Postdoctoral Fellow - RF / Mixed-Signal Circuits for 6G Applications

Indian Institute of Technology Gandhinagar (IITGN) invites applications for a Postdoctoral Fellow position in high-frequency analog/RF/mixed-signal circuit design for next-generation 6G systems. This appointment will contribute to ongoing projects on PLL/VCO design for sub-THz and technology-circuit co-optimization for future RF front-ends.

Position Overview:

- Design and simulation of Phase-Locked Loops (PLLs), Voltage-Controlled Oscillators (VCOs), and frequency synthesizers targeting mmWave and sub-THz bands.
- Investigate phase noise, tuning range, and power efficiency trade-offs at advanced technology nodes.

Eligibility & Qualifications:

- PhD in Electrical/Electronic Engineering with mandatory experience in Analog/Mixed-Signal IC Design.
- The percentage/grade points with respect to the academic qualifications will be a minimum of 60% or equivalent grade from Graduation onwards and 55% or equivalent grade in class 10th and 12th.
- Strong background in analog/mixed-signal/RF IC design with publications in recognized journals/conferences.
- Mandatory hands-on experience with Spectre/SpectreRF/ADS or equivalent EDA tools.
- Prior experience with PLL, VCO, oscillator design, or other high-frequency circuit design will be considered a plus.
- Tapeout experience will be considered an additional advantage.

Duration & Compensation:

- Initial appointment: 1 year (extendable based on performance and funding).
- Stipend: ₹72,00 per month (Consolidated).

Application Process:

- Apply via the official Google form (<u>link</u>) before 30th December, 2025
- Applications via email will not be considered.
- Shortlisted candidates will be interviewed, with final selection by committee recommendation.

Contact:

For queries, please write to Dr. Tarun Kumar Agarwal (tagarwal@iitgn.ac.in).