

Available !!

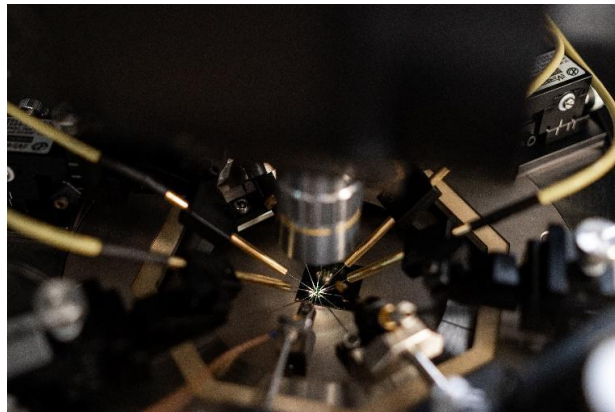


Current Compliance Implementation

Emerging memristors are novel circuit elements, originally described as the “fourth missing circuit element” and considered today as the future of nonvolatile memory. Different memristors have been developed and simulatively characterized by the Technion’s ASIC² research group, headed by Prof. Shahar Kvatinsky.

Current Compliance (CC) is a factor that can significantly influence the memristive devices performance.

State-of-the-art apparatus propose CC circuit with response time of $100\mu\text{Sec}$ to 1mSec , this slow response time may cause undesired behavior of the memristive devices or even damage the device. Our target is to potentially improve the measurement setup of research memristive devices by designing a small CC circuit.



Project Goals:

In this project, the students will get to know the memristive devices measurement setup, examine the CC behavior, simulate and implement a CC circuit.

Prerequisites:

- **Courses:** Electrical Engineering Lab 1+2
- **Recommended:** Integrated Circuits - Introduction to VLSI

For more information: ilan.l@technion.ac.il (Ilan Lipschutz)