SOUMYA SUNDAR PATTANAYAK

Tamluk, Purba Medinipur, WB-721636
9101343439/9476429342
soumyapa@gmail.com
www.researchgate.net/profile/Soumya_Pattanayak2
0000-0002-8606-5862

To work with a reputed institution as an Assistant professor, that will provide me a good platform to utilize my teaching & administration skills and will help me to grow my career.

EDUCATION

PhD National Institute of Technology Silchar, E&IE Dept. **Thesis submitted on 09.08.2021**
Thesis: Studies on Dielectric Properties of Agricultural Residue-Based Microwave Absorbing Materials.

M.Tech National Institute of Technology Agartala, E&IE Dept. **2015**
Thesis: "Modified Mathematical model of Photo-acoustic Tomography"
Advisor: Dr. Dibyendu Ghoshal

B.Tech Haldia Institute of Technology, WBUT, E&IE Dept. **2011**

AWARDS AND ACHIEVEMENT

Achievement
WBJEE Rank- 5701 2007
GATE 2013

Title of Fellowship
MHRD Scholarship (**Rs. 12,400/-**) 2013-2015
MHRD Scholarship (**Rs. 35,000/-**) 2016-2021

TEACHING EXPERIENCE

Designation	Institution	Period	Nature of Duties
Assistant Professor	Vignan Institute of Information Technology, Visakhapatnam, AP	27.12.2021-present	Teaching
Teaching Assistant	National Institute of Technology Silchar, Assam	Aug 2016 to July 2021	Lab duties, teaching assistantship
Assistant Professor	Modern Institute of Engineering & Technology Bandel, WB	Aug 2015 to May 2016	Teaching

COURSE TAUGHT

1. Control System
2. Circuit Theory
3. Sensor & Transducer
4. Electrical & Electronic Measurement
5. Electromagnetic Field Theory
6. IoT

KEY SKILLS

- CST Microwave Studio
- MATLAB
- ORIGIN
- EXCEL

RESEARCH OUTCOMES [CITATION: 103, H-INDEX: 7, I10-INDEX: 6]

Journal Publications

1. **S. S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Microwave Absorption Study of Dried Banana Leaves Based Single Layer Microwave Absorber," I. J. Microw. Wire. Techn., vol. 13(2), pp. 154-163, 2021. *Impact factor: 1.064 (SCIE)*.
2. **S. S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Design and Development of Banana Leaves based Double-Layer Microwave Absorber," IETE Journal of Research, 2020. Doi: 10.1080/03772063.2020.1844073. *Impact factor: 2.333 (SCIE)*.
3. **S. S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Investigation on corn husk based single-layer microwave absorber," I. J. Microw. Wire. Techn., vol. 13(8), pp. 779-788, 2021. *Impact factor: 1.064 (SCIE)*.
4. S. Roy, S. Ghosh, **S. S. Pattanayak**, U. Chakarborty, "Dual-polarized textile-based two/four element MIMO antenna with improved isolation for dual wideband application," I. J. RF Microw. Comput. Aided Eng., vol. 30, pp. 1-20. 2020. *Impact factor: 1.694(SCIE)*.
5. A. K. Biswas, **S. S. Pattanayak**, U. Chakarborty, "Evaluation of Dielectric Properties of Colored Resin Plastic Button to Design a Small MIMO Antenna," IEEE Tran. Instru. Measur. vol. 69, pp. 9170-9177, 2020. *Impact factor: 4.016 (SCIE)*.
6. A. K. Biswas, P. S. Swarnakar, **S. S. Pattanayak**, U. Chakarborty, "Compact MIMO Antenna with High Port Isolation for Triple-Band Applications Designed on a Biomass Material Manufactured with Coconut Husk," Microw. Opt. Techn. Let. vol. 62, pp. 3975–3984, 2020. *Impact factor: 1.392 (SCIE)*.
7. U. Das, D. Das, B. Paul, T. Rabha, **S. S. Pattanayak,** A**.** Kanjilal, S. Bhattacharjee, P. Sarkar, A. Roy, "Induced Vacancy Assisted Filamentary Resistive Switching Device Based on $RbPbI_3$-xClx Perovskite for RRAM Application," ACS Applied Materials & Interfaces, vol. 12, pp. 41718–41727, 2020. *Impact factor: 9.229 (SCIE)*.
8. A. Dey, **S.S. Pattanayak**, D. Mitra, W. Arif, "Investigation and design of enhanced decoupled UWB MIMO antenna for wearable applications," Microw. Opt. Techn. Let. vol. 63, pp. 845-861, 2021. *Impact factor: 1.392 (SCIE)*.
9. **S. S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Microwave absorption performance enhancement of corn husk-based microwave absorber", J. Mater. Sci.: Mater. Electr, vol. 32(1), pp. 1150-1160, 2021. *Impact factor: 2.478 (SCIE)*.
10. **S. S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Progress on Agricultural Residue Based Microwave Absorber: A Review and Prospects", J. Mater. Sci., Springer, vol. 56, pp. 4097-4119, 2021. *Impact factor: 4.220 (SCIE)*.
11. **S. S. Pattanayak,** and Soumen Biswas, "Effect of moisture content on dielectric properties of banana leaves and peels in frequency range of 1-20 GHz", Frequenz, 2021. Doi: 10.1515/freq-2021-0136. *Impact factor: 0.726 (SCIE)*.
12. **S. S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Microwave Absorption Efficiency of Double-Layer Corn Husk based Microwave Absorber", J. Mater. Sci.: Mater. Electr, vol. 33, pp. 5149–5160, 2022. *Impact factor: 2.478 (SCIE)*.
13. **S. S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Design from Waste: An Eco-efficient Microwave Absorber using Dried Banana Leaves and Charcoal Based Composite", J. Mater. Sci.: Mater. Electr, (accepted), 2022. *Impact factor: 2.478 (SCIE)*.

Conference Papers (Internationals)

1. **S.S. Pattanayak**, T. Bachar, and S. Sahoo, "Dielectric Relaxation Phenomena of N, N-Dimethylformamide in Different Solvents from Conductivity Measurement under 9.90 GHz Electric Field", International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC), IEEE Proceedings, Priyadarshini Engineering College, Chettiyappanur, Vaniyambadi - 635751, Vellore District, Tamil Nadu, India, 28th & 29th January 2018.
2. **S.S. Pattanayak**, T. Bachar, and S. Sahoo, "Dielectric Relaxation Phenomena of Aniline and Substituted Anilines with Acetonitrile under 9.36 GHz Electric Field," 3rd International Conference for Convergence in Technology (I2CT), IEEE Conference, The Gateway Hotel, XION Complex, Wakad Road, Pune, India. Apr 06-08, 2018.
3. **S.S. Pattanayak**, S. H. Laskar, and S. Sahoo, "A Review on Microwave Absorber Using Agricultural Residues. Research & Reviews," A Journal of Embedded System & Applications, 8(1), pp.12-18, 2020.
4. **S.S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Microwave Absorption Properties of Building Material Marble", 5th International Conference for Convergence in Technology (I2CT), IEEE Conference, The Gateway Hotel, XION Complex, Wakad Road, Pune, India. Apr 06-08, 2019.
5. **S.S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Modelling Coconut Fiber Coir and Charcoal Powder Made Microwave Absorber over X-band Frequency", 5th International Conference for Convergence in Technology (I2CT), IEEE Conference, The Gateway Hotel, XION Complex, Wakad Road, Pune, India. Apr 06-08, 2019.
6. **S.S. Pattanayak**, S. H. Laskar, and S. Sahoo, "Modelling Agricultural Residue based Microwave Absorber under X-band Frequency", TENSYMP - The IEEE Region 10 Symposium, Kolkata, 7-9th June, 2019.
7. S. Roy, S. Ghosh, P. B. Saha, M. S. Singh, A. Sarkhel, and **S. S. Pattanayak**, "Design and Analysis of Low Cost Biodegradable Substrate Material for Microwave Device Application", In 2021 IEEE Indian Conference on Antennas and Propagation (InCAP) 2021 Dec 13 (pp. 614-617). IEEE.

Details of Patent

Sl. No.	Patent Title	Name of the Applicant(s)	Patent No	Award Date	Agency/Country	Status
1	A method for developing corn husk-based microwave absorber	Dr. Swagatadeb Sahoo, ***Mr. Soumya Sundar Pattanayak,*** Dr. S. H. Laskar	**2021104490**	14.04. 2022	Australian Government/IP Australia	Granted

PROFESSIONAL SERVICE

1. **Student Coordinator**
   1. 2 days' workshop on LATEX for beginners, 6-7th January, 2020, E&IE Dept., NIT Silchar.
   2. 5 days' workshop on MATLAB Applications in Control System & Signal Processing, 18-22nd February, 2019, E&IE Dept., NIT Silchar.
   3. 5 days' workshop on Intelligent Sensing, Instrumentation & Control, 2017, E&IE Dept., NIT Silchar.
   4. Department Ph.D. Monitoring Committee (DPMC) student member.
2. **Reviewer**
   - IEEE Transaction on Electromagnetic Compatibility.
   - International Journal of Electronics.
   - Journal of Microwave Power and Electromagnetic Energy.
   - Physica Scripta, IOP Science.
   - Materials Research Express, IOP Science.