

## Contents:

1 CURRICULUM VITAE .....	4
2 INTRODUCTION .....	8
3 NON-CONVENTIONAL TECHNIQUES .....	10
4 PRINCIPLE OF NOVEL BD-FG AND BD-QFG TECHNIQUES .....	11
4.1 Comparative study of Sub-volt Differential Difference Current Conveyors based on BD, QFG and BD-QFG techniques.....	16
5 NOVEL AUTOMATIC TUNING CIRCUIT FOR BULK-CONTROLLED SUB-THRESHOLD MOS RESISTORS .....	21
6 CONCLUSION .....	24
7 REFERENCES.....	25
ABSTRAKT .....	28
ABSTRACT .....	29