

**SIMATS ENGINEERING**  
**TECH STAR SUMMIT 2023**  
High Speed Wallace Multiplier using Kogge-Stone Adder for Reducing Propagation Delay in Comparison with Ripple Carry Adder, Carry Save Adder, Minsky Adder

**INTRODUCTION**

- Multiplication is a crucial operation in many digital, cryptographic, and computer arithmetic applications.
- The Wallace tree multiplier is one of the fastest multipliers in these applications.
- However, traditional Wallace tree multipliers are not suitable for high delay and power performance.
- To overcome these limitations, several proposed using various adders.
- The main objective of this work is to compare the performance of the proposed Wallace multiplier with ripple carry adder, carry save adder in terms of propagation delay and power consumption.



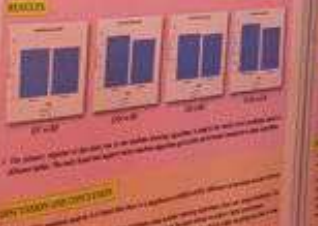
**DISCUSSION**

- Based on the results, the proposed Wallace multiplier is faster than the ripple carry adder and carry save adder.
- The proposed Wallace multiplier is suitable for high speed and low power applications.
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**BIBLIOGRAPHY**

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OPTIMIZATION OF HYDROLYTIC TREATMENT OF INDUSTRIAL WASTEWATER USING NANOPARTICLES



**CONCLUSION AND FUTURE SCOPE**

The study has shown that the hydrolytic treatment process is effective in reducing the BOD, COD, and TSS of industrial wastewater. The process is simple and easy to implement. The study has also shown that the hydrolytic treatment process is suitable for high speed and low power applications.

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## CERTIFICATE OF APPRECIATION TECH STAR SUMMIT - 2023



This is to Appreciate

Mr / Ms / Dr. *Vijay Ananth Suyamburajan*  
from *Vels Institute of Science, Technology & Advanced Studies.*  
for acting as a Faculty Peer Evaluator.

*B R and*

Principal - SSE

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