

SONAL SUKHADEO FANDE

PhD Candidate

MEMS, Microfluidics and Nanoelectronics Lab, www.mmne.in

Department of Pharmacy / Electrical and Electronics Engineering

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Education:

- 08/2017- Master in Pharmacy (Quality Assurance)
07/2019
- Government college of pharmacy, Amravati
 - Studied types of analytical techniques, quality systems, and technology transfer, Pharmaceutical manufacturing techniques, audits, & pharmaceutical validation
 - **Master's thesis entitled: "Development and validation of RP-HPLC method on the anticancer drug in bulk and pharmaceutical dosage form".**
 - SGPA: 7.76
- 08/2013- Bachelor of Pharmacy,
07/2017
- Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, Maharashtra.
 - Studied multiple subjects under the umbrella of Pharmaceutical Sciences. With a major emphasis on Organic Chemistry, Medicinal Chemistry, Biochemistry and Pharmaceutics (Novel Drug Delivery System).
 - Project work **"Development of radial arm maze apparatus used in memory enhancing activity."**
 - SGPA:7.95

Current Positions:

- Designated as ICMR-SRF pursuing doctoral studies in MEMS, Microfluidic, and Nanoelectronic lab, Bits-Pilani, Hyderabad campus (India).

Achievements:

- Qualified GPAT 2017.
- Participated in a national-level poster presentation on "Quality risk management of drug in pharmaceutical" at 68h Indian pharmaceutical congress, Vishakhapatnam
- Awarded as ICMR-SRF from ICMR Scientific Project Review Group

Experience:

- **Executive** September 2019 – January 2021
Medi-assist, Pune
Worked as a quality assurance executive. Experienced in documentation, processing & verification of prescription monitoring, screening of disease conditions, treatment given, and the prescribed medicine.
- **Research intern** December 2018-April 2019
Farbe Firma, Ankleshwar

Learned the concept of quality control & assurance in the pharmaceutical parenteral plant. Learned all processes and tests performed in the quality control for the finished process, raw-material and in-process materials. Handling of various documents e.g. SOP, COA, Specification, ATR.

- **Intern**

October 2018-December 2018

Cubic lab, Ankleshwar

Completed the thesis work in the cubic lab. Performed characterization, and optimization using IR, and UV-Visible spectroscopy. Developed the sensitive method for anticancer drugs and validated using High-performance liquid chromatography.

Certificates/Workshop

- Completed certification in CSIR-SRPT Program on “green catalysis” under Dr. G Sudhakar organized by CSIR-NEIST Jorhat
- Attended a two-day workshop on the partners in energy environment engineering education and research for sustainable development by the directory of internationalization and quality development in higher education, Norway.
- Attended an online workshop on “Research methodology and scientific writing” organized by Biotechnika.

Key skills:

- Curiosity to Learn, interpersonal communication skills, team building, and worker
- Good orator, scientific communicator, and good presentation skills
- Scientific writing, science writing
- Electrochemical sensing of biomarkers, and pathogens, handling of Bacterial culture techniques, and Biomedical point-of-care devices.
- Expertise in ECIS (Electrical Cell-substrate Impedance Sensing), TEM, Electrochemical workstation, Fluorescence Microscope, UV, FT-IR, Raman, Chromatographic techniques (GC/LC-MS, HPLC), ZETA Potential and size Analyzer, and Surface Plasmon Resonance
- Lab view, Scilab, OriginPro, Corel 7.5, Solid work, MS-Office, etc.

Area of Interest:

- Theranostic Nanomaterials
- Electrochemical point-of-care devices, Biosensors
- Non-invasive biomarkers detection
- Biomedical devices

Publications:

1. Sonal Fande, Khairunnisa Amreen, D Sriram, and Sanket Goel, Microfluidic Electrochemical Device for Real-time Culturing and Interference-free Detection of *Escherichia coli*, *Analytica Chimica Acta*
2. Sonal Fande, Prohit Mishra, Rishabh Agrawal, Nitin Indurwade, Development of radial arm maze apparatus used in memory enhancing activity, *International Journal of Research and Analytical Review*, vol. 5(3), 2018.