SACHIN KUMAR

Address : A-4 Meet Nagar,
Street no-1, Shahdara,
Delhi- 110094
Mobile : +91 - 7827328094
Email : sachin.kumar029@gmail.com

OBJECTIVE

Quest to work in a professional environment with sincerity and dedication and to grow along with the organization.

EDUCATIONAL DETAILS

Course	College/University/Board	Year	Aggregate
Ph.D.	University of Delhi South Campus	Pursuing	--
M.sc. Electronics	University of Delhi South Campus	2012	70.60%
B.sc. (H) Electronics	University of Delhi, Delhi	2010	64.3%
XII	CBSE, delhi	2006	75.6%
X	CBSE, delhi	2003	60%

ACADEMIC CERTIFICATES

- **Q**ualified UGC **NET** (Electronic Science) for Lectureship in **June-2012**.
- **Q**ualified UGC **NET** (Electronic Science) for Lectureship in **December-2012**.
- **Q**ualified UGC **NET JRF** (Electronic Science) in **June-2013**.

ACHIEVEMENTS

- Obtained '**B**' Certificate in **N.C.C.**
- Obtained **First prize** in Circuit simulation at Inter-College Level.
- **Best Paper Presentation Award** in International Conference **ICMARS-2013**, Jodhpur, Rajasthan, India.
- **Best Paper Presentation Award** in International Conference **NANOCON-2014**, Pune, Maharashtra, India.

- **Second Prize** in **Badminton (Single)** at Inter Departmental Sports meet (**Varchasva 2016**) at **University of Delhi South Campus**.
- **Second Prize** in **Badminton (Doubles)** at Inter Departmental Sports meet (**Varchasva 2016**) at **University of Delhi South Campus**.
- **Second Prize** in **Volleyball (Captain)** at Inter Departmental Sports meet (**Varchasva 2016**) at **University of Delhi South Campus**.

SOFTWARE AND HARDWARE SKILLS

• Programming Languages	:	C, C++, C#, FORTRAN
• Processor and Microcontroller	:	8085, 8086, 8051
• Web Designing Tools	:	HTML, CSS,
• Working Platforms	:	Windows 2000/XP/Windows 7
• Software Package	:	PSpice, Visual studio, FORTRAN developer studio, AVR studio, MS Office.
• Hardware	:	PC Assembling, OS installation, software Installation, Hardware installation.

ACADEMIC PROJECT

- **Minor Project**
  - **Regulated Variable power supply** (-15V to +15V) and fix supply of 5V using **LM-7805** and **LM-317**.
  - Microcontroller 8051 based **Solar trekking system**

- **Summer Training**
  - 2 month summer training on **AVR Studio,** to design **Winding Resistance Meter** using Atmel 128, in **Real Time Systems..**

- **Major Project**
  - Analytical modeling of **SON-MOSFET** and comparison of simulated results with analytical results.

EXTRA CURRICULAR

- Served as **J.U.O.** in **N.C.C. Camp**
- **Organized a trip** in college at departmental level.
- **Organized a fest** in college at departmental level.
- Served as Local **Organizing Committee member** for a **National Conference** (NCRDE-2013) at **University of Delhi.**
- Served as **Organizing Committee member** for a Lecture series "**MiniColloquia on compact modeling of devices and circuits**" at **University of Delhi.**
- Served as **Organizing Committee member** for a Lecture series "**Short Course on Quantum Transport in Carbon Based Devices**" at **University of Delhi.**
- Served as **Organizing Committee member** for a Inter Departmental Sports meet "**Varchasva 2016**" at **University of Delhi South Campus.**

RESEARCH TOPIC and LIST OF PUBLICATION

"**Design and Development of Simulation Framework for Microelectronic Devices**"

Papers in International Journals

1. "*Nanoscale-RingFET: An Analytical drain Current Model including SCE's*" **Sachin Kumar**, Vandana Kumari, Sanjeev Singh, Manoj Saxena and Mridula Gupta, **IEEE Transactions on Electron Devices**, Vol.62(12), pp. 3965 - 3972 Nov. 2015. ISSN No. 0018-9383, DOI: 10.1109/TED.2015.2493578, Impact Factor: 2.512.

2. "*Sub-threshold Drain Current model of Double Gate RingFET (DG-RingFET) Architecture: An Analog and Linearity Performance Investigation for RFIC Design*" **Sachin Kumar**, Vandana Kumari, Sanjeev Singh, Manoj Saxena and Mridula Gupta, **IETE Technical Review**, pp. 1-10, Jan 2017. ISSN No. 0974-5971, DOI: http://dx.doi.org/10.1080/02564602.2016.1270174, Impact Factor: 1.330.

3. "*Reconnoiter the Leavening of Skin- Deep Insulated Extension On Analog Performance of RingFET*" **Sachin Kumar**, Vandana Kumari, Sanjeev Singh, Manoj Saxena and Mridula Gupta, **AEUE- International Journal of Electronics and Communication**, July 2017, Impact Factor: 1.147 (In Press).

4. "*Analytical Drain Current model for Gate and Channel Engineered RingFET (GCE-RingFET)*" **Sachin Kumar**, Vandana Kumari, Sanjeev Singh, Manoj Saxena and Mridula Gupta, **Elsevier-Superlattices and Microstructures**, July 2017, Impact Factor: 2.123 (In Press).

Papers in International Conferences

5. "*Hot Carrier Reliability and linearity Performance Investigation of Nanoscale RinFET for RFIC Design*" ***Sachin Kumar**, Vandana Kumari, Manoj Saxena, Mridula Gupta,* **International Conference on Microwave, Antenna, Propagation and Remote sensing (**ICMARS 2013**),** 11th – 14th December pp. 40-44, , Jodhpur, India.

6. "*TCAD Assessment of Dual Material Gate Nanoscale RingFET (DMG-RingFET) for Analog and Digital Applications*" ***Sachin Kumar**, Vandana Kumari, Manoj Saxena, Mridula Gupta,* **2nd International Conference on Device System and Circuit, (ICDCS-14),** *6th – 8th March,* Coimbatore, Tamilnadu, India, 2014.

7. "*Performance Investigation of Double Gate – RingFET (DG-RingFET) for Analog and Digital Circuit Design*" ***Sachin Kumar**, Vandana Kumari, Manoj Saxena, Mridula Gupta,* **International Conference on Nano Science and Technology (**ICONSAT 2014**)**, 3rd- 5th March, at Chandigarh, Punjab, India, 2014.

8. "*TCAD Assessment of Nanoscale Double Gate RingFET (DG-RingFET) Architecture: Analog and Linearity Performance Investigation for RFIC Design*" **Sachin Kumar**, Vandana Kumari, Manoj Saxena and Mridula Gupta, **International conference on Nanotechnology (NANOCON, Pune, India)**, October 14-15, 2014.

9. "*Investigation of III-V Compound Semiconductor Materials on Analog Performance of Nanoscale RingFET*", **Sachin Kumar**, Vandana Kumari, Manoj Saxena and Mridula

Gupta**, INDICON 2015**, Jamia Millia Islamia University, Delhi, India, 17-20 December, 2015.

10. "*Schottky Barrier Nanoscale RingFET: A novel approach for efficient Analog Applications*", **Sachin Kumar**, Vandana Kumari, Manoj Saxena and Mridula Gupta, **IWPSD 2015**, IISc Bangalore, Bangalore, Karnataka, India, 07-11 December, 2015.

PERSONAL DETAILS

Fathers' Name	:	Sh. Subhash Chand
Date of Birth	:	29rd March, 1988
Nationality	:	Indian
Gender	:	Male
Languages Known	:	English, Hindi
Permanent Address	:	A-4, Meet Nagar, Street no-2, Shahdara, Delhi - 110094
Hobbies	:	Interacting with People, Playing Volleyball, Listening Music.

(SACHIN KUMAR)