Dr. H. S. Lalithamba

Professor and Head, Dept of Chemistry, SIT
Contact: +91 9008305654
Email: hsl@sit.ac.in
Vidwan ID: 90793
Scopus ID: 35409750300
OrcID: 0000-0001-6047-8493
Faculty ID: SIT0124

Education

	Degree	Year	Institute	Specialization
1	Ph.D.	2012	Bangalore University	Synthetic Organic Chemistry (Synthesis of Peptide and Peptidomimetics)
2	M.Sc.	1996	Bangalore University	Organic Chemistry
3	B.Sc.	1994	Bangalore University	Physics, Chemistry and Maths (PCM)

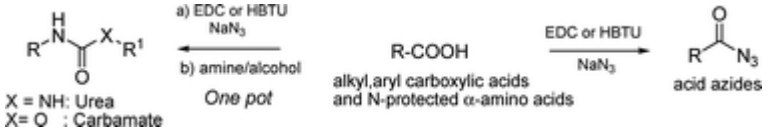
Professional Experience

	Date (from-to)	Designation	Organization
1	24-02-2023 To till date	Professor & Head	Siddaganga Institute of Technology, Tumakuru
2	01-08-2021 To 23-02-2023	Associate Professor & Head	Siddaganga Institute of Technology, Tumakuru
3	02-11-2013 To 31-07-2021	Associate Professor	Siddaganga Institute of Technology, Tumakuru
4	24-11- 2007 To 01-11-2013	Senior Lecturer	Siddaganga Institute of Technology, Tumakuru
5	04-12-1997 To 23-11-2007	Lecturer	Siddaganga Institute of Technology, Tumakuru

(Please fill in reverse order. Current designation should be at the top)

Awards and Honors

1 Received the distinction of '**Top 10 most downloaded OBC article in January 2010'**
for publication in Org. Biomol. Chem., 2010, 8, 835–840, entitled "New and simple synthesis of acid azides, ureas and carbamates from carboxylic acids: application of
peptide coupling agents EDC and HBTU".



2 Received **'Best Project Award – 2013'** for the student project entitled 'An efficient protocol for the *Synthesis of N$^{\alpha}$-Protected β-Amino Alcohols and Peptidyl Alcohols employing EDC/ HBTU'*, organized by Indian Institute of Chemical Engineers on 14th May 2013 held at M.V.J.C.E., Bangalore (Funded by KSCST).

3 **'Outstanding Project of the Year – 2013'** for the student project entitled 'An efficient protocol for the *Synthesis of N$^{\alpha}$-Protected β-Amino Alcohols and Peptidyl Alcohols employing EDC/HBTU'*, during the Seminar and exhibition held at Angadi Institute of Technology and Management, Belgaum on 30th and 31st August 2013 conducted by KSCST.

4 '**Award of seed money to Young Scientist for research' by Vision Group of Science and Technology,** Department of Information Technology, Biotechnology and Science & Technology, Government of Karnataka in 2013.

5 **Outstanding Project of the Year – 2014'** for the student project entitled '*One-pot synthesis of Fmoc/Cbz-protected β-amino alkyl azides directly from alcohols'* during the Seminar and exhibition held at KLE Society's B.V. Bhoomaraddi College of Engg. & Technology, Hubli on 28th and 29th July 2014 conducted by KSCST.

6 Received **First Prize** for the student project entitled *'Synthesis and biological evaluation of peptides as potential antimicrobial agents using in vitro and in silico studies' for their poster presentation'* in the One day International Technical Seminar on "Advances in Biotechnology and Allied Sciences" organized by Dept. of Biotechnology, SIT, Tumakuru on 20th May 2015.

7 Received **Second Prize** for the project entitled *'Synthesis of N$^{\alpha}$-protected diazomethylketones employing BOP and its utilization in the preparation of bromomethylketones, thiazoles and studies on their biological activities'* for the poster presentation at the Advanced Lecture Series in Ocular Pharmacology held on 8th and 9th Aug 2015 at SIT, Tumakuru.

8 Received **Best Oral Presentation** for the student project entitled '*Transesterification of Pumpkin oil using nano calcium oxide catalyst'* in the National Conference on Recent Advances in Industrial Engineering and Applied Chemistry on 21st and 22nd October 2016 at SSIT, Tumakuru.

9 Received **Best Poster** for the project entitled *'Designing, Synthesizing and Biological evaluation of peptides as potential antimicrobial agents using in vitro and*

in silico studies' in the National Conference on Recent Advances in Industrial Engineering and Applied Chemistry on 21st and 22nd October 2016 at SSIT, Tumakuru.

10 Received **Second Prize** for the project entitled *'Antibacterial and Anti-inflammatory studies of dithiocarbamate-in silico and in vivo'* in the 1st International Conference on Recent trends in Bioengineering (ICRTB 2018) at MIT School of Bioengineering, Sciences & Research MITADT University, Loni Kalbhor, Pune on 17th February 2018.

11 Received **First Prize** in Poster presentation, for the project entitled 'Nano CaO catalyzed synthesis of acyl selenourea derivatives from acid chlorides of *N*-protected amino acids' at REACT'19- A national level tech fest, on 29th & 30th March 2019 organized by the department of Chemical Engineering, R.V. College of Engineering, Bengaluru- 560 059.

12 Has secured position in World Scientist and University Rankings 2020 list. World ranking position-637864, Country-22732- and at SIT Tumakuru-01 surveyed by AD Scientific Index, 2021 AD ranking for Scientists.

13 Secured position in World Scientist and University Rankings 2021 list. World ranking position- 589627, Country - 22250 and at SIT, Tumakuru - 01 surveyed by AD Scientific Index, 2022 AD ranking for Scientists.

14 Received Third **Prize** for the project entitled 'Design and development of photocatalytic reactor and heterogeneous photocatalyst for biodiesel production*'* from the department of Mechanical Engg. during the Major Project Exhibition - 2022 on 13th July 2022.

15 Received **'Best Project Award – 2022'** for the student project entitled 'Development of Heterogeneous Photocatalytic Method for Biodiesel Production*'*, during the Seminar and Exhibition held at Visevesavaraya Technological University (VTU), Belgavi on 12th and 13th August 2022 (Funded by KSCST).

16 Received '**Certificate of Best Paper Presentation'** for the project entitled 'Green Route to Synthesize $CaTiO_3$ Photocatalyst using *Terminalia Catappa* seeds extract and its Utilization in green fuel – U163 in the International Conference on Recent Developments in Mechanical Engineering, ICRME-2022 on 24th and 25th June 2022 at SIT, Tumakuru.

17 Secured position in World Scientist and University Rankings 2022 list. World ranking position- 691624, Country - 22127 and at SIT, Tumakuru - 01 surveyed by AD Scientific Index, 2023 AD ranking for Scientists.

18 Secured position in World Scientist and University Rankings 2023 list. World ranking position- 643626, Country - 135396 and at SIT, Tumakuru - 01 surveyed by AD Scientific Index, 2024 AD ranking for Scientists.

19 Received ' **Best Presentation Award'** for the project entitled 'Green Route to Synthesize ZnO NPs and their utilization for the synthesis of methylidene-pyrimidin-2,4,6 triones in an International Conference Science and Engineering (ICCMSE) jointly organized by Maharani Cluster University (MCU), Bangalore, Karnataka, India and RSP Conference Hub, Coimbatore, Tamilnadu, Indai on 25th and 26th November 2023.

20 Secured position in World Scientist and University Rankings 2024 list. World ranking position- 79467, Country - 436107 and at SIT, Tumakuru - 01 surveyed by AD Scientific Index, 2024 AD ranking for Scientists.

Courses Taught

Undergraduate Courses

Theory: 1. Engineering Chemistry

2. Organic Chemistry for III Sem. B.E (Chemical)

3. instrumental Methods of Analysis for IV Sem. B.E (Chemical) and BT

4. Chemistry for various streams

Lab: 1. Engineering Chemistry Lab

2. Organic Chemistry Lab for III Sem. B.E (Chemical)
3. Technical Chemistry Lab for IV Sem. B.E (Chemical)
4. Chemistry Lab. for various streams

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
1	Yathish K.V.	Optimization of Biodiesel Production Parameters using Non-edible Oils	2020
2.	Uma K.	Design, synthesis and evaluation of peptidomimetic analogues employing activating agents and nano metal oxides and their antimicrobial studies	2020
3	Raghavendra M.	Synthesis of peptides and peptidomimetics with potential biological properties	2022
4	Triveni B.V.	Synthesis and characterization of peptides, Graphene nanoplatelets, Peptide-graphene nanoplatelets composites, graphene nanoplatelets-polymer composites and their multifunctional applications	Ongoing
5	Srinivas N.R.	Investigation of graphene nanocomposites for wearable piezoresistive sensors for cardiology and respiratory applications	Ongoing
6	Varsha G.	Synthesis and development of injectable, intravitreal and stimuli-responsive drug delivery system to treat eye diseases	Ongoing
7	Rangaswamaiah B.L.	Synthesis and Characterization of Polylactic acid nanocomposites nanoclay titanium dioxide and zinc oxide for packing applications	Ongoing
8.	Manasa H.M	Development of feedstock modifications for efficient green fuel production through KOH	Ongoing

		facilitated biochar based metal oxides	

Research Areas

1. Synthesis of Peptide & Peptidomimetics and study of their biological activities
2. Production of biodiesel from non edible seeds and their optimization studies
3. Synthesis of nano particles and their applications as catalysts and sensors

Sponsored Projects

Completed Projects:

1. Title: "Synthesis of *N*-protected amino/peptide Weinreb amides, amino alkyl sulfoxides, sulfones and acylthio/seleno ureas"
Funding Agency: Karnataka State Council for Science and Technology
Amount: : 30.00 lakhs
Duration: : One year
Role:PI

2. Title: "Synthesis of *N*-protected amino/peptide Weinreb amides, amino alkyl sulfoxides, sulfones and acylthio/seleno ureas"
Funding Agency: Karnataka State Council for Science and Technology
Amount: 30.00 lakhs
Duration: 3 years
Role:PI

Student's Projects:

1. Title: An efficient protocol for the synthesis of N^{α}-protected β amino alcohols by employing EDC/ HBTU/TBTU**(Student Project of VIII Sem. B.E. Chemical Engineering)**
   Funding Agency: Karnataka State Council for Science and Technology
   Amount: 6,000.00
   Duration: 6 months
2. Title: One-pot synthesis of Fmoc/Cbz-protected β-amino alkyl azides directly from alcohols **(Student Project of VIII Sem. B.E. Chemical Engg.)**
   Funding Agency: Karnataka State Council for Science and Technology
   Amount: 6,000.00
   Duration: 6 months
   Role: PI

3. Title: 'Synthesis of N^{α}-protected diazomethylketones employing BOP and its utilization in the preparation of bromomethylketones, thiazoles and studies on their biological activities' **(Student Project of VIII Sem. B.E. Chemical Engineering, 2015-16)**
   Funding Agency: Karnataka State Council for Science and Technology
   Amount: 7,000.00
   Duration: 6 months

4. Title: Synthesis of N^{α}-protected thiazoles employing thioamide and bromoacetaldehyde'. **(Students of VIII Sem. B.E. Chemical Engg., 2016-17)**
   Funding Agency: Karnataka State Council for Science and Technology
   Amount: 4,500.00
   Duration: 6 months
5. Title: Synthesis and characterization of TiO_2 and thin film for hydrogen gas sensor applications' **(VIII Sem. B.E. (IT) Engg., 2016-17)**
   Funding Agency: Karnataka State Council for Science and Technology
   Amount: 4,500.00
   Duration: 6 months
6. Title Development of Heterogeneous Photocatalytic Method for Biodiesel Production **(VIII Sem. B.E. (Mechanical Engg. Students 2021-22)**
   Funding Agency: Karnataka State Council for Science and Technology
   Amount: 12000.00
   Duration: 6 months

Publications

1 New and simple synthesis of acid azides, ureas and carbamates from carboxylic acids: Application of peptide coupling agents EDC and HBTU, V. V. Sureshbabu, **H. S. Lalithamba,** N. Narendra and H. P. Hemantha, Org. Biomol. Chem., 2010, 8, 835–840.

2 Ultrasound mediated synthesis of 2-amino-1,3-selenazoles derived from Fmoc/Boc/*Z*-*α*-amino acids, **H. S. Lalithamba**, N. Narendra, N. A. Shankar and V. V. Sureshbabu, ARKIVOC, 2010, (XI), 77-90.

3 An efficient one-pot access to trithiocarbonate-tethered peptidomimetics, N. Narendra**,** **H**. **S. Lalithamba** and V. V. Sureshbabu, Tetrahedron Lett., 2010, 51, 6169-6173.

4 Simple and efficient synthesis of Fmoc/Boc/Cbz-protected-*α*-amino alcohols and peptidyl alcohols employing Boc_2O, **H. S. Lalithamba** and V. V Sureshbabu, Indian J. Chem., 2010, 49B,1372-1378.

5 Application of 2-(1H-benzotriazol-1-yl)-1,1,3,3-tetramethyluronium tetrafluoroborate (TBTU) for the synthesis of acid azides, N. A. Shankar, **H. S. Lalithamba** and V. V. Sureshbabu, Indian J. Chem., 2011, 50B, 103-109.

6 Synthesis of oligopeptides through O-acyl isopeptide method, **H. S. Lalithamba**, H. P. Hemantha and V. V. Sureshbabu, Protein Pep. Lett.18, 848-857, 2011.

7 A simple Approach for the Synthesis of Thio, Dithio and Selenothiocarbmate-Tethered Peptidomimetics, **H. S. Lalithamba**, T.M. Vishwanatha, M. Samarasimha Reddy and V. V. Sureshbabu, Synlett, 2012, 23, 1516-1522.

8. Synthesis, solventochromic properties and dipole moment of Fmoc-L-alaninol, **H. S. Lalithamba**, S. R. Manohara B. Siddlingeshwar., Shivakumaraiah, Journal of Molecular Liquids, Volume 198, Pages 94-100, 2014.

9 Optimization of scum oil biodiesel production using response surface methodology' K.V. Yatish, **H.S. Lalithamba**, R. Suresh, S.B. Arunb, P. Vinay Kumar, Process safety and Environmental Protection, Volume 102, Pages 667-672, 2016.

10 Synthesis of N^{α} -protected aminoacid/peptide Weinreb amides employing *N,N'*-carbonyldiimidazole as activating agent; studies on docking and antibacterial activities', K. Uma, **H.S. Lalithamba**, M. Raghavendra, Vivek Chandramohan, and C. Anupama, *Archive for Organic Chemistry (Arkivoc)*, Volume iv, Pages 339-351, 2016.

11 Synthesis of N^{α}-protected diazomethylketones using , COMU and its utilization in the preparation of bromomethylketones and selenazoles, **H.S. Lalithamba**, K. Uma, M. Raghavendra, International journal of Innovative Research & Development, Vol 5, Issue 11, ISSN 2278 – 0211, 2016.

12 Transesterification of Pumpkin oil using nano calcium oxide catalyst' International journal of Innovative Research & Development, N. Channa Keshava Naik, S. B. Arun, K. V. Yatish, R. Suresh, **H. S. Lalithamba**, Vol 5 Issue 11, ISSN 2278 – 0211,2016.

13 Synthesis of biodiesel from Garcinia gummi-gutta, Terminalia belerica and Aegle marmelos seed oil and investigation of fuel properties, K. V. Yatish, **H. S. Lalithamba**, R. Suresh & B. R. Omkaresh, Biofuels, Vol 9, No. 1, 121-128, 2016.

14 Plant-mediated green synthesis of ZnO nanoparticles using garcinia gummi-gutta seed extract: Photoluminescence, screening of their catalytic activity in antioxidant, formylation and biodiesel production, M. Raghavendra, K. V. Yatish, **H.S. Lalithamba**, The European Physical Journal Plus, Springer 2017, 132(358), 1-12.

15 Synthesis of N^{α}-protected amino acid derived formamides using MgO nano catalyst: Study of molecular docking and antibacterial activity, M. Raghavendra, **H.S. Lalithamba**, S. Sharath, H. Rajanaika-International Journal of Science and Technology, Scientia Iranica, 24(6), 3002-3013, 2017.

16 Synthesis and Characterization of Titanium Dioxide Thin Film for Sensor Applications, Latha H. K. E., **H.S. Lalithamba**, Materials Research Express, Volume 5, Number 3, 2018.

17 Optimization of bauhinia variegata biodiesel production and its performance, combustion and emission study on diesel engine, K.V. Yatisha, H.S. Lalithamba, R. Suresh, H.R. Harsha Hebbar, Renewable Energy, 122, 561-575, 2018.

18 Sodium phosphate synthesis through glycerol purification: Utilization for biodiesel production from dairy scum oil to economize production cost, K.V. Yatisha**,** **H.S. Lalithamba**, R. Suresh, Sustainable Energy & Fuels, 6, **2**, 1299-1304, 2018.

19 Capsicum annuum fruit extract: A novel reducing agent for the green synthesis of ZnO nanoparticles and their multifunctional applications, **Lalithamba H.S.,** Raghavendra M., Uma K., Yatish K.V., Mousumi Das, Nagendra G., Acta Chimica Slovenica, 65, 354–364, 2018.

20 Preparation of a CaO Nanocatalyst and Its Application for Biodiesel Production Using Butea monosperma Oil: An Optimization Study, Yatish Kalanakoppal Venkatesh, Raghavendra Mahadevaiah, **Lalithamba Haraluru Shankaraiah,** Suresh Ramappa, Arun Sannagoudar Basanagouda, Journal of the American Oil Chemists Society, 95, 635–649, 2018.

21 Bromodimethylsulfonium bromide: A novel reagent for the one pot synthesis of potent N^{α}-ureido peptides and study of molecular docking and antibacterial activities, **Lalithamba H.S** , Raghavendra M., Vivek Chandramohan, Scientia

Iranica, 25, 6, 3311-3321, 2018.

22 Effect of Sodium Chloride on GeotechnFical Properties of Black Cotton Soil, Ramya H.N., Umesha T.S., **Lalithamba H.S**., Journal of Materials Science & Nanotechnology, 6, 3, 1-10, 2018.

23 Nano NiO catalyst: synthesis, characterization, and their application for the synthesis of substituted imidazoles, Raghavendra, Mahadevaiah, S. P. Vinay, **Lalithamba Haraluru Shankraiah,** Tumbe Group of International Journals 1, 1, 95-102, 2018

24 A facile synthesis of hydroxamic acids of N^{α} -protected amino acids employing BDMS, study of their molecular docking and antibacterial activities, K. Uma, **H.S. Lalithamba**, V. Chandramohan, K. Lingaraju, Organic Preparations and Procedures International, 51, 161–174, 2019.

25 Ochrocarpus longifolius assisted green synthesis of $CaTiO_3$ nanoparticle for biodiesel production and its kinetic study, K.V. Yatish, **H.S. Lalithamba** R. Suresh, H.K.E. Latha, Renewable Energy 147, 310-321, 2019.

26 Plant-mediated green synthesis of Ag nanoparticles using *Rauvolfia tetraphylla* (L.) flower extracts: Characterization, Biological activities and screening of their catalytic activity in formylation reaction, S.P. Vinay , Udayabhanu , G. Nagaraju , **H.S. Lalithamba** , and N. Chandrasekhara, Scientia Iranica, 27(6), 3353-3366, 2020

27 Design and Molecular dynamic Investigations of 7,8-Dihydroxyflavone Derivatives as Potential Neuroprotective Agents Against Alpha-synuclein, Thangavel Mohankumar, Vivek Chandramohan, **Haralur Shankaraiah Lalithamba**, Richard L. Jayaraj, Poomani Kumaradhas, Magudeeswaran Sivanandam, Govindasamy Hunday, Rajendran Vijayakumar, Rangasamy Balakrishnan, Dharmar Manimaran, Namasivayam Elangovan, Springer nature, Scientific reports, 1, 10, 1-11, 2020.

28 Synthesis of terminal thiazoles from *N*-protected amino acids and study of their antibacterial activities, **Haraluru Shankaraiah Lalithamba**, Kogali Uma, Tumakuru Srinivas Gowthami, Govindappa Nagendra, Organic Preparations and Procedures International, 52, 3, 181–191, 2020

29 Dehydrosulfurization of protected thioureas to carbodiimides employing $(Boc)_2O$ and DMAP", K. Uma, **H.S. Lalithamba**, Chemical Data Collections, 27, 100378, 1-5, 2020.

30 DHF-BAHPC molecule exerts Ameliorative antioxidant status and reduced cadmium-induced toxicity in Zebrafish (Danio rerio) embryos, Thangavel Mohankumar, **Haralur Shankaraiah Lalithamba,** Krishnan Manigandan, Arunachalam Muthaiyan, Namasivayam Elangovan, Environmental Toxicology and Pharmacology, 79, 103425, 1-9, 2020.

31 Parametric Studies on the Storage Stability and Ageing Effect of Biodiesel Treated with Eucalyptus Oil as a Cost-effective Green-Antioxidant Additive", International Journal of Energy Research K.V. Yatish, **H. S. Lalithamba**, Mohan Sakar, Balakrishna, R. Geetha, B. R. Omkaresh, S.B. Arun, Int J Energy Res.,Vol. 44, Issue 14, page 11711-11724, 2020

32 Hydrothermal synthesis of nano TiO_2 and its application for the synthesis of *N*-protected formamides and their utilization for the synthesis of thioformamides and study of their biological activities, K. Uma, **H.S. Lalithamba**, B.C. Revanasiddappa, Chemical data collections, 30,100591, 2020

33 Synthesis of Tin oxide nanoparticles using combustion method for gas sensing applications, Journal of the Instrument Society of India, ISSN No. 0970-9983, Vol.

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34 Terminalia chebula as a novel green source for the synthesis of copper oxide nanoparticles and feedstock for second generation biodiesel production;Optimization, Kinetic study and green chemistry metrics approach, K.V. Yatish , R. Mithun Prakash, C. Ningaraju, M. Sakar, R. Geetha Balakrishna, **H.S. Lalithamba** Energy, Vol. 215, 119165, 2021

35 Effective utilization of green synthesized CuO nanoparticles for the preparation of keto-1,2,3-triazole analogues of protected amino acids/dipeptide acids and recyclable catalyst for the optimization and kinetic study of biodiesel production, M. Raghvendra, Yatish **K. V. H.S. Lalithamb,** B. R. Omkaresh, The European Physical Journal Plus**,** 2021, 136:1156

36 The effect of Tin concentration on microstructural and electrical properties of ITO nanoparticles synthesized using Green synthesis", S. Mala, H.K.E. Latha, **H.S. Lalithamba**, A. Udayakumar, Iranian journal of materials science and engineering, Vol. 18, Number 4, December 2021

37 A study on the impact of tin concentration on microstructural, dielectric and conductivity properties of ITO nanoparticles, S Mala, H.K.E Latha and **Lalithamba H.S**. A. Udayakumar, Materials Today: Proceeding, volume 60, 839-848, 2022.

38 Green synthesis of ITO nanoparticles using Carica papaya seed extract: Impact of Annealing Temperature on Microstructure and Electrical Properties of ITO Thin films for Sensor Applications, Materials Technology: Advanced Performance Materials, S. Mala, H.K.E. Latha, A. Udayakumar, **H.S. Lalithamba**, DOI: 10.1080/10667857.2021.1954278, 1-7, 2021

39 Green synthesis of tin oxide based nanoparticles using Terminalia bellirica seed extract: impact of operating temperature and antimony dopant on sensitivity for carbon dioxide gas sensing application C. Chaitra, H.M. Kalpana, C.M. Ananda and **H.S. Lalithamba,** Materials Technology, https://doi.org/10.1080/10667857, 2022,2035143

40 Structural, optical and electrical properties of undoped and doped (Al, Al + Mn) ZnO nanoparticles synthesised by green combustion method using terminalia catappa seed extract, D. Savitha, H.K.E. Latha, **H.S. Lalithamba**, S. Mala, Yogananda Vasudev Jeppu, Materials Today: Proceedings, Vol. 60, 988-997, 2022

41 Combustion synthesis of nano Fe_2O_3 and its utilization as catalyst for the synthesis of Nα-protected acyl thioureas and study of anti-bacterial activities, Acta Chimica Slovenica .M. Raghvendra, Yatish K. V. **H.S. Lalithamba**, Acta Chim. Slov. 69, 116–124, 2022.

42 Efficient Application of Green Synthesized CeO_2 Nanoparticles for the Preparation of Selenoester Derivatives of Protected Amino Acids and Production of Biodiesel from Annona squamosa Oil **H. S. Lalithamba**, M. Raghavendra, K. V. Yatish, Journal of Electronic Materials, Journal of Electronic Materials (2022) 51:3650–365

43 Green synthesis of vanadium oxide nanoparticles for thin film based sensor application T.R. Kishan Chand, H.M. Kalpana H.S. Lalithamba, IOP Conf. Series: Materials Science and Engineering 1225 (2022) 012062 IOP Publishing doi:10.1088/1757-899X/1225/1/012062

44 Study on green synthesis characterization and electrical properties of cerium oxide (CeO2)-doped vanadium pentoxide (V2O5) nanoparticles for strain gauges, Journal of Materials Science: Materials in Electronics T. R. Kishan Chand, H. M. Kalpana, and **H. S. Lalithamba**, volume 33, pages16942–16954 (2022)

45 Solar energy-assisted reactor for the sustainable biodiesel production from Butea monosperma oil: Optimization, kinetic, thermodynamic and assessment studies

K.V. Yatish, B.R. Omkaresh, Veeranna R. Kattimani, **H.S. Lalithamba**, M. Sakar, R. Geetha Balakrishn, Energy, 263, 125768 (2023)

46 Nano CaO: Synthesis, characterization, and application as an efficient catalyst for the preparation of tetrazole analogues of protected amino acids H. S. Lalithamba, M. Raghavendra , R. Bharatha , H. K. E. Latha, Scientia Iranica, 29(6 C), pp. 3132–3141, 2022

47 Structural, Optical and Electrical Properties of ATO Nanoparticles Synthesized by Combustion Method Chaitra C, H.M Kalpana, **H.S Lalithamba**, C.M Ananda, Journal of Mines, Metals and Fuels 70(8A): 1-479; 2022. DOI: 10.18311/jmmf/2022/31972.

48 Green Synthesis of MgO Nanoparticles using Caesalpinia Sappan Seeds and their Application for Direct Conversion of Alcohol to Azide Lalithamba H.S., Divyarani K., S. Sreenivasa, T. Madhu Chakrapani Rao, Journal of Mines, Metals and Fuels, 70(8A): 1-479; 2022. DOI: 10.18311/jmmf/2022/32012

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50 Study of Electrical and Magnetic Properties of Zn-Co-Ferrite Nanocomposites, R Santhosh Kumar, Rashmi and **Lalithamba H.S**, Journal of Mines, Metals and Fuels 70(8A): 1-479; 2022. DOI: 10.18311/jmmf/2022/32012

51 Impact of Al and Mn doping on structural and Electrical properties of the Green synthesized ZnO Nanoparticles, D. Savith, Latha H.K.E, **H.S. Lalithamba**, 2023 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), 979-8-3503-4729-6/23/$31.00,
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52 Dielectric properties of green synthesized Sb:SnO2 nanoparticles Chaitra C, H.M. Kalpana, **H.S. Lalithamba,** C.M. Ananda, 2023 International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), 979-8-3503-4729-6/23/$31.00,
2023 IEEE | DOI: 10.1109/ICSSES58299.2023.10199228

53 Synthesis and Characterization of silver Nanoparticles for Gas Sensing Applications, Mala S, **Lalithamba H S** ,R Nagesh Gowda, International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), 979-8-3503-4729-6/23/$31.00,
2023 IEEE | DOI: 10.1109/ICSSES58299.2023.10199228

54 Plant mediated synthesis of CaO nano particles and investigation of morphological, spectroscopic, electrical, and catalytic properties, **H. S. Lalithamba**, Aisha Siddekha, Rashmi, B. V. Triveni, J Mater Sci: Mater Electron (2023) 34:2065 (Q2)

55 Green Synthesis, Structural, Electrical and Catalytic Properties of Nano MgO, **H. S. Lalithamba,** H. K. E. Latha, N. Narendra, S. Mala, Journal of Electronic Materials (2024) 53:30–40

56 Ultrasound-accelerated Synthesis of N-protected Amino Alkyl Iodides from Amino Alcohols Using P_2I_4 Reagent and its Application in the Synthesis of Amino Alkyl Thiols, **Lalithamba H.S.** Nagendra Govindappa*, Akshitha D. Nagaraja and Aisha Siddekha, Letters in Organic Chemistry, **DOI:** 10.2174/1570178620666230913160751

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Invited Lectures, talks and workshops

1. Given training for B.Sc. students of IDSG College, Chikamagalur and M.Sc. students of Mangalore University on the synthesis of peptides during 15th June 30th June 2015.
2. Participated as a Judge for poster presentation for two days national conference “On Frontiers and Challenges in Chemistry” organized by Don Bosco Institute of Technology, Bangalore on 10th, 11th October 2013.
3. Delivered lecture on **“Amino acids, Peptides and Proteins”** for the Biotechnology Finishing School (BTFS) Batch V students in the department of Biotechnology, S.I.T., Tumakuru on 24th February 2016.

4. Delivered lecture on **'Synthesis of peptidomimetics and their applications'** for the Biotechnology Finishing School (BTFS) Batch V students in the department of Biotechnology, S.I.T., Tumakuru on 24th February 2016.
5. Guided for VIII Sem. B.E.(BT) students for their major project of GM Institute of Technology, Davangere.
6. Guided for M.Sc. students for their research project of Kuvempu University, Shimoga.
7. Guided for a research scholar, Dept. of BT (School of Biosciences) of Periyar, University, Selem, for his Ph.D work.
8. Delivered an Invited Lecture on 'Synthesis and Characterization of Nano material for the Final year students of Government First Grade College, Tumakuru on 19th August 2022.
9. Conducted a workshop on 'Synthesis and Characterization of Nano material for the Final year students of Government First Grade College, Tumakuru on 19th August 2022.