



Sameer Chouksey

Master of Technology

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ACADEMICS

Degree	Institute / University / Board	Year	%/CGPA
M.Tech. (Nanotechnology)	Indian Institute of Technology (IIT) Roorkee	2014	8.71
B.E. (Electronics & Communication)	RGPV Bhopal	2011	69.4
Class XII	M.P. Board	2007	80.67

PROFESIONAL EXPERIENCE

Since: Nov 2014

I am currently working with ANVISYS TECHNOLOGIES PVT LTD (An automation based start up). At Anvisys, I work on the development of **Home Automation** based products. The project I am currently working on is based on NXP 8051, ARM processor with PIR motion sensor and WiFi based wireless communication.

ACADEMIC/PROFESSIONAL ACHIEVEMENTS

- Contributed an article "Recent advancement in nanomaterials based Li-ion battery" to **Nanotech, Future Markets, Inc. (UK based Magazine)**
- Contributed an article "Carbon Nanotubes: Application in Li-ion battery" to **Nano Digest Magazine**
- Presented research work "High performance Li-ion battery based on CNT-Si Core-Shell structured anode" in 6th Bangalore-India-Nano, an **international conference**
- My research work "Si-CNT hybrid structure as Li-ion battery anode material" was presented at **IIM NMD ATM 2014** an international conference
- Completed certification on "Solar cells, Fuel cells and Batteries" by **Stanford University**
- Actively participated on ATVES (a national **conference on latest VLSI trends**)
- Actively participated on workshop on "**Formation of Smart Nanodevices**".
- Secured 99.17 percentile in GATE 2012 (**Electronics & Communication**)
- Completed four weeks training at BRBRAITT(Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training)
- Completed two weeks training on Communication Systems at M.P. Power Transmission Company Ltd
- Student in-charge of High-Temperature lab (contains **CVD**, microwave and different furnaces) at IITR

M.TECH. DISSERTATION

Title : Synthesis and characterization of Si-CNT based Li-ion battery anode.

Description : Silicon is known to offer highest theoretical specific capacity (4200mAh/g) as a Li-ion battery anode material. But volume expansion and contraction of Si particles during lithiation and delithiation processes hinder its commercialization. Carbon nanotubes are rolled graphene sheets of diameter in the range of nanometer, having large surface area and very high electrical and thermal conductivity. Due to its flexible nature, CNT acts as a buffer during the volume expansion and contraction of Si and prevents the electrode swelling which eventually leads to higher specific capacity and better performance.

TECHNICAL SKILLS

Hands-on Experience: Synthesis and characterization of CNT based Li-ion batteries, Thin film Deposition (CVD) Home Automation (projects based on 8051, ARM and Arduino based microcontrollers),

Sound knowledge of: Chemical Vapour Deposition (CVD), Carbon Nanotubes and its applications: Lithium ion battery, Field emission and Dye sensitized solar cells.
VLSI circuit design (CMOS circuit design and timing issues in digital circuits), Analog circuit design, Op-Amp, 8051, ARM based microcontrollers

Basic knowledge of: XRD, SEM, Raman Spectroscopy, Electronic circuit simulation tools: OrCAD, PSpice & Embedded C.

PROJECT

Title : Solar Seeker

Description: Solar seeker is an electronic device that keeps solar panel perpendicular to the sun and receives maximum sun light throughout the day which eventually leads to better efficiency. Under the project we developed LDR, LM311 comparator and H-bridge based circuit to perform the desired function.

EXTRA CURRICULAR ACHIEVEMENTS

- **Placement Representative** of CON, IIT Roorkee for year 2013-14.
- **Organizing Secretary** of **Cognizance'14**(Annual techfest of IITR) CON, IIT Roorkee
- Won third prize on AD-Valorem competition in Aureole-2008
- Won third prize under group activity category (skit) in college fest-2010
- Secured grade 'A' in the state level Environment Awareness competition

Information updated on 21 Jan. 15