

Faculty Profile



Name: Dr. SOUMIT SAMADDER CHAUDHURY

Designation: Senior Assistant Professor

Teaching Areas: Electromagnetic Theory, RF and Microwave Engineering, Antenna Theory, Control Systems, Circuit Theory, Analog Circuits, Basic Electronics Engineering.

Research Interests: Substrate Integrated Waveguide Technology and planar multi-band filter designing, Metamaterial inspired multi-band filters and antennas, Development of independent band tuning in planar multiple band filters and antennas.

Education:

- Ph.D. from Indian Institute of Information Technology Allahabad in 2021.
- M.Tech in Radio Physics and Electronics from University of Calcutta, Kolkata in 2012.

Research / Selected Publications:

1. **Chaudhury, Soumit Samadder**, Seema Awasthi, and Rajat K. Singh. "Independent Control Over Passbands in Highly Selective and Compact Triple-Band Bandpass Filter Based on Substrate Integrated Waveguide." *Progress In Electromagnetics Research* (2023).
2. **Chaudhury, Soumit Samadder**, Seema Awasthi, and Rajat K. Singh. "Semi-circular Mushroom Resonator loaded SIW cavity based compact Triple-Band Bandpass Filter with high selectivity." *International Journal of RF and Microwave Computer-Aided Engineering*.
3. **Chaudhury, Soumit Samadder**, Seema Awasthi, and Rajat K. Singh. "Dual band bandpass filter based on semi-circular mushroom loaded substrate integrated waveguide." *Microwave and Optical Technology Letters* <https://doi.org/10.1002/mop.32720>.
4. **Chaudhury, Soumit Samadder**, Seema Awasthi, and Rajat K. Singh. "Dual band bandpass filter based on substrate integrated waveguide loaded with mushroom resonators." *Microwave and Optical Technology Letters* 62.6 (2020): 2226-2235.
5. **Chaudhury, Soumit Samadder**, Seema Awasthi, and Rajat Kumar Singh. "Dual-mode bandpass filter based on substrate-integrated waveguide loaded with complementary split ring resonators." *Microwave and Optical Technology Letters* 60.11 (2018): 2639-2642.
6. **S. S. Chaudhury**, S. Awasthi and R. K. Singh, "Independent Control Over the Passband of Bandpass Filter Based on Semi-Circular Mushroom Loaded Substrate Integrated Waveguide," *2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)*, Bangalore, India, 2022, pp. 56-59, doi: 10.1109/MAPCON56011.2022.10047632.
7. **Chaudhury, Soumit Samadder**, Seema Awasthi, and Rajat Kumar Singh. "Control over passband bandwidth of dual mode bandpass filter based on compact Substrate Integrated Waveguide." *2021 IEEE Indian Conference on Antennas and Propagation (InCAP)*. IEEE, 2021.
8. **S. S. Chaudhury**, S. Awasthi and R. K. Singh, "Independent control over center frequency and bandwidth of bandpass filter based on SIW loaded with rectangular mushroom resonators," *2020 IEEE Asia-Pacific Microwave Conference (APMC)*, Hong Kong, Hong Kong, 2020, pp. 302-304.
9. **Chaudhury, Soumit Samadder**, and Seema Awasthi. "Multiple passband circular cavity substrate integrated waveguide filter using asymmetric complementary split ring resonators." *2017 IEEE Asia Pacific Microwave Conference (APMC)*, Kuala Lumpur, Malaysia, IEEE, 2017.
10. **S. Samadder Chaudhury**, S. Awasthi and R. Kumar Singh, "Substrate integrated waveguide based dual mode bandpass filter using metal via and complementary split ring resonators," *2018 IEEE MTT-S International Microwave and RF Conference (IMaRC)*, Kolkata, India, 2018, pp. 1-4.

Professional Society memberships: Professional Member of IEEE Microwave Theory and Techniques Society.