

BIO-DATA

1. **Name and full correspondence address**

Dr. Swagatadeb Sahoo

Assistant Professor

Department of Electronics & Communication Engineering.

National Institute of Technology-Jamshedpur, Jharkhand, Pin-831014, India.

2. **Email(s) and contact number(s)**

swagatdebmsit@yahoo.co.in; swagatadeb.ece@nitjsr.ac.in

M-9434369728

3. **Institution**

National Institute of Technology-Jamshedpur, Jharkhand, India.

4. **Date of Birth**

21.11.1977

5. **Gender (M/F/T)**

Male

6. **Category Gen/SC/ST/OBC**

General

7. **Whether differently abled (Yes/No)**

No

8. **Academic Qualification (Undergraduate Onwards)**

| | Degree | Year | Subject | University/Institution | % Marks |
|----|--------|------|--|--|---------|
| 1. | B.E | 2001 | Instrumentation and Electronics Engineering | B.M.S College of Engineering, Bangalore University, India. | 73.38 |
| 2. | M.E | 2010 | Electronics and Communication Engineering | Birla Institute of Technology (Mesra), Ranchi, India. | 77 |
| 3. | Ph.D | 2014 | Microwave , Broadband Dielectric Spectroscopy, Material Property | Jadavpur University, Kolkata, India. | |

9. **Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award**

Ph.D thesis title: "Dielectric relaxation of some interesting binary and single polar liquid mixtures in non polar solvents measured at 10 GHz electric field to study the structural and associational aspect."

Guide's Name: Prof Tapas Ranjan Midya

Institute/Organization/University: Jadavpur University, Kolkata, W.B, India

Year of Award: March, 2014

10. Work experience (in chronological order)

| Sl No | Positions held | Name of the Institute | From | To | Pay Scale |
|-------|---------------------|--|------------|------------|-------------|
| 1. | Assistant Professor | National Institute of Technology- Jamshedpur, Jharkhand, India | 14.06.2018 | Till date | 15600-39100 |
| 2. | Assistant Professor | National Institute of Technology- Silchar, Silchar, Assam, India | 11.07.2016 | 12.06.2018 | 15600-39100 |
| 3. | Lecturer | Dr.MeghnadSaha Institute of Technology (Government of West Bengal),Haldia, W.B,India | 05.04.2005 | 30.06.2016 | 21480 |
| 4. | Service Engineer | Satyen Construction, Haldia, West Bengal, India | 02.11.2001 | 04.04.2005 | 10000 |

11. Professional Recognition/Award/Prize/ Certificate, Fellowship received by the applicant

| S.No | Name of Award | Awarding Agency | Year |
|------|---|--|------|
| 1 | UGC-NET(Assistant Professor) | UGC | 2014 |
| 2 | Assistant Professor 1 st Rank | West Bengal College Service Commission | 2015 |

12. Detail of patents:

| S.No | Patent Title | Name of Applicant(s) | Patent No | Award Date | Agency/Country | Status |
|------|--|----------------------|------------|------------|------------------------------------|---------|
| 1 | A system and a process for evaluating dielectric relaxation in dipolar liquid. | Swagatadeb Sahoo | 2020104029 | 10.02.2021 | Australian Government/IP Australia | Granted |
| 2 | A method for developing corn husk-based microwave absorber | Swagatadeb Sahoo | | | Australian Government/IP Australia | Filed |

13. Publications (List of papers published in SCI Journals, in year wise descending order)

| S.No. | Author(s) | Title | Name of Journal | Volume | Page | Year |
|-------|---|--|--|---------------------------------------|-----------|------------------------|
| 1 | S.S.Pattanayak, S.H.Laskar, & S.Sahoo | Microwave Absorption Study of Dried Banana Leaves Based Single Layer Microwave Absorber. | Int. J. Microw. Wire. Techn. | 13(2) | 154-163 | 2021 |
| 2 | S.S.Pattanayak, S.H.Laskar, & S.Sahoo | Design and Development of Banana Leaves based Double-Layer Microwave Absorber. | IETE Journal of Research | Doi: 10.1080/03772063.2020.1844073 | | 2020 (accepted) |
| 3 | S.S.Pattanayak, S.H.Laskar, & S.Sahoo | Investigation of organic corn husk-based flat microwave absorber. | Int.J. Microwave and Wireless Technologies | Doi: 10.1017/S1759078720001555. | | 2020 (accepted) |
| 4 | S.S.Pattanayak, S.H.Laskar, & S.Sahoo | Progress on Agricultural Residue Based Microwave Absorber: A Review and Prospects. | J. Mater. Sci. | 56 | 4097–4119 | 2021 |
| 5 | S.S.Pattanayak, S.H.Laskar, & S.Sahoo | Microwave absorption performance enhancement of corn husk-based microwave absorber | J. Mater. Sci: Materials in Electronics | 32 | 1150-1160 | 2021 |
| 6 | D.Kumar, S.K.Sit, S.N.Singh & S.Sahoo | Dielectric relaxation behaviour of amide and phenol mixture in C ₆ H ₆ under microwave field, | J.Solution. Chem | 50(5) | 690-722 | 2021 |
| 7 | T.Bachhar, S.K.Sit, S.H.Laskar & S.Sahoo | Investigation of dielectric relaxation in Tributyl phosphate from susceptibility and conductivity measurement under microwave field. | Bulletin of Materials Science | 44 | 120-135 | 2021 |
| 8 | S.Sahoo | Investigation of dielectric relaxation in | Indian J.Phys. | 94(1) | 17-29 | 2020 |

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| | | dipolar liquids. | | | | |
| 9 | S.Sahoo | Dielectric relaxation study of propylene carbonate from susceptibility and conductivity measurement under broadband electric field. | Indian J.Phys. | 94(5) | 639-656 | 2020 |
| 10 | S.K.Sit, B.Gupta and S.Sahoo | Dielectric relaxation of Benzonitrile and Tetramethyl Urea with N,methylformamide in C ₆ H ₆ under 9.885 GHz electric field. | Ind. J. Pure & Appl. Phys. | 56 | 684-695 | 2018 |
| 11 | S.Sahoo and S.K.Sit | Dielectric relaxation of amides and tetrahydrofuran polar mixture in C ₆ H ₆ from conductivity measurement under 9.90 GHz electric field. | Pramana.J.Phys. | 88,No11 | 11-23 | 2017 |
| 12 | S.Sahoo and S.K.Sit | Dielectric relaxation Phenomena of alkyl acrylate on complexation with phenol dissolved in carbon tetrachloride under static and highfrequency electric field. | Ind. J. Pure & Appl. Phys. | 55 | 207-217 | 2017 |
| 13 | S.Sahoo and S.K.Sit | Double relaxation phenomena of nicotinamide, Benzamide and 1-propanol mixture dissolved in benzene measured at 9.385 GHz electric field. | Can. J. Phys | 94 | 1-12 | 2016 |
| 14 | S.Sahoo, T.R.Middya and S.K.Sit | Relaxation phenomena of acrylic esters and phenols in dilute solution of CCl ₄ under static and high | Ind. J. Pure & Appl. Phys. | 53 | 725-735 | 2015 |

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|----|---------------------------------------|---|----------------------------|---------|-----------|------|
| | | frequency electric field. | | | | |
| 15 | S.Sahoo, T.R.Midya and S.K.Sit | Dielectric relaxation of ethanol and <i>N</i> -methyl acetamide polar mixture in C ₆ H ₆ at 9.90 GHz. | Pramana.J.Phys. | 83,No.4 | 579-595 | 2014 |
| 16 | S.Sahoo, T.R.Midya and S.K.Sit | Relaxation phenomena of binary aprotic polar liquid mixture dissolved in nonpolar solvents under static and highfrequency electric field. | RASAYAN. J. Chem | 6,No.3 | 262-273 | 2013 |
| 17 | S.Sahoo, T.R.Midya and S.K.Sit | Dielectric behaviour of aprotic polar liquid dissolved in non-polar solvent under static and high frequency electric field | Ind. J. Pure & Appl. Phys. | 50 | 150-183 | 2012 |
| 18 | S.Sahoo and S.K.Sit | Dielectric behaviour of some amides and formamides dissolved in non polar solvents under static electric field | Pramana.J.Phys. | 77,No.2 | 395-404 | 2011 |
| 19 | S.Sahoo and S.K.Sit | Relaxation phenomenon of binary polar liquid mixture in C ₆ H ₆ from conductivity of solution measured at 10 GHz electric field | Indian. J.Phys. | 84(11) | 1549-1559 | 2010 |
| 20 | S.Sahoo and S.K.Sit | Double relaxation phenomena of associated binary polar liquid mixture in non polar solvent under high frequency electric field | Material Science &Engg B. | 163 | 31-39 | 2009 |
| 21 | S.Sahoo, K.Dutta, S.Acharyya ,S.K.Sit | Dielectric relaxation of binary polar liquid mixture measured in benzene at 10 GHz frequency | Pramana.J.Phys. | 70 | 543-552 | 2008 |
| 22 | S.Sahoo, K.Dutta, S.Acharyya | Dielectric relaxation of associated ternary liquid mixture | Ind.J. Pure & Appl. Phys. | 45 | 529-544 | 2007 |

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|--|----------|--|--|--|--|--|
| | ,S.K.Sit | from high frequency conductivity measurement of solution | | | | |
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14. Books/Reports/Chapters/General articles etc

| S.No | Title | Author's Name | Publisher | Year of Publication |
|------|---|------------------|------------------------|---------------------|
| 1. | Chapter Title: Carbon Tetrachloride: Dielectric relaxation study and uses. Book Title: Advances in Chemistry Research(Vol.62). | Swagatadeb Sahoo | Nova Science Publisher | 2020 |

15. Area of Specialisation:

Microwave Engineering, Material Characterisation, Microwave Absorbing material, Microwave Sensor, Bio-electromagnetics, Microwave material interaction, Broadband Dielectric Spectroscopy

16. Laboratory developed:

RF & Microwave Engineering Lab at NIT Jamshedpur

17. No of International Conference : 11(9 IEEE)

18. Details of Projects

Shortlisted but not recommended in DST-SERB Extra Mural Project Scheme(EMR-EECE); Cost: 61,56,000/- , File no: EMR/2017/002927/EEC

19. Industrial Experience

3 years Industrial experience as Project Engineer in Process Instrumentation sector.

20. Thesis Guided

Ph.D: 05 (Continuing)

M.Tech:07 (Completed)

B.Tech: 13(Completed)

21. Editorial Board Member

Journal of Polymer Science and Engineering

22. Papers reviewing from international journals

- i) Journal of Physics D, IOP Publication
- ii) Measurement Science and Technology, IOP Publication
- iii) Journal of Physics Communication, IOP Publication

- iv) Emerging Materials Research, Springer Publication
- v) American Journal of Science, Engineering and Technology, SciencePG Publication
- vi) Journal of Emergent Materials, Springer Publication
- vii) Journal of Physics: Condensed Matter, IOP Publication

23. Courses taught at NIT Jamshedpur, NIT Silchar and Dr.Meghnad Saha Institute of Technology

RF & Microwave Engineering, Electromagnetic theory, Measurement, Instrumentation and Control, Analytical Instrumentation, Biomedical Instrumentation, Process instrumentation, Process control, Digital Electronics, Electrical & Electronic Measurement system.

24. Member of Professional Body

Member of The Institution of Engineers(India), IEEE Professional Communication Society ,IEEE Microwave Theory and Techniques Society ,IEEE Dielectrics and Electrical Insulation Society,IEEE Electromagnetic Compatibility Society.