya University of Technology, Gorakhpur

Year of Award: 2022

Research Area: Organic Electronics / Organic Semiconductor Devices

Research Topic:**Analytical Modeling and Parameter Extraction of Organic Light-Emitting Transistor (OLET)****PROFESSIONAL EXPERIENCE****Present Position****Associate Professor****Sandipani Technical Campus, Latur, Maharashtra****Date of Joining:** 10 August 2026**Current Pay:** ₹1,00,000 per month**INDUSTRIAL AND ACADEMIC EXPERIENCE**

Organization	Position	Period	Approx. Duration
Venus Control & Switchgear, Gurgaon	Engineer	Aug. 2002 – Jul. 2003	1 Year
Pylon Engineering, Greater Kailash, New Delhi	Senior Engineer	Jul. 2003 – Jan. 2007	3.5 Years
Emerson Network Power, Karol Bagh, New Delhi	Circle Head	Jan. 2007 – Jan. 2009	2 Years
Indus Towers Ltd., Gurgaon	Senior Executive (Band-E)	Jan. 2009 – Jun. 2009	0.5 Year
Reliance Communication, Gomti Nagar, Lucknow	Manager	Jun. 2009 – Jul. 2010	1 Year
GITM, Farrukhnagar, Gurgaon	Assistant Professor	Jul. 2010 – Jul. 2011	1 Year
LDCITS, Prayagraj	Assistant Professor	Aug. 2011 – Aug. 2014	3 Years
SAITM, Farrukhnagar, Gurgaon	Head of Department	Aug. 2014 – Aug. 2016	2 Years
KIPM, GIDA, Gorakhpur	Associate Professor	Aug. 2016 – May 2018	1.5 Years
ITM, GIDA, Gorakhpur	Assistant Professor	May 2018 – Nov. 2021	3.5 Years
M.M.M.U.T., Gorakhpur	Assistant Professor (Guest)	Sep. 2022 – Jun. 2025*	~2 Years

VNIT, Nagpur	Adhoc Assistant Professor	Jul. 2025 – May 2026	~1 Year
Sandipani Technical Campus, Latur	Associate Professor	From Aug. 2026	Present

Experience Summary

- **Pre-Ph.D. Experience:** Approximately 19 years
- **Post-Ph.D. Experience:** Approximately 3 years
- **Overall Industrial + Academic Experience: 20+ years**

*The dates in the supplied application form contain an apparent chronological typo ("Jan 2018") for the MMMUT position. The final CV should use the dates exactly as supported by the relevant experience certificate.

INDUSTRIAL EXPERIENCE

Dr. Ojha has substantial industry exposure in engineering, power electronics/controls, telecommunications and infrastructure organizations, including:

Venus Control & Switchgear	Engineer
Pylon Engineering	Senior Engineer
Emerson Network Power	Circle Head
Indus Towers Ltd.	Senior Executive – Band E
Reliance Communication	Manager

This industrial experience strengthens his ability to integrate **practical engineering applications, industry-oriented problem solving, project-based learning and professional skills** into academic teaching and research.

ACADEMIC & ADMINISTRATIVE EXPERIENCE

Dr. Sandeep Ojha has served in several academic leadership roles, including:

- Associate Professor
- Assistant Professor
- Head of Department
- Assistant Professor (Guest)

- Adhoc Assistant Professor
- Academic and laboratory responsibilities
- Curriculum and laboratory development
- Student project guidance
- Departmental academic coordination

His experience as **Head of Department** @ SAIMT, Gurgaon has provided exposure to academic administration, faculty coordination, student mentoring, curriculum implementation and departmental development.

RESEARCH PUBLICATIONS

Dr. Ojha has published research papers in **SCI-indexed international journals**, including journals published by established international publishers.

Selected SCI-Indexed Publications / Research Contributions

1. **Silicon – Springer Journal**
ISSN: 1876-9918
International SCI-indexed journal.
Status: **Published**
2. **Silicon – Springer Journal**
ISSN: 1876-9918
International SCI-indexed journal.
Status: **Published**
3. **Main Group Chemistry**
ISSN: 1745-1167
International SCI-indexed journal.
Status: **Published**
4. **Journal of Optics**
ISSN: 0974-6900
International SCI-indexed journal.
Status: **Published**
5. **Journal of Optics**
ISSN: 0974-6900
International SCI-indexed journal.
Status: **Published**
6. **Doklady Physics**
ISSN: 1028-3358
International SCI-indexed journal.
Status: **Published**

RECENT RESEARCH PUBLICATIONS

Selected publications reported for the latest academic year include:

- **Journal of Optics** – International SCI-indexed publication.
- **Doklady Physics** – International SCI-indexed publication.

Complete bibliographic details, including **paper titles, authorship, volume, issue, pages, year, DOI, impact factor and JCR quartile**, may be incorporated from the publication proofs for the final publication list.

RESEARCH STRENGTHS

- Analytical modeling of semiconductor devices
- Parameter extraction
- Organic semiconductor devices
- Organic optoelectronics
- OLET device structures
- Device characterization
- Microelectronics
- VLSI design
- Emerging electronic devices
- Sensor-oriented electronic systems
- Application-oriented research

TEACHING AREAS

Dr. Ojha is academically equipped to teach courses in:

Core Electronics

- Basic Electronics
- Electronic Devices
- Electronic Devices & Circuit Theory
- Linear Electronic Circuits
- Analog Electronics
- Digital Electronics
- Circuit Theory

Microelectronics & VLSI

- Microelectronics
- VLSI Design
- Semiconductor Devices
- Semiconductor Device Modeling
- Integrated Circuit Design
- CMOS/VLSI Technologies

Emerging Technologies

- Internet of Things (IoT)
- IoT Sensors and Actuators
- Intelligent Sensor Systems
- Embedded Systems
- Electronics for Smart Systems

ACADEMIC STRENGTHS

- Strong foundation in Electronics & Communication Engineering
- Specialized expertise in Microelectronics & VLSI Design
- Ph.D.-level expertise in emerging organic electronic devices
- Extensive teaching experience
- Extensive industrial experience
- Departmental leadership experience
- Research publication experience in SCI-indexed journals
- Ability to bridge theoretical concepts with industrial applications
- Experience in interdisciplinary research and teaching

PROFESSIONAL COMPETENCIES

Technical

- Microelectronics
- VLSI Design
- Semiconductor Devices
- Device Modeling
- Electronic Circuits

- Analog Electronics
- Digital Electronics
- IoT
- Sensor Systems

Academic

- Teaching and Learning
- Curriculum Development
- Laboratory Development
- Student Mentoring
- Project Supervision
- Research & Publication
- Academic Administration

Professional

- Engineering Management
- Team Leadership
- Departmental Coordination
- Industry Interaction
- Technical Problem Solving
- Project Management

PROFESSIONAL CAREER HIGHLIGHTS

- Ph.D. in **Microelectronics & VLSI Design** from M.M.M.U.T., Gorakhpur.
- M.Tech. in **VLSI Design** with 75.05%.
- B.Tech. in **Electronics & Communication Engineering** from J.K. Institute, University of Allahabad.
- More than **20 years of combined academic and industrial experience.**
- Experience across engineering, telecommunications, infrastructure and higher education sectors.
- Served as **Head of Department.**
- Served as **Associate Professor** at multiple institutions.
- Published research in **SCI-indexed international journals.**

- Research specialization in **Organic Light-Emitting Transistors (OLETs)**.
- Strong interdisciplinary background spanning **Microelectronics, VLSI, semiconductor devices, electronics and IoT**.

PROFESSIONAL MEMBERSHIPS / ACTIVITIES

Professional memberships, fellowships, reviewer activities, conferences, workshops, FDPs and certifications may be added here based on supporting certificates and records.

WORKSHOPS / TRAINING / FDPs

The applicant has participated in various **workshops, training programmes and academic development activities**. Documentary evidence is available and may be appended to the detailed CV.

DOCUMENTARY RECORD

The following supporting documents are available:

1. Educational certificates and mark sheets
2. Degree certificates
3. Experience certificates
4. SCI publication proofs
5. Workshop certificates
6. Training certificates
7. Other relevant academic/professional documents

REFEREES

1. Prof. Rajneesh Srivastava

Head of Department

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2. Dr. Pragya Gupta

Assistant Professor

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3. Mr. Hari Narayan Chaudhary

Deputy General Manager (DGM)

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Email: chaudharyhnc@gmail.com

PERSONAL DETAILS

Date of Birth: 16 December 1976

Gender: Male

Marital Status: Married

Blood Group: AB+

Nationality: Indian

Category: General

Languages: Hindi and English

Correspondence Address:

Sector-2, Shivaji Nagar, P.O. Barago, Ranibagh, Rustampur, Gorakhpur – 273016, Uttar Pradesh, India

DECLARATION

I hereby declare that the information furnished in this Curriculum Vitae is true and correct to the best of my knowledge and belief. I understand that any discrepancy or omission may be verified from the original documents and supporting certificates.

Place: Gorakhpur, Uttar Pradesh

Date: 11 August 2026



Dr. Sandeep Kumar Ojha

Applicant