

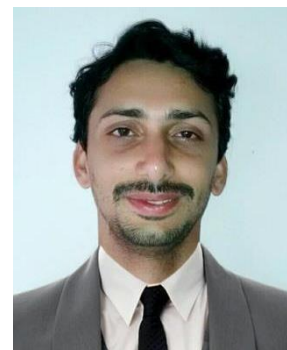
# CURRICULUM VITAE

## Personal Details

Name : **Dr. AHIPA T. N.**  
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Web of Science  
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Vidwan ID : 298172  
Date of Birth : 23-07-1986



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## Education

<b>Degree</b>	<b>Duration</b>
<b>Ph.D. in (Synthetic) Organic Chemistry</b> from <b>National Institute of Technology Karnataka, Surathkal, Mangalore, India.</b> Title of Thesis: "Synthesis, characterization and mesomorphic properties of new pyridine derivatives" under the guidance of Prof. A. V. Adhikari.	<b>2010-2014</b>
Degree awarded in the year 2014.	
<b>Five years integrated M.Sc (Hons) in Applied Chemistry</b> from <b>Sahyadri Science College (affiliated to Kuvempu University), Shimoga, India.</b>	<b>2004-2009</b>
Degree awarded in the year 2009.	

## Professional Experience

### Current Position:

Associate Professor at Centre for Nano and Material Science, Jain University, Jain Global Campus, Jakkasandra Post, Kanakapura Taluk, Ramanagara District, Karnataka.

Period: 1<sup>st</sup> March 2024 to till date.

Research Area: Organic Synthesis; Luminescent Liquid Crystals; Conjugated Polymers, Hole Transporting Materials, Solar Cells.

### Previous Employments:

1. Assistant Professor at Centre for Nano and Material Science, Jain University, Jain Global Campus, Jakkasandra Post, Kanakapura Taluk, Ramanagara District, Karnataka.

Period: 1<sup>st</sup> September 2015 to 29<sup>th</sup> February 2024.

Research Area: Organic Synthesis; Luminescent Liquid Crystals; Conjugated Polymers, Hole Transporting Materials, Solar Cells.

2. Senior Research Associate at Centre for Nano and Material Science, Jain University, Jain Global Campus, Jakkasandra Post, Kanakapura Taluk, Ramanagara District, Karnataka.

Period: 1<sup>st</sup> April 2014 to 31<sup>st</sup> August 2015.

Research Area: Synthesis of conjugated polymer for Organic Solar Cell Application.

3. Research Scholar at National Institute of Technology Karnataka (NITK) – Surathkal, Mangalore, Karnataka.

Period: 20<sup>th</sup> Dec. 2010 to 31<sup>st</sup> March 2014

Research Area: Organic Luminescent Liquid Crystals.

4. Junior Research Fellow at Indian Plywood Industries Research and Training Institute, Bangalore, Karnataka.

Period: 20<sup>th</sup> Oct. 2009 to 13<sup>th</sup> Dec. 2010

Project: Synthesis, Extraction & Characterization of Furfural based various Resin.

## Membership/Professional Affiliations

### **NATIONAL:**

- **Life Member** (2018), Indian Council of Chemists, Agra, India (Membership No.: LF/1826)

## **INTERNATIONAL:**

- **ACS Community Member** (2020), American Chemical Society (ACS), MEMBERSHIP NUMBER: 31009496; MEMBER JOIN DATE: 05/27/2020
- **Life Member** (2018), Asian Polymer Association (Membership No.: L532)

### **Editor/ Editorial Board Member**

- **Associate Editor** for “**Heliyon**” (Chemistry) Journal from 28th of April, 2022 (IF: 4.00)
- **Associate Editorial Board Member** [Field: Polymer Chemistry] for the journal “**Current Indian Science**”, Bentham Science, (Duration (2 years): March 22, 2022 to March 21, 2024)
- **Editorial Board Member** for **International Journal of Energy and Environmental Science** (IJEES)- Science Publishing Group (Duration: Dec 28, 2018 to Dec. 31, 2020)

### **Research Projects Undertaken**

- 1) **Ongoing project, 2020-23 (three years): Design and development of new cost effective carbazole based hole transporting materials for perovskite solar cells** sanctioned by **Science and Engineering Research Board (SERB)** under the scheme of **Core Research Grant (CRG)** (Project amount of **39,82,264-00**). Grant Number: CRG/2020/003151; Project start date: 22<sup>nd</sup>-December-2020.
- 2) **Ongoing project, 2022-23 (one year): Bio-active Pharmacophores Conjugated with Anti-tubercular (TB) Drugs to assess for their Biological Action** sanctioned by **Vision Group on Science and Technology (VGST)** under scheme **Research Grant for Scientists/Faculty (RGS/F)** (One Time Grant) (Project amount of **2,97,790-00**). 2021-22. [Dr. Dinesh Reddy (PI) and Dr. Ahipa T N (Co-PI)]
- 3) **Ongoing project, 2022-23 (one year): Design and Synthesis of New Polymers Via Direct Arylation Method** sanctioned by **JAIN (Deemed-to-be University)**, Bangalore under the scheme of **Minor Project** (Project amount of **2,00,000-00**). Ref: JU/MRP/CNMS/14/2022; Project start date: 12-December-2022; End date: 1-December-2023. (1 Year).

4) **Completed project, 2015-18 (three years): *Luminescent Liquid Crystals for Organo-electronic Devices*** sanctioned by **Science and Engineering Research Board (SERB)** under the scheme of **Young Scientist** (Project amount of **19,40,000-00**). Grant Number: YSS/2014/000835; Project start date: 14-Oct-2015; End date: 13-Oct-2018. (3 Years).

## Patents

### Indian Patents

1) Title of the Invention: Terpyridine Analogue And Method For Synthesis Thereof  
Name of Inventors : Dr. Ahipa T N; Samrudhi B M; Deepak Devadiga  
Application No.: 202341014623 A  
Date of filing of Application :04/03/2023  
Publication Date : 17/03/2023

2) Title of the Invention: Polyaniline-Coated Fluorescent Halloysite Nanoparticles Composition And Method For Synthesis Thereof  
Name of Inventors: Shajesh Palantavida, Vineeth S S, Dr. Ahipa T N  
Application No.: 202341044938  
Date of filing of Application: 04.07.2023  
Publication Date:

## Publications

### Book Chapters:

1. B.M. Samrudhi, Deepak Devadiga and Ahipa T.N.; Flame-retardant polymer nanocomposite films and coatings. In *Polymer Nanocomposite Films and Coatings, Processes, Fundamental Properties and Applications*, Edited by Mayank Pandey, Kalim Deshmukh, Chaudhery Mustansar Hussain, Woodhead Publishing, an imprint of Elsevier. 2024, pp 259-291. DOI: <https://doi.org/10.1016/B978-0-443-19139-8.00004-8>

2. Devadiga, D.; **Ahipa, T. N.**, Photoacoustic Spectroscopy Mediated Non-invasive Detection of Diabetics. In *Advanced Bioscience and Biosystems for Detection and Management of Diabetes*, Sadasivuni, K. K.; Cabibihan, J.-J.; A M Al-Ali, A. K.; Malik, R. A., Eds. Springer International Publishing: Cham, 2022; pp 165-180. DOI: 10.1007/978-3-030-99728-1\_8. Available from: [https://link.springer.com/chapter/10.1007/978-3-030-99728-1\\_8](https://link.springer.com/chapter/10.1007/978-3-030-99728-1_8)

3. Deepak Devadiga and **T.N. Ahipa** (January 2nd 2020). Betanin: A Red-Violet Pigment - Chemistry and Applications [Online First], IntechOpen, DOI: 10.5772/intechopen.88939. Available from: <https://www.intechopen.com/online-first/betanin-a-red-violet-pigment-chemistry-and-applications>.

## Papers published in international journals:

### Research Articles:

1. Anoop, K. M.; Chetri, R.; **Ahipa, T. N.**, Solvent optimization on novel organic passivating layer for the effective passivation of perovskite films. *Materials Science in Semiconductor Processing* **2024**, *174*, 108184. (IF:4.1). **Q1-Journal**
2. Devadiga, D.; **Ahipa, T. N.**; Bhat S, V.; Kumar, S., Dimeric cyanopyridine with methylenebis(oxy)-based linker: A tactic to luminescent molecules exhibiting room temperature liquid crystalline property. *Dyes and Pigments* **2023**, *220*, 111695.(IF:4.5). **Q1-Journal**
3. Nayak, S.; Gaonkar, S. L.; Devadiga, D.; **Ahipa, T. N.**; Sinha, R. K., Synthesis, characterization and photo-physical properties of sugar hydrazones having indole and 1,3,4-oxadiazole moiety. *Journal of Luminescence* **2023**, *263*, 120065. (IF:3.60) **Q2-Journal**
4. Devadiga, D.; **Ahipa, T. N.**; Bhat S, V.; Kumar, S.; Nayak, S., Investigation of luminescent and liquid crystalline properties of the supramolecular hydrogen bonded complexes formed from non-mesogenic pyridine derivatives and lauric acid. *Journal of Molecular Liquids* **2023**, *386*, 122515. (IF:6.00) **Q1-Journal**
5. Pasha, A.; Pramanik, P.; George, J. K.; Dhiman, N.; Zhang, H.; Sidhik, S.; Mandani, F.; Ranjan, S.; **Nagaraja, Ahipa Tantri**; Umopathy, S.; Mohite, A. D.; Balakrishna, R. G., Cationic and Anionic Vacancy Healing for Suppressed Halide Exchange and Phase Segregation in Perovskite Solar Cells. *ACS Energy Letters* **2023**, 3081-3087.(IF:22.00) **Q1-Journal**
6. Devadiga, D.; **Ahipa, T. N.**; Devadiga, D.; Selvakumar, M., New D–A propeller system with pyridine core for co-sensitization in dye sensitized solar cells. *Polyhedron* **2023**, *238*, 116407.(IF:2.6) **Q2-Journal**

7. Devadiga, D.; Selvakumar, M.; Devadiga, D.; Paramasivam, S.; **Ahipa, T. N.**; Shetty, P.; Kumar, S. S., Calcium-doped TiO<sub>2</sub> microspheres and near-infrared carbazole-based sensitizer for efficient co-sensitized dye-sensitized solar cell. *Journal of Materials Science* **2023**, *58* (13), 5718-5734. **(IF:4.5) Q1-Journal**
8. Samreen, S.; Devadiga, D.; Samrudhi, B. M.; **Ahipa, T. N.**; Sadasivuni, K. K., Synthesis and mechanochromic investigations of new cyanopyridone derivatives. *Dyes and Pigments* **2023**, *211*, 111080. **(IF:4.5). Q1-Journal**
9. Vishnumurthy, K. A.; Pramodini, S.; Poornesh, P.; Nagaraja, K. K.; **Ahipa, T. N.**, Design and synthesis of polyindole - ZnO nano composite for NLO applications. *Journal of the Indian Chemical Society* **2023**, *100* (1), 100827. **(IF:0.2). Q4-Journal**
10. Devadiga, D.; **Ahipa, T. N.**; Bhat, S. V.; Kumar, S., New Luminescent Pyridine-based Disc type Molecules: Synthesis, Photophysical, Electrochemical, and DFT studies. *Journal of Fluorescence* **2023**, *33* (2), 445-452. **(IF:2.7). Q2-Journal**
11. Devadiga, D.; Selvakumar, M.; Devadiga, D.; **Ahipa, T. N.**; Shetty, P.; Paramasivam, S.; Kumar, S. S., Synthesis and characterization of a new phenothiazine-based sensitizer/co-sensitizer for efficient dye-sensitized solar cell performance using a gel polymer electrolyte and Ni-TiO<sub>2</sub> as a photoanode. *New Journal of Chemistry* **2022**, *46* (44), 21373-21385. **(IF:3.3). Q1-Journal**
12. Devadiga, D.; **Ahipa T.N.**; S, V. B.; Kumar, S., New luminescent ordered liquid crystalline molecules with a 3-cyano-2-pyridone core unit. *Soft Matter* **2022**, *18* (43), 8320-8330. **(IF:3.4). Q1-Journal**
13. Devadiga, D.; **Ahipa, T. N.**, Protonation induced redshift in the fluorescence of a pyridine derivative as a potential anti-counterfeiting agent. *Soft Matter* **2022**, *18* (41), 8008-8016. **(IF:3.4). Q1-Journal**
14. Devadiga, D.; Selvakumar, M.; Devadiga, D.; Paramasivam, S.; **Ahipa, T. N.**; Shetty, P.; Kumar, S. S., Organic sensitizer with azine  $\pi$ -conjugated architecture as co-sensitizer and polymer-based electrolyte for efficient dye-sensitized solar cell. *Surfaces and Interfaces* **2022**, *33*, 102236. **(IF:6.2). Q2-Journal**

15. Devadiga, D.; Selvakumar, M.; Devadiga, D.; **Ahipa, T. N.**; Shetty, P.; Paramasivam, S.; Kumar, S. S., The improved performance of dye-sensitized solar cells using co-sensitization and polymer gel electrolyte. *International Journal of Energy Research* **2022**, *46* (9), 12974-12987. (IF:4.672). **Q1-Journal**
16. Devadiga, D.; Selvakumar, M.; Shetty, P.; Mahesha, M. G.; Devadiga, D.; **Ahipa, T. N.**; Kumar, S. S., Novel photosensitizer for dye-sensitized solar cell based on ionic liquid-doped blend polymer electrolyte. *Journal of Solid State Electrochemistry* **2021**, *25* (4), 1461-1478. (IF: 2.5). **Q2-Journal**
17. Devadiga, D.; **Ahipa, T. N.**, Cyanopyridone doped PMMA films as UV and blue light filters: Preparation and characterization. *Optik* **2021**, *229*, 166233. (IF: 3.1). **Q1-Journal**
18. Gautam, A.; Shahini, C. R.; Siddappa, A. P.; Jan Grzegorz, M.; Hemavathi, B.; **Ahipa, T. N.**; Srinivasa, B., Palladium(II) complexes of coumarin substituted 1,2,4-triazol-5-ylidenes for catalytic C–C cross-coupling and C–H activation reactions. *Journal of Organometallic Chemistry* **2021**, *934*, 121540. (IF: 2.3). **Q1-Journal**
19. Swathi, M. G.; Devadiga, D.; **Ahipa, T. N.**, Mechanochromic studies of new cyanopyridone based fluorescent conjugated molecules. *Journal of Luminescence* **2020**, *217*, 116818. (IF: 3.60). **Q2-Journal**
20. Hemavathi, B.; V, J.; Ramamurthy, P. C.; Pai, R. K.; K. N, N. U.; **T. N. Ahipa**; Soman, S.; Balakrishna, R. G., Variation of the donor and acceptor in D–A– $\pi$ –A based cyanopyridine dyes and its effect on dye sensitized solar cells. *New Journal of Chemistry* **2019**, *43* (39), 15673-15680. (IF: 3.3) **Q2-Journal**
21. B, H.; S, A.; Shanmukappagouda; J, K.; Devaiah C, T.; R, S.; Balakrishna, R. G.; T.N, Ahipa., New 2-methoxy-4,6-bis(4-(4-nitrostyryl)phenyl)nicotinonitrile: Synthesis, characterization and DSSC study. *Journal of Photochemistry and Photobiology A: Chemistry* **2019**, *377*, 75-79. (IF: 4.3) **Q2-Journal**
22. Hemavathi, B.; Jagadish, K.; **Ahipa, T. N.**; Balakrishna, R. G., Fabrication of TiO<sub>2</sub>/poly (3-Cyanopyridine-fluorene) hybrid nanocomposite as electron transport layer for

dye sensitized solar cell. *Journal of Electroanalytical Chemistry* **2019**, 838, 136-141. (IF: 4.50) Q1-Journal

23. Manohara, H. M.; Trupthi Devaiah, C.; Hemavathi, B.; **Ahipa, T. N.**, Synthesis, optical and electrochemical properties of new cyanopyridine derivatives. *Journal of Luminescence* **2019**, 206, 284-291. (IF: 3.60) Q2-Journal

24. Hemavathi, B.; Jayadev, V.; Pradhan, S. C.; Gokul, G.; Jagadish, K.; Chandrashekhara, G. K.; Ramamurthy, P. C.; Pai, R. K.; Narayanan Unni, K. N.; **Ahipa, T. N.**; Soman, S.; Geetha Balakrishna, R., Aggregation induced light harvesting of molecularly engineered D-A- $\pi$ -A carbazole dyes for dye-sensitized solar cells. *Solar Energy* **2018**, 174, 1085-1096. (IF: 6.7) Q2-Journal

25. Hemavathi, B.; Kesavan, A. V.; Chandrashekhara, G. K.; Ramamurthy, P. C.; Pai, R. K.; **Ahipa, T. N.**; Geetha Balakrishna, R., Polycondensation of thiophene-flanked cyanopyridine and carbazole via direct arylation polymerization for solar cell application. *Reactive and Functional Polymers* **2018**, 133, 1-8. (IF: 5.10) Q2-Journal

26. Swathi, M. G.; **Ahipa, T. N.**, Aggregation induced emission properties of new cyanopyridone derivatives. *Journal of Molecular Liquids* **2018**, 265, 747-755. (IF: 6.00) Q1-Journal

27. Hemavathi, B.; Trupthi Devaiah, C.; Swathi, M. G.; **Ahipa, T. N.**, Influence of terminal alkoxy chain lengths on the solvatochromic and AIE properties of 4,6-bis(4-(3,4-bis(alkoxy)styryl)phenyl)-2-methoxynicotinonitriles. *Dyes and Pigments* **2018**, 159, 1-7. (IF: 4.5) Q1-Journal

28. Trupthi Devaiah, C.; Hemavathi, B.; Ros, M. B.; Barberá, J.; Tejedor, R. M.; Sadasivuni, K. K.; **Ahipa, T. N.**, Blue luminescent cyanopyridone based molecular architectures: A structure-property study. *Journal of Molecular Liquids* **2018**, 255, 233-243. (IF: 6.00) Q1-Journal

29. Hemavathi, B.; Geetha, B. R.; **Ahipa, T. N.**, Alcohol soluble cyanopyridine based conjugated donor-acceptor polymers: Synthesis, photophysical and their charge transport behavior. *European Polymer Journal* **2017**, 95, 1-10. (IF: 6.00) Q1-Journal



- 30.** Ulla, H.; Kiran, M. R.; Garudachari, B.; **Ahipa, T. N.**; Tarafder, K.; Adhikari, A. V.; Umesh, G.; Satyanarayan, M. N., Blue emitting 1,8-naphthalimides with electron transport properties for organic light emitting diode applications. *Journal of Molecular Structure* **2017**, *1143*, 344-354. (IF: 3.80) **Q3-Journal**
- 31.** Trupthi Devaiah C.; Hemavathi B.; **Ahipa T.N.**, New blue emissive conjugated small molecules with low lying HOMO energy levels for optoelectronic applications. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2017**, *175*, 222-228. (IF: 4.4) **Q1-Journal**
- 32.** Hemavathi, B.; **Ahipa, T. N.**; Pillai, S.; Pai, R. K., Synthesis of Cyanopyridine Based Conjugated Polymer. *Data in Brief* **2016**, *7*, 1314–1320. (IF: 1.2)
- 33.** Pai, R. K.; Pillai, S.; **Ahipa, T. N.**, Microscopic analysis of polymer honeycomb thin film studied by PeakForce TUNA for organic solar cell application. *Journal of Renewable and Sustainable Energy* **2016**, *8* (2), 023703. (IF: 2.5). **Q4-Journal**
- 34.** Pai, R. K.; Hemavathi, B.; **Ahipa, T. N.**; Anoop, K. M., Solvent-induced surface morphology of polymer honeycomb thin films for power generating solar windows. *Environmental Progress & Sustainable Energy* **2016**, *35* (4), 1207-1214. (IF: 2.8). **Q3-Journal**
- 35.** Hemavathi, B.; **Ahipa, T. N.**; Pillai, S.; Pai, R. K., Cyanopyridine based conjugated polymer-synthesis and characterization. *Polymer* **2015**, *78*, 22-30. (IF: 4.60). **Q1-Journal**
- 36.** **Ahipa, T. N.**; K. M, A.; Krishna Pai, R., Hexagonal columnar liquid crystals as a processing additive to a P3HT:PCBM photoactive layer. *New Journal of Chemistry* **2015**, *39* (11), 8439-8445. (IF: 3.3) **Q2-Journal**
- 37.** **Ahipa, T. N.**, Synthesis, Characterization, and Mesomorphic Properties of New Pyridine Derivatives. *ChemistryOpen* **2015**, *4* (6), 786-791. (IF: 2.30) **Q3-Journal**
- 38.** **Ahipa, T. N.**; Adhikari, A. V., 2-Methoxypyridine derivatives: synthesis, liquid crystalline and photo-physical properties. *New Journal of Chemistry* **2014**, *38* (10), 5018-5029. (IF: 3.3) **Q2-Journal**

- 39. Ahipa, T. N.;** Adhikari, A. V., New cyanopyridone based luminescent liquid crystalline materials: synthesis and characterization. *Photochemical & Photobiological Sciences* **2014**, *13* (11), 1496-1508. **Cover Page Article. (IF: 3.1) Q2-Journal**
- 40. Ahipa, T. N.;** Kumar, V.; Shankar Rao, D. S.; Prasad, S. K.; Adhikari, A. V., New 4-(2-(4-alkoxyphenyl)-6-methoxypyridin-4-yl)benzotrioles: synthesis, liquid crystalline behavior and photo physical properties. *CrystEngComm* **2014**, *16* (25), 5573-5582. **(IF: 3.1) Q2-Journal**
- 41. Ahipa, T. N.;** Kamath, P. R.; Kumar, V.; Adhikari, A. V., New luminescent 2-methoxy-6-(4-methoxy-phenyl)-4-p-tolyl-nicotinonitrile: Synthesis, crystal structure, DFT and photophysical studies. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2014**, *124*, 230-236. **(IF: 4.4) Q1-Journal**
- 42. Ahipa, T. N.;** Kumar, V.; Adhikari, A. V., New columnar liquid crystal materials based on luminescent 2-methoxy-3-cyanopyridines. *Structural Chemistry* **2014**, *25* (4), 1165-1174. **(IF: 1.7) Q2-Journal**
- 43. Ahipa, T. N.;** Adhikari, A. V., Trihydrazone functionalized cyanopyridine discoids: synthesis, mesogenic and optical properties. *Tetrahedron Letters* **2014**, *55* (2), 495-500. **(IF: 1.80) Q2-Journal**
- 44. Ahipa, T. N.;** Adhikari, A. V., Synthesis and mesomorphism of new 2-methoxy-3-cyanopyridine mesogens, SPIE OPTO, SPIE: 2012; p 10.
- 45. Ahipa, T. N.;** Kumar, V.; Adhikari, A. V., Synthesis, structural analysis and solvatochromic behaviour of 4,6-bis (4-butoxyphenyl)-2-methoxynicotinonitrile mesogen. *Liquid Crystals* **2013**, *40* (1), 31-38. **(IF: 2.2) Q2-Journal**
- 46. Krishnamurthy, G.,** Parameswaranai, P., Naik, H.S., **Ahipa, T.N.,** Harisha, K.V. and Susrutha, S.R., 2009. Synthesis and anthelmintic activity of some 3d-metal ion complexes with 2-substituted benzimidazole. *J. Teach. Res. Chem. New York*, (2), p.16.

### **Review Articles:**

- 1. Devadiga, D.;** Tantri Nagaraja, Ahipa.; Devadiga, D.; Selvakumar, M., Minireview and Perspectives of Liquid Crystals in Perovskite Solar Cells. *Energy & Fuels* **2024**, *38* (2), 854-868. **(IF:5.3). Q1-Journal**

2. G, Srikanth.; Devadiga, D.; B. M, S.; T. N, Ahipa., Synthetic Strategies for 3,6-Substituted Carbazole-based Polymers and Their Opto-Electronic Applications—A Review. *Journal of Fluorescence* **2024**. DOI: <https://doi.org/10.1007/s10895-023-03535-2> (IF:2.7). **Q2-Journal**
3. Anoop, K. M.; **Ahipa, T. N.**, Recent advancements in the hole transporting layers of perovskite solar cells. *Solar Energy* **2023**, *263*, 111937. (IF: 6.7) **Q1-Journal**
4. Radhakrishna, K.; Manjunath, S. B.; Devadiga, D.; Chetri, R.; Nagaraja, A. T., Review on Carbazole-Based Hole Transporting Materials for Perovskite Solar Cell. *ACS Applied Energy Materials* **2023**, *6* (7), 3635-3664. (IF: 6.4) **Q1-Journal**
5. Devadiga, D.; T.N, A., Liquid Crystal-Based Water Treatment Membranes. *Advanced Materials Interfaces* **2022**, *9* (7), 2101276. (IF: 5.4) **Q1-Journal**
6. Devadiga, D.; Ahipa, T. N., A review on the emerging applications of 4-cyano-4'-alkylbiphenyl (nCB) liquid crystals beyond display. *Materials Science and Engineering: B* **2022**, *275*, 115522. (IF: 3.6) **Q1-Journal**
7. Gokul, V.; Devadiga, D.; Ahipa, T. N., Pyridine based mechanochromic compounds: An overview. *Dyes and Pigments* **2021**, *195*, 109692. (IF: 4.5) **Q1-Journal**
8. Devadiga, D.; Ahipa, T. N., An up-to-date review on halogen-bonded liquid crystals. *Journal of Molecular Liquids* **2021**, *333*, 115961. (IF: 6.00) **Q1-Journal**
9. Devadiga, D.; **Ahipa, T. N.**, Heterodimeric hydrogen-bonded mesogens comprising pyridine moiety: a review. *Liquid Crystals Reviews* **2020**, *8* (1), 5-28. (IF: 5.1). **Q1-Journal**
10. Devadiga, D.; **Ahipa, T. N.**, Recent advancements in the mesogens comprising of 1,3,5-triazine core moiety. *Liquid Crystals Reviews* **2019**, *7* (2), 107-141. (IF: 5.1). **Q1-Journal**
11. Devadiga, D.; **Ahipa, T. N.**, Recent synthetic advances in pyridine-based thermotropic mesogens. *RSC Advances* **2019**, *9* (40), 23161-23228. (IF: 3.90). **Q2-Journal**
12. Sadasivuni, K. K.; Deshmukh, K.; **Ahipa, T. N.**; Muzaffar, A.; Ahamed, M. B.; Pasha, S. K. K.; Al-Maadeed, M. A.-A., Flexible, biodegradable and recyclable solar cells:

a review. *Journal of Materials Science: Materials in Electronics* **2019**, 30 (2), 951-974. (IF: 2.8) Q2-Journal

13. Pai, R. K.; Ahipa, T. N.; B, Hemavathi, Rational design of benzodithiophene based conjugated polymers for better solar cell performance. *RSC Advances* **2016**, 6 (28), 23760-23774. (IF: 3.90). Q2-Journal

14. Hemavathi, B.; Ahipa, T. N.; Pai, R. K., Polymer design for solar cell – Current trend and future scenario. *European Polymer Journal* **2015**, 72, 309-340. (IF: 6.00). Q1-Journal

### Invited Talks:

1. Delivered an invited talk on “*Passivation of Surface Defects in MAPbI<sub>3</sub> Perovskite by a Novel Organic Molecule*” in the International Conference on SMART NANOTECHNOLOGIES (ICONSNT 2023) held during 6-8<sup>th</sup> July 2023 at GITAM University, Visakhapatnam, India jointly organized by Qatar University, Qatar; Inha University, S. Korea; University Teknologi MARA, Malaysia and Department of Chemistry, GITAM (Deemed-to-be University), India.

2. Delivered an invited talk on “*New pyridine derivatives as blue fluorescent emitters*” at Alumni Connect Webinar organized by Department of Integrated MSc (HONS) Chemistry in association with IQAC, Sahyadri Science College, Shimoga, 27<sup>th</sup> July 2021.

### **Work Highlighted in Magazine:**

1. **RCPSDC Skills Time**, Nurturing Skills & Talent for A Better Tomorrow, Issue 1, Volume 11, OCT-DEC 2023. Magazine highlighted our work, Devadiga, D.; Ahipa, T. N.; Bhat S, V.; Kumar, S., Dimeric cyanopyridine with methylenebis(oxy)-based linker: A tactic to luminescent molecules exhibiting room temperature liquid crystalline property. *Dyes and Pigments* 2023, 220, 111695.

### **Research papers presented in International/ National conference:**

1. Moksha D M, Deepak Devadiga, Samrudhi B M, and Ahipa T.N. “Design, Synthesis and Characterization of Push-Pull System Comprising 3-Cyan0-2- pyridone and Carbazole Units” at International Conference on Transformative Chemistry for a Sustainable Future organized by Department of Chemistry, St. Aloysius (Deemed-to-be University), Mangaluru - 575003, India, on 15th March 2024. (Oral Presentation)

2. Anusha D Shetty, Deepak Devadiga, Samrudhi B M, and **Ahipa T.N.** “Design, synthesis, characterization of 4-(4-bromophenyl)-6-(4-cyanophenyl)-2-oxo-1,2-dihydropyridine-3-carbonitrile with AIE property” at International Conference on Transformative Chemistry for a Sustainable Future organized by Department of Chemistry, St. Aloysius (Deemed-to-be University), Mangaluru - 575003, India, on 15th March 2024. (Oral Presentation)
3. Samrudhi B.M., Kay Thai Soe, Nopporn Rujisamphan, Deepak Devadiga, and **Ahipa T.N.** “Non-Bonding Electron Pairs of Lewis Base Groups Act as The Defect Passivation In Hybrid Perovskite Solar Cell” at Two-day International symposium entitled “Science Beyond Boundary: Invention, Discovery, Innovation and Society” “RASAYAN 17” jointly organized by Chirantan Rasayan Sanstha, Midnapore, West Bengal & JAIN (Deemed-to-be University), Bengalore, Karnataka in collaboration with American Chemical Society during 9th - 10th October 2023. (Poster Presentation)
4. Samrudhi B.M. and **Ahipa T.N.** “Carbazole based electron blocking materials for perovskite solar cells” at International Conference on Sustainable Chemistry and Engineering (SusChemE 2.0), organized by Institute of Chemical Technology, Mumbai during 14th - 16th September 2023. (Oral Presentation)
5. Rachel Chetri and **Ahipa T.N.** “New N-heterocyclic Based Molecule as a Hole Transporting Material” at International Conference on Sustainable Chemistry and Engineering (SusChemE 2.0), organized by Institute of Chemical Technology, Mumbai during 14th - 16th September 2023. (Poster Presentation)
6. Samrudhi B.M. and **Ahipa T.N.** “Theoretical investigation on carbazole based hole transporting materials for perovskite solar cells” at International Conference on Advances in Materials, Ceramics and Engineering Sciences (AMCES-2023), organized by Department of Aeronautical, Biotechnology, Civil, Chemical, Chemistry and Mechanical Engineering held at Dayanand Sagar College of Engineering, Bengaluru during 13th -15th March 2023. (Oral Presentation)
7. Rachel Chetri and **Ahipa T.N.** “New Carbazole - Based Molecule As A Hole Transporting Material” at Second International Conference on Advanced Materials for Health, Energy and Environment (AMHEE-2023) organized by Department of Chemistry, Biotechnology, Environmental Engineering, Polymer Science and Technology from 28 February 2023 to 02 March 2023, SJCE, JSSSTU, Mysuru. (Oral Presentation)
8. Rachel Chetri, Samrudhi B.M., Deepak Devadiga, Anoop K.M., and **Ahipa T.N.** “New carbazole based hole transport material for perovskite solar cell” at Second international conference on “Nanomaterials and Sustainable Applications (NANO-SA-2023)” organized by Institute of Chemical Technology Mumbai Marathwada Campus Jalna at Rama International Hotel, Aurangabad, Maharashtra. India during January 10-11, 2023. (Poster Presentation)

9. Deepak Devadiga and **Ahipa T.N.** “Room temperature dimeric pyridine-based liquid crystals” at online “Second International e-Conference on Chemicals & Materials for Emergent Technologies (CheMET\_2022)” jointly organized by Center for Advanced Materials-Qatar University, Emergent Materials Journal & Chemistry Africa Journal-Springer, 17<sup>th</sup> -18<sup>th</sup> October 2022.(Poster Presentation)
10. Samrudhi B.M. and **Ahipa T.N.** “Structural, Thermal, Electrochemical and photophysical properties of cyanopyridone derivative” at online “Second International e-Conference on Chemicals & Materials for Emergent Technologies (CheMET\_2022)” jointly organized by Center for Advanced Materials-Qatar University, Emergent Materials Journal & Chemistry Africa Journal-Springer, 17<sup>th</sup> -18<sup>th</sup> October 2022. (Poster Presentation)
11. Deepak Devadiga and **Ahipa T.N.** “Design and Synthesis of 3-cyano-2-pyridone-based Liquid Crystalline Molecules” at International Virtual Conference on Current Scenario in Chemical Sciences (CSCS – 2022) organized by School of Chemical Sciences, Moolji Jaitha College (Autonomous), Jalgaon (MS), India on 16th and 17th September 2022.(Oral Presentation)
12. Deepak Devadiga and **Ahipa T.N.** “New Pyridine-based Conjugated System for Reversible Acid Base Sensor” Presented a poster in the International workshop on Recent Trends in Functional Nanomaterials for Technological Applications held on 2nd & 3rd August 2022 organized by Centre for Nanoscience and Nanotechnology, Amity University, Mumbai and ICON Labs, Navi Mumbai, India.
13. Deepak Devadiga and **Ahipa T.N.** “Synthesis of Pyridine-based Small Luminescent Molecules and Evaluation of Photophysical Properties” International Conference on Chemical Sciences: Academia, Industry & Society Interface (ICCS 2022) Interface” jointly organized by the Department of Chemistry, Post Graduate Centre, Jyoti Nivas College Autonomous Bangalore and Karnataka Science and Technology Academy, Department Of Science And Technology, Government Of Karnataka from 23rd to 25th June 2022. (Oral Presentation)
14. Samrudhi B.M. and **Ahipa T.N.** “Synthesis of New Terpyridine Analogue and Its Photophysical Properties” International Conference on Chemical Sciences: Academia, Industry & Society Interface (ICCS 2022) Interface” jointly organized by the Department of Chemistry, Post Graduate Centre, Jyoti Nivas College Autonomous Bangalore and Karnataka Science and Technology Academy, Department Of Science And Technology, Government Of Karnataka from 23rd to 25th June 2022. (Oral Presentation)
15. Deepak Devadiga and **Ahipa T.N.** “Synthesis and Characterization of PMMA Films Doped by Cyanopyridone - based Blue Emissive Conjugated Small Molecule”. National Conference on Trends in Materials and Chemical Sciences- TMCS 2019 organized by Department of Chemistry, Manipal Institute of Technology Manipal

Academy of Higher Education, Manipal 576 104, Karnataka, India, 4<sup>th</sup> -5<sup>th</sup>, November 2019. (Oral Presentation)

**16.** Swathi M.G.; Deepak Devadiga and **Ahipa T.N.** “Mechanochromic Studies of New Cyanopyridone Derivatives”. International Conference on Modern Approaches of Chemical Science and Nanomaterials – 2019 (ICMACSN-2019), Organized by Mody University of Science and Technology, Lakshmanagarh, Rajasthan, India, 26<sup>th</sup>-27<sup>th</sup> August 2019. (Poster Presentation)

**17.** Deepak Devadiga and **Ahipa T.N.** “Study of hydrogen bonded complexes by using IR and Raman techniques”. International Conference on Frontiers in Materials from Basic Science to Real-time Applications (F2DM) organized by Centre for Nano and Material Sciences, JAIN (Deemed-to-be University), Jain Global Campus, Kanakapura Taluk, Ramanagara District - 562 112, 13-16<sup>th</sup> March, 2019. (Poster Presentation)

**18.** Meenakshy K.R.; Nagaraju D.H.; and **Ahipa T.N.** “Electron barrier properties of conjugated organic semiconductors for molecular wire applications”. International Conference on Frontiers in Materials from Basic Science to Real-time Applications (F2DM) organized by Centre for Nano and Material Sciences, JAIN (Deemed-to-be University), Jain Global Campus, Kanakapura Taluk, Ramanagara District - 562 112, 13-16<sup>th</sup> March, 2019. (Poster Presentation)

**19.** Swathi M.G. and **Ahipa T.N.** “Aggregation induced emission properties of new cyanopyridone derivatives”. International Conference on Green Methods for Separation, Purification and Nanomaterial Synthesis 2018 (GMSP & NS 2018), organized by Centre for Nano and Material Sciences, Jain University, Jain Global Campus, Kanakapura Taluk, Ramanagara District - 562 112, 24-25 April, 2018. (Poster Presentation)

**20.** Hemavathi B., Trupthi Devaiah C., Swathi M.G., and **Ahipa T.N.**, “Influence of terminal alkoxy chain lengths on the solvatochromic and AIE properties of 4,6-bis(4-(3,4-bis(alkoxy)styryl)phenyl)-2-methoxynicotinonitriles”. International Conference on Green Methods for Separation, Purification and Nanomaterial Synthesis 2018 (GMSP & NS 2018), organized by Centre for Nano and Material Sciences, Jain University, Jain Global Campus, Kanakapura Taluk, Ramanagara District - 562 112, 24-25 April, 2018. (Poster Presentation)

**21.** Samreen S. and **Ahipa T.N.**, “New cyanopyridone derivatives: Design, synthesis and their photophysical properties”. International Conference on Green Methods for Separation, Purification and Nanomaterial Synthesis 2018 (GMSP & NS 2018), organized by Centre for Nano and Material Sciences, Jain University, Jain Global Campus, Kanakapura Taluk, Ramanagara District - 562 112, 24-25 April, 2018. (Poster Presentation)

**22.** Hemavathi B., Suraj Soman, and **Ahipa T.N.**, Geetha R Balakrishna, “New 3-cyanopyridine  $\pi$ -extended carbazole based dye for dye sensitized solar cells”. International

symposium on functional materials (ISFM-2018): Energy and Bio-medical applications, 13-15 April 2018, Hotel Shivalikview, Chandigarh, India. (Oral Presentation)

**23.** Manohara H.M., Trupthi Devaiah C., Hemavathi B., **Ahipa T.N.**, “Design, Synthesis and Structural Characterization of New Pyridine Based Luminescent Materials”. International Conference on Green Chemistry & Nanotechnology Opportunities & Challenges 2017, organized by Department of Chemistry, Food Science and Technology & DDU Kaushal Kendra held at ST ALOYSIUS COLLEGE (Autonomous), Mangalore, 575003, on 27<sup>th</sup> - 28<sup>th</sup> February 2017. (Oral Presentation)

**24.** Hemavathi B., Kusuma J., Shanmukappagouda., Trupthi Devaiah C., R. Geetha Balakrishna and **Ahipa T.N.**, “Enhancement of Photovoltaic Performance in Dye Sensitized Solar Cell by Co-sensitization of Pyridine Based Novel Dyes”. International Conference on Green Chemistry & Nanotechnology Opportunities & Challenges 2017, organized by Department of Chemistry, Food Science and Technology & DDU Kaushal Kendra held at ST ALOYSIUS COLLEGE (Autonomous), Mangalore, 575003, on 27<sup>th</sup> - 28<sup>th</sup> February 2017. (Oral Presentation)

**25.** Manohara H.M., Trupthi Devaiah C., Hemavathi B., **Ahipa T.N.**, “Optical and Luminescence Properties of New Cyanopyridine Derivatives”. International Conference on Electronics, Physics and Chemistry-2017 (ICEPC-2017), Jyoti Nivas College Autonomous, Bangalore, India, during 16-18 February, 2017.

**26.** Hemavathi B., Kusuma J, Geetha R. Balakrishna, **Ahipa T.N.**, Synthesis of New Cyanopyridine based Dye End-capped with Cyanoacetic Acid Groups for Solar Cell Application”. New Trends in Applied Chemistry (NTAC-2017), Sacred Heart College and Hotel Crowne Plaza, Thevara, Kochi, 682 013, Kerala, India, during 09-11 February 2017.

**27.** Hemavathi B., Geetha R. Balakrishna\*, **Ahipa T.N.**, “Synthesis of Donor-Acceptor Copolymer of Carbazole and Cyanopyridine Units via Direct Arylation Polymerization for Solar Cell Applications”. 2<sup>nd</sup> International Conference on Solar Energy Photovoltaic, held at School of Electronic Engineering, Campus 12, KIIT University, Bhubaneswar, 751024, India, during 17<sup>th</sup> - 19<sup>th</sup> December 2016.

**28.** Trupthi Devaiah C. Hemavathi B., **Ahipa T.N.**, “New Blue Emissive Conjugated Small Molecules with Low Lying HOMO Energy Levels for Optoelectronic Applications”. International Conference of Young Researchers on Advanced Materials (IUMRS-ICYRAM-2016), held at J N Tata Auditorium, Indian Institute of Science, Bangalore-560012, during 11<sup>th</sup> - 15<sup>th</sup> December 2016.

**29.** Hemavathi B., Shanmukappagouda, Trupthi Devaiah C., **Ahipa T.N.**, “Synthesis of new Cyanopyridine based Small Molecules for Optoelectronic Application”. International Conference of Young Researchers on Advanced Materials (IUMRS-ICYRAM-2016), held at J N Tata Auditorium, Indian Institute of Science, Bangalore-560012, during 11<sup>th</sup> - 15<sup>th</sup> December 2016.



- 30.** Hemavathi B., Geetha R. Balakrishna, **Ahipa T.N.**, “Amino Functionalized Polymer as Charge Transport Layer for Solar Cell Application”. International Conference on Advanced Materials and Technology (ICMAT-16), Organized by Sri Jayachamarajendra College of Engineering, Mysuru during 26<sup>th</sup> - 28<sup>th</sup> May 2016.
- 31.** Hemavathi B., **Ahipa T.N.**, Anoop K.M. and Ranjith Krishna Pai. “Effect of Solvent and Morphology on PPV based Polymer Solar Cells.” International Conference on Energy Harvesting Storage and Conversion (IC-EEE 2015), Department of Physics, Cochin University of Science and Technology, Cochin, India, February 4-7, 2015.
- 32.** **Ahipa T.N.**, Anoop K.M. and Ranjith Krishna Pai. “Hexagonal Columnar Liquid Crystals as a Processing Additives for P3HT:PCBM Photoactive Layer.” International Conference on Energy Harvesting Storage and Conversion (IC-EEE 2015), Department of Physics, Cochin University of Science and Technology, Cochin, India, February 4-7, 2015.
- 33.** Anoop K.M., **Ahipa T.N.** and Ranjith Krishna Pai. “Effect of TOPO Capped CdTe Quantum Dots on P3HT:PCBM Layer Based Solar Cells”. International Conference on Energy Harvesting Storage and Conversion (IC-EEE 2015), Department of Physics, Cochin University of Science and Technology, Cochin, India, February 4-7, 2015.
- 34.** Hemavathi B., Ranjith Krishna Pai, **Ahipa T.N.**, Anoop K.M. “Role of solvent and surface morphological studies on honeycomb structured Poly{2,5-Bis[3-(N, N-Diethylamino)-1-Oxapropyl]-1,4-Phenylenevinylene}.” 7<sup>th</sup> BANGALORE INDIA NANO, Research-Industry-Academia, The Lalit Ashok, Bengaluru, December 5-6, 2014.
- 35.** Anoop K.M., **Ahipa T.N.**, Chandan H.R., Geetha Balakrishna and Ranjith Krishna Pai. “Influence of CdTe Quantum dots on the morphology of P3HT:PCBM bulk-heterojunction solar cells.” 7<sup>th</sup> BANGALORE INDIA NANO, Research-Industry-Academia, The Lalit Ashok, Bengaluru, December 5-6, 2014.
- 36.** **Ahipa T.N.**, Vijith Kumar, Doddamane S. Shankar Rao, Subbarao Krishna Prasad and Airody Vasudeva Adhikari. “Synthesis, characterization and liquid crystalline behavior of new methoxy pyridines carrying terminal alkoxy pendent and polar nitrile group.” International Conference on Recent Advances in Material Science and Technology - 2013 (ICRAMST – 13), National Institute of Technology Karnataka, Surathkal, January 17th - 19th, 2013.
- 37.** **Ahipa T.N.**, Airody Vasudeva Adhikari, “Synthesis and mesomorphism of new 2-methoxy-3-cyanopyridine mesogens.” Emerging Liquid Crystal Technologies VII (SPIE OPTO), San Francisco, California, United States, January 21-26, 2012.
- 38.** **Ahipa T.N.**, Airody Vasudeva Adhikari, “Synthesis, characterization and mesomorphic properties of 2-methoxy-3-cyanopyridine core.” International Conference on Synthetic and Structural Chemistry (ICSSC-2011), Mangalore University Mangalore, December 8-10, 2011.

### ***International/ National Seminar/Workshops/ Symposium Attended:***

1. Participated in the Two-day International symposium entitled “Science Beyond Boundary: Invention, Discovery, Innovation and Society” “RASAYAN 17” jointly organized by Chirantan Rasayan Sanstha, Midnapore, West Bengal & JAIN (Deemed-to-be University), Bengaluru, Karnataka in collaboration with American Chemical Society during 9th - 10th October 2023.
2. Participated in the webinar Nanotechnology to Combat Climate Change: Storing Solar Energy into Carbon Dioxide, Bengaluru INDIA NANO TALKS- 2022 on 15th September 2022.
3. Participated in the National Conference on Changing Trends in Polymer Science and Technology (CTPST-2021) held at National Institute of Technology Calicut, India during 20-21 January 2021.
4. Participated in International Conference on Modern Approaches of Chemical Science and Nanomaterials – 2019 (ICMACSN-2019), Organized by Mody University of Science and Technology, Lakshmanagarh, Rajasthan, India, 26<sup>th</sup>-27<sup>th</sup> August 2019.
5. Participated and acted as session chair in KSTA sponsored National seminar on “Frontiers in Materials and Chemical Sciences” held at CNMS, JAIN (Deemed-to-be University), Bengaluru, India during 30<sup>th</sup> and 31<sup>st</sup> August 2018.
6. Participated in **8<sup>th</sup> BANGALORE INDIA NANO**, Research-Industry-Academia, on March 3-4, 2016 at The Lalit Ashok, Bengaluru.
7. Participated in “**FICCI Technology Expo and Innovator - Investor Meet**” on 15<sup>th</sup> October 2015 at Hotel ITC Gardenia in Bangalore.
8. Participated in the workshop on *Atomic Force Microscopy and New Possibilities* on 24<sup>th</sup> April, 2015 at CeNSc , IISc Bangalore.
9. Participated in **7<sup>th</sup> BANGALORE INDIA NANO**, Research-Industry-Academia, on December 5-6, 2014 at The Lalit Ashok, Bengaluru.
10. Participated in the **Advanced Workshop on Scanning Probe Microscopy** on 4<sup>th</sup> July, 2014 at CeNSE, IISc, Bangalore.
11. Participated in the **Australia-India Future Materials and Technology Symposium 2014** on 14<sup>th</sup> October, 2014 at Vivanta by Taj, M G Road, Bangalore.

### ***International/ National Webinars Attended:***

1. Attended the Webinar on “*RSC-IISER Desktop Seminar with OBC*” organized by RSC publishing webinars held on 21<sup>st</sup> November 2021.

2. Attended the Webinar on “*RSC-IISER Desktop Seminar with OBC*” organized by RSC publishing webinars held on 25<sup>th</sup> Septemeber 2021.
3. Participated in a National webinar on “Nanomaterials for energy devices-environmental remediation and biomedical applications” organized by Department of Chemistry, Bapuji Institute of Engineering and Technology, Davangere on 21<sup>st</sup> August 2021.
4. Attended the Webinar on “*RSC-IISER Desktop Seminar with ChemComm*” organized by RSC publishing webinars held on 6<sup>th</sup> August 2021.
5. Participated in the live webinar lecture series on APA Sustainability Forum “*Circularity and Sustainability of Plastic*” organized by Asian Polymer Association held on 1<sup>st</sup> May, 2021.
6. Attended the Webinar on “*What does trustworthy peer review look like?*” organized by Royal Society of Chemistry held on 23<sup>rd</sup> September 2020.
7. Actively Participated in the International Webinar of “*Applications of Mass Spectroscopy in Chemistry and Beyond*”, organized by Department of Chemistry, BMS Institute of Technology & Management, Bengaluru, India held on 19<sup>th</sup> September, 2020.
8. Attended the Lectures in the 2nd National Seminar on *Frontiers in Materials and Chemical Sciences* (NSFMC 2020), organized by Centre for Nano and Material Sciences, JAIN (Deemed-to-be University), Bengaluru, India held on 31<sup>st</sup> August to 4<sup>th</sup> September 2020.
9. Attended the Webinar on *N-containing Conjugated Microporous Polymers for Energy Applications* held on 12<sup>th</sup> of August 2020 organized by Department of Chemistry, School of Engineering, Presidency University, Bengaluru.
10. Participated in the webinar “*Post COVID-19: Science and Technology*” organized by SRM University-AP, in association with India’s national newspaper, “THE-HINDU” held on 29<sup>th</sup> May 2020.

#### **Details of Advisory Committee/ Session Chaired at National & International Conferences:**

- Advisory Committee for the two days International Conference on “Science and Technology for Socio-Economic and Environmental Sustainability (I-SENTIENT- 2022)” organized by School of Sciences, JAIN (Deemed-to-be University), on 28th- 29th September 2022.
- Session Chaired for the theme: “*Nanomaterials: Basics, synthesis, Properties & Applications*” at International Conference on Frontiers in Materials from Basic Science to Real-time Applications (F2DM) organized by Centre for Nano and Material Sciences,

JAIN (Deemed-to-be University), Jain Global Campus, Kanakapura Taluk, Ramanagara District - 562 112, 13-16<sup>th</sup> March, 2019.

- Session Co-chaired at National Seminar on Frontier in Materials and Chemical Sciences organized by Centre for Nano and Material Sciences (CNMS), Jain University, Jain Global Campus, Kanakapura Taluk, Ramanagara District - 562 112, 30-31<sup>st</sup> August, 2018.

### **Details of Faculty Development Programs Attended**

- Participated in 02 Days FDP program on “NEP Aligned Faculty Development Programme” organized by Centre for Educational Transformation through Technology (CETT), JAIN (Deemed-to-be University), Jayanagara, Bengaluru, India (11th and 12th May 2022).
- Participated in 02 Days FDP Program on “Power System Design Simulation and Analysis using DIgSILENT PowerFactory Software” of DIgSILENT GmbH, Germany in association with M/s DELLSOFT Technologies Pvt. Ltd. New Delhi, (July, 27 - 28, 2021).

### **Panel Member:**

- As panel member for Chemistry Discipline during the RESEARCH RETREAT program organized by JAIN (Deemed-to-be University), Bengaluru, India on 19<sup>th</sup> and 20<sup>th</sup> December, 2020.
- As panel member for Chemistry Discipline during Annual University RESEARCH RETREAT program organized by JAIN (Deemed-to-be University), Bengaluru, India on 23<sup>rd</sup> and 24<sup>th</sup> November 2019.

### **Details of Department/ University Responsibilities Undertaken**

- **Management Information System (MIS) Report Incharge:** Collecting, Verifying and forwarding MIS reports and other related supporting files of the faculties to the concerned department.
- **Department Web Update Incharge:** Collecting, Verifying and forwarding Web Update files and other related supporting files of the faculties to the concerned department.
- **Alcohol Handling Incharge:** Collecting request letters from the faculties and the issuing of alcohol for their research activities.
- **PhD Scholar Synopsis Presentation Incharge:** Planning and Scheduling of the PhD Scholar synopsis presentation.

### Details of External Examiner:

- **RAC External Member** for Presidency University, Bangalore, India.
- **External Examiner** for R V College of Engineering, Bangalore, India.
- **External Examiner** for Dayananda Sagar University, Bangalore, India.

### Details of Postdoc supervised/ working:

Sl. No.	Name of Student	Name of the Guide/ Co-Guide	Date of Joining	Year completed/ working	Title of the project thesis
1.	<b>Dr. Deepak</b>	Dr. Ahipa T.N.	10-10-2023	Working	Design, Synthesis, and Characterization of Conjugated N-heterocyclic Small and Polymeric Molecules for Optoelectronic Applications
2.	<b>Dr. Anoop K. M.</b>	Dr. Ahipa T.N.	14-09-2022	06-11-2023	Thermal and light stability of perovskite solar cells

### Details of PhD supervised/ working:

Sl. No.	Name of Student	Name of the Guide/ Co-Guide	Date of Joining	Date of Viva Voce	Year completed/ working	Title of the project thesis
1.	<b>Ms. Rachel Chetri</b> (Aug 2022-)	Dr. Ahipa T.N.	01-08-2022		Working	Carbazole based materials for hole transporting material in perovskite solar cells
2.	<b>Ms. Samrudhi B.M.</b> (Sep 2021-)	Dr. Ahipa T.N.	01-09-2021		Working	Design and Synthesis of New Carbazole based HTMs for Perovskite Solar Cells.

3.	<b>Mr. Deepak</b> (Jan 2019- Sept. 2023) <b>Best Ph.D Scholar for the year 2023- 24 and the recipient of the Gold Medal of Jain (Deemed- to- be University)</b>	Dr. Ahipa T.N.	01-03- 2019	04- 09- 2023	2023 Completed	Design, Synthesis, and Characterization of Fluorescent Pyridine-based Conjugated Molecules and their Liquid Crystalline Properties
4.	<b>Mrs. Hemavathi B</b> (Jan 2016- Aug 2019)	Dr. Ahipa T.N. (Co- Guide)	1-12- 2015	09- 08- 2019	2019 Completed	Synthesis of conjugated small molecules and polymers for photovoltaic applications

**Details of JRF/ Project Assistants supervised/ working:**

Sl. No	Name of Student	Duration		Title of the project
		From	To	
1.	<b>Ms. Rachel Chetri</b>	21/03/2022	31/07/2022	Synthesis of new organic hole transporting molecules
2.	<b>Ms. Krishnapriya R (JRF)</b>	01/02/2021	17/05/2022	Design and Synthesis of New Organic Hole Transporting Materials for Perovskite Solar Cells
3.	<b>Mr. Deepak</b>	17/09/2018	31/12/2018	Synthesis of Some Liquid Crystal Molecules
4.	<b>Ms. Swathi M G</b>	06/08/2017	10/08/2018	Mechanochromic Studies of New Cyanopyridone Based Fluorescent Conjugated Molecules
5.	<b>Ms. Trupthi Devaiah C.</b>	1/08/2016	13/07/2017	Blue Luminescent Cyanopyridone Based Molecular Architectures: A Structure-Property Study

## M.Sc projects supervised/working:

Sl. No.	Name of Student	Name of the Guide	Year completed /working	Title of the project thesis
1.	<b>Ms. Swathi M</b>	Dr. Ahipa T.N.	working	Design and synthesis of electronically conducting copolymers via electropolymerization
2.	<b>Mr. Deepak</b>	Dr. Ahipa T.N.	working	D-A type polymer for supercapacitor application
3.	<b>Ms. Anusha D Shetty</b> Duration: 5 <sup>th</sup> June 2023 to 31 <sup>st</sup> July 2023	Dr. Ahipa T.N.	2023	Design, Synthesis and Characterization of 4-(4-Bromophenyl)-6-(4-cyanophenyl)-2-oxo-1,2-dihydropyridine-3-carbonitrile with AIE Property
4.	<b>Ms. Moksha D M</b> Duration: 5 <sup>th</sup> June 2023 to 31 <sup>st</sup> July 2023	Dr. Ahipa T.N.	2023	Design, Synthesis and Characterization of Push-Pull System Comprising 3-Cyano-2-pyridone and Carbazole Units
5.	<b>Ms. Nikitha N Nair</b> Duration: 7 <sup>th</sup> June 2023 to 31 <sup>st</sup> July 2023	Dr. Ahipa T.N.	2023	New Carbazole-based Polymer Containing Chalcone Unit: Synthesis, Characterization and Photophysical Property
6.	<b>Mr. Srikanth G</b>	Dr. Ahipa T.N.	2023	New Carbazole-based Polymer with D-A System: Synthesis, Characterization, Photophysical and Electrochemical Properties
7.	<b>Ms. Chithra Shetty</b> MSc-Intern St. Aloysius College (Autonomus), Mangaluru, Karnataka - 575003 Duration: 25 <sup>th</sup> July 2022 to 16 <sup>th</sup> September 2022	Dr. Ahipa T.N.	2022	Synthesis, Photophysical and Aggregation Induced Emission Property of New 6-(4-bromophenyl)-4-(4-cyanophenyl)-2-oxo-1,2-dihydropyridine-3-carbonitrile
8.	<b>Ms. Shibani</b> MSc-Intern	Dr. Ahipa T.N.	2022	Synthesis, Photophysical and Aggregation Induced Emission Property of New 4-(4-

	St. Aloysius College (Autonomus), Mangaluru, Karnataka - 575003 Duration: 25 <sup>th</sup> July 2022 to 16 <sup>th</sup> September 2022			cyanophenyl)-2-oxo-6- (thiophen-2-yl)-1,2- dihydropyridine-3-carbonitrile
9.	<b>Ms. Rima Yadav</b>	Dr. Ahipa T.N.	2022	Design and Synthesis of New Conjugated Polymers
10.	<b>Mr. Gokul V</b>	Dr. Ahipa T.N.	2021	Design and Synthesis of New Mechanochromic Compounds
11.	<b>Ms. Krishnapriya R</b> (Jyoti Nivas College, Bangalore), MSc-Intern	Dr. Ahipa T.N.	2020	Synthesis and Characterization of A Novel Carbazole Based Hole Transporting Material For Perovskite Solar Cell
12.	<b>Ms. Meenakshy K R</b>	Dr. Ahipa T.N.	2019	Electron Barrier Properties of Conjugated Organic Semiconductors for Molecular Wire Applications
13	<b>Ms. Samreen S.</b>	Dr. Ahipa T.N.	2018	Synthesis, Aggregation Induced Emission and Mechanochromic Fluorescence of New Cyanopyridone Derivatives
14	<b>Ms. Anitha N.</b>	Dr. Ahipa T.N.	2018	New Cyanopyridone Derivatives: Design, Synthesis, and their Photophysical Properties
15	<b>Mr. Manohara H.M.</b>	Dr. Ahipa T.N.	2017	Synthesis, Characterization, Photoluminescence and Electrochemical Properties of New Cyanopyridine Derivatives
16	<b>Ms. Trupthi Devaiah C.</b>	Dr. Ahipa T.N.	2016	New cyanopyridone derivatives: synthesis, characterization and their application in DSSC
17	<b>Mr. Shanmukappagouda</b>	Dr. Ahipa T.N.	2016	Synthesis and Characterization of New Donor-Acceptor Materials for Solar Cell Application



## Students Achievements

- **Mr. Deepak Devadiga** has received 3rd prize in Poster Presentation for the paper on “New Pyridine-based Conjugated System for Reversible Acid Base Sensor” in the International workshop on Recent Trends in Functional Nanomaterials for Technological Applications held on 2nd & 3rd August 2022 organized by Centre for Nanoscience and Nanotechnology, Amity University, Mumbai and ICON Labs, Navi Mumbai, India.
- **Ms. Samrudhi B M** has received 2nd place in “Oral Presentation” for the paper on “Synthesis of New Terpyridine Analogue and Its Photophysical Properties” in the “International Conference on Chemical Sciences: Academia, Industry & Society Interface” jointly organized by the Department of Chemistry, Post Graduate Centre, Jyoti Nivas College Autonomous Bangalore and Karnataka Science and Technology Academy, Department Of Science And Technology, Government Of Karnataka from 23rd to 25th June 2022.
- Best Oral Presentation award to **Mr. Manohara H.M.**, postgraduate student for the paper on “Design, Synthesis and Structural Characterization of New Pyridine Based Luminescent Materials”. International Conference on Green Chemistry & Nanotechnology Opportunities & Challenges 2017, organized by Department of Chemistry, Food Science and Technology & DDU Kaushal Kendra held at ST ALOYSIUS COLLEGE (Autonomous), Mangalore, 575003, on 27<sup>th</sup> - 28<sup>th</sup> February 2017.
- Best Oral Presentation award to **Mrs. Hemavathi B.**, research student for the paper on “Amino Functionalized Polymer as Charge Transport Layer for Solar Cell Application”. International Conference on Advanced Materials and Technology (ICMAT-16), Organized by Sri Jayachamarajendra College of Engineering, Mysuru during 26<sup>th</sup> - 28<sup>th</sup> May 2016.

## Awards/ Recognitions

- 2021: Elsevier Reviewer Recognition Certificate issued by Journal of Photochemistry and Photobiology A: Chemistry
- 2021: Elsevier Reviewer Recognition Certificate issued by Materials Today: Proceedings
- 2020: Elsevier Reviewer Recognition Certificate issued by Solar Energy
- 2019: Elsevier Reviewer Recognition Certificate issued by Journal of Molecular Structure
- 2018-2019: Elsevier Reviewer Recognition Certificate issued by Dyes and Pigments
- 2017: Elsevier Reviewer Recognition Certificate issued by Journal of Molecular Liquids

- 2015: Start Up Research Grant - Young Scientists Awarded by SERB, New Delhi, India. (Ref. No.: YSS/2014/000835)
- 2014-2015: Senior Research Associate Fellowship Awarded by Centre for Nano and Material Sciences, Jain University, Bangalore, Karnataka, India.
- 2010-2014: Ph.D. Research Fellowship Awarded by National Institute of Technology Karnataka, Surathkal (NITK), Mangalore, Karnataka, India. (Ref. No.: Ph.D/Fellowship/2010-11/E1)
- 2009-2010: Junior Research Fellowship Awarded by Indian Plywood Industries Research and Training Institute (GOI), Bangalore, Karnataka, India. (Ref. No.: ES/119E/2639)

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