

Name of Faculty Dr. D.Saritha
 Designation Assistant Professor
 Nature of Job/Appointment Regular
 Date of Joining 24 – 06 - 2019
 E-mail dsaritha_chm@cbit.ac.in



Education Qualifications

	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Chemistry) IITM	Awarded
PG	M.Sc.(Chemistry)	First
UG	B. Sc. (MPC)	Distinction

Work Experience

Teaching 10.3 Years
 Research 16 Years
 Industry --
 Others -
 Area of Specialization Material science, Energy storage, Li-ion batteries, Electrochemistry

Professional Memberships

Member, IAENG -264439

Responsibilities held at Institution Level

1. Working as Innovation-Teaching, Learning & Evaluation Committee member at CBIT from 15/7/2021 to till date.
2. Worked as Additional In charge for Planning and Developing committee at KL University, Hyderabad from 22-8-2018 to 20-6-2019.
3. Worked as Women protection cell committee member at KL University, Hyderabad from 6/8/2018 to 31/5/2019.
4. Worked as Institution-Industry cell member at KL University, Hyderabad from 25/7/2017 to 25/7/2018.

Responsibilities held at Department Level

1. Working as RD Coordinator at CBIT from 6-12-2019 to till now.
2. Working as Departmental Research Committee member at CBIT from 8-4-2021 to till date.
3. Working as Engineering Chemistry Lab Coordinator at CBIT from 20-11-2020 to till date
4. Mentor for Induction program to the 1st Year Students at CBIT.
5. Class In-charge/Teacher at CBIT.
6. Member- Disciplinary committee at CBIT.
7. Worked as lab in charge for Engineering Chemistry lab at KL University, Hyderabad from 2017-19.
8. Course coordinator for the Engineering Chemistry Theory at KL University, Hyderabad from 2017 to 2019.

Research Guidance

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Awards Received

1. Best Researcher Award presented by Science Father, International Research Awards on New Science Inventions (NESIN 2021)
2. Best Paper Award presented on the occasion of international conference on Advances in Minerals, Metals, Materials, Manufacturing and Modelling (ICAM5 19) organized by NIT Warangal.
3. Best Paper Award presented on the occasion of Research Day organized by CBIT, 2019.
4. Best Paper Award presented on the occasion of 1st international conference on Nanoscience and nanotechnology (ICNAN 16) organized by VIT University.
5. Open House coordinator at shaasta-2009 where we portrayed various researches being carried out in the department in Indian Institute of Technology, Madras.
6. Excelled in National Entrance Test- Graduate Aptitude Test in Engineering (GATE) in 2006 for admission into Ph.D program in IIT Madras (Gate score – 374).

Courses Handled at Under Graduate / Post Graduate Level.

Engineering chemistry, Engineering chemistry Lab, Environmental science.

No. of Papers Published

National Journals – Nil International Journals – 23

Projects Carried out

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Patents

1. Effect of chemical treatment on natural fiber reinforced composites, D. Saritha, B. Dhatreyi, R. Sujithra, 2021, Application No.202141003308 A. (Published)

Technology Transfer

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Invited Speaker

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No. of Books/Chapter Published with details

1. Book Title: Nanotechnology Based Additive Manufacturing: Product Design, Properties and Applications, Chapter Title: Nanomaterials-Based Additive manufacturing for Mass Production of Energy Storage Systems: 3D Printed Batteries and Supercapacitors, Authors: R. Sujithra, B. Dhatreyi, D. Saritha* Wiley-VCH, Weinheim – Accepted 2022
2. Book Title: Nanotechnology Based Additive Manufacturing: Product Design, Properties and Applications, Chapter Title: Nanomaterials and Nanostructures in Additive Manufacturing: Properties, Applications and Technological Challenges, K.Sathish Kumar, N. Mahendar Reddy, R. Sujithra, K. Ramesh, Gubbala V. Ramesh, D. Saritha * Wiley-VCH, Weinheim – Accepted 2022
3. Book Title: Smart Technologies for Energy, Environment & Sustainable Development, Chapter Title: A brief review of cathode materials for Li-ion batteries, Author: D. Saritha*, Springer-https://doi.org/10.1007/978-981-16-6875-3_44, 2022.
4. Book Title: Proceedings of Fourth International Conference on Inventive Material Science Applications. Advances in Sustainability Science and Technology. Chapter Title: Ordered Pt3M (M= Early d- block Metals) Intermetallic Nanocrystals: Synthesis and Electrocatalysis Authors: D. Saritha, N. Mahendar Reddy, * Gubbala V. Ramesh, * Springer-Accepted, pp 585-594, 2022, https://doi.org/10.1007/978-981-16-4321-7_48, ISBN: 978-981-16-4320-0, 978-981-16-4321-7.
5. Book Title: Advances in Sustainability Science and Technology, Chapter Title: Modern progression in anode materials for lithium-ion batteries: Review, Authors: Gubbala V. Ramesh, N. Mahendar Reddy, D. Saritha* Springer-Accepted, pp 595-603, 2022, https://doi.org/10.1007/978-981-16-4321-7_49, ISBN: 978-981-16-4320-0, 978-981-16-4321-7.
6. Book Title: Advanced Nanomaterials for Point of Care Diagnosis and Therapy, Chapter Title: Chapter 11 - Carbon nanomaterials: Application as sensors for diagnostics, Naveen K Dandu, Ch G Chandaluri, Kola Ramesh, D. Saritha, N. Mahender Reddy, Gubbala V. Ramesh, Elsevier, pages 211-248, 2022, <https://doi.org/10.1016/B978-0-323-85725-3.00015-5>.
7. Book Title: 2D Functional Nanomaterials: Synthesis, Characterization, and Applications, Chapter Title: 2D Nanomaterials for Photocatalysis and hot electrocatalysis. Authors: Gubbala V. Ramesh, * N. Mahendar Reddy, Muvva D. Prasad, D. Saritha, Kola Ramesh. Wiley-VCH, Weinheim, Chapter 22, pp 383-411, 2021, ISBN: 9783527823949, 3527823948.
8. Structurally connected Vandates and Molybdates as Electrode materials for Li-ion Batteries, D. Saritha, Lambert Academic Publishing, 2021

Organized

1. Successfully organized Guest Lecture on “Nano-Materials” by Dr. K Venkateshwara Rao, Professor of nanotechnology, JNTUH, Kukatpally, Hyderabad-85 on 6-2-2021.
2. Successfully Organized Webinar on “2D Nanomaterials for Advanced Electronic Applications” by Dr. Kishore Kumar Sadasivuni, Center for Advanced Materials, Managing Editor, Emergent Materials, Springer, Qatar University, Qatar on 10-4-2021.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops/Other Trainings (Attended and/or Organized).

Attended

3. Participated in the National One Week Faculty Development Programme on Carbon Capture & Storage organized by the Department of Chemistry, Central University of Tamil Nadu, Thiruvavur, India from 21st to 25th February 2022.
4. Participated in the Online AICTE Recognized Faculty Development Programme on Innovative Technologies Application through Unnat Bharat Abhiyan from 21/03/2022 to 25/03/2022 (One Week) Conducted by Rural Development Department NITTTR, Chandigarh.
5. Participated in the Online AICTE Recognized Faculty Development Programme on Analytical Techniques for Material Characterization from 07/03/2022 to 11/03/2022 (Except: 7 March) Conducted by Applied Science Department NITTTR, Chandigarh.
6. Participated in the Online AICTE Recognized Faculty Development Programme on Online Learning and Online Evaluation from 14/03/2022 to 18/03/2022 (one Week) Conducted by Education and Educational Management Department NITTTR, Chandigarh.
7. Participated in the Online AICTE Recognized Faculty Development Programme on Nanomaterials and their green applications from 28/03/2022 to 01/04/2022 (One Week) Conducted by Applied Science Department, NITTTR, Chandigarh.
8. Participated in Two Day Faculty in-house training Programme conducted by CBIT On 23rd & 30th April, 2022.
9. Participated in the Workshop on "Thin film deposition and device fabrication" during 7th - 9th January 2022
10. Successfully completed "online Patent Information Course" Organized by Turnip Innovations during Nov 2020.
11. Successfully completed "Improved business Performance with Google Forms" an online non-credit course authorized by Rhyme and offered through Coursera on 26-5-20.
12. Successfully completed "Solar Energy Basic course" an online non-credit course authorized by State University of New York and offered through Coursera on 25-5-20.
13. Successfully completed "Organic Solar cells –Theory and Practice" an online non-credit course authorized by Technical university of Denmark and offered through Coursera on 20-5-20.
14. Successfully completed "Introduction to solar cells course" an online non-credit course authorized by Technical university of Denmark and offered through Coursera on 11-5-20.
15. A week online Faculty Development Programme on "IPR and Patent Prosecution" Organized by Institute Innovation Council, MVSREC, Hyderabad during 24/05/2021 to 28/05/2021.
16. A week online Faculty Development Programme on "Research Paper Writing" Organized by KG Reddy, Hyderabad during 10/05/2021 to 15/05/2021.
17. A week online Faculty Development Programme on "Research Trends in Advanced Materials Science and Engineering Technology" Organized by CBIT, Hyderabad during 8/03/2021 to 12/03/2021.
18. A week online ATAL Academy Faculty Development Programme on "Molecular Manufacturing" Organized by CBIT, Hyderabad during 19/10/2020 to 23/10/2020.
19. Two week online Faculty Development Programme on "Research Methodologies and Statistical Data Analysis" Organized by CBIT, Hyderabad during 16/11/2020 to 28/11/2020.
20. A week online AICTE Recognized Faculty Development Programme on "Research Pedagogy and Technical Writing" Organized by NITTTR, Chandigarh during 21/09/2020 to 25/09/2020.
21. A week online AICTE Recognized Faculty Development Programme on "Intellectual Property Rights -Aspects and Prospects for Entrepreneurs" Organized by NITTTR, Chandigarh during 14/09/2020 to 18/09/2020.

22. A week online AICTE Recognized Faculty Development Programme on "Advances in Manufacturing" Organized by NITTTR, Chandigarh during 07/09/2020 to 11/09/2020.
23. A week online AICTE Recognized Short term Training Programme on "Synthesis, Characterization and its applications of nanomaterials" Organized by JNTU, Hyderabad during 24/08/2020 to 29/08/2020.
24. A week online Faculty Development Programme on "Engineering Physics and Materials Science" Organized by CBIT, Hyderabad during 03/08/2020 to 07/08/2020.
25. A one week online faculty development program on "Material processing and optimization from Conversion and Storage" by NITTTR, Chandigarh during 6-7-20 to 10-7-20.
26. A one week online faculty development program on "Advanced Materials for Energy Harvesting, Conversion and Storage" organized by MLR institute of Technology, Hyderabad during 19-6-20 to 23-6-20.
27. A one week online faculty development program on "Materials: Recent trends and engineering applications" by Gokaraju Rangaraju institute of Engineering and Technology, Hyderabad during 2-6-20 to 7-6-20.
28. A one week online faculty development program on "Outcome based education & NBA Accreditation" by Chaitanya bhārathi institute of technology, Hyderabad during from 28-5-20 to 1-6-20.
29. A one week online AICTE Recognized faculty development program on "Recent Advances in Material Characterization" by NITTTR, Chandigarh during 23-5-2020 to 28-5-2020.
30. A one week online faculty development program on "nano materials for Energy harvesting and biomedical applications" by Godhavari institute of Engineering and technology, AP during 18-5-20 to 22-5-20.
31. A one week national online faculty development program on "ICT tools for effective teaching learning" by Swami Ramanand Teerth Marathwada university, Nanded during 11-5-2- to 16-5-20.
32. A one week online national faculty development program and online training on "Latex" by Sanjay Ghodawat University, Kolhapur in association with Spoken Tutorial project, IIT- Bombay during 27-4-20 to 2-5- 20.
33. A three day International work shop on Energy Storage Technologies for E-Mobility (IWESTE-2021) organized by SRMIST, Chennai during 25/3/21 to 27/3/21.
34. A three day online Workshop on Advanced materials for Energy and Environment Applications Organized by Yogi Vemana University, Kadapa during 21/12/2020 to 23/12/2020.
35. 3 days of video lectures and hands work on "Effective and efficient online teaching in the age Corona, A Hands on workshop" by IIT Bombay on 16-5-20.
36. A one month "IIC Online Sessions" conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi, 28-4-20 to 22-5-20.
37. A one day Seminar on Environmental Science organized by RSC on 21-4-21.
38. A one day online webinar on National Educational Policy organized by UBA Cell, MGIT on 26-9-20.
39. A one day online webinar on Transforming youth into responsible citizens and engage them in developing the nation organized by Lead India Foundation on 15-8-20.
40. A one day online Workshop on Recent Trends in Materials and its applications in Engineering organized by department of Physics, CBIT, Hyderabad, 2019.
41. A one-day online Workshop on "National seminar on IOT for Real world" by CBIT, MGIT Hyderabad, 2019.
42. A one day online "Leadership talk with Shri Dipendra Manocha" by MHRDS Innovation cell on 27-6-20.

43. A one-day online webinar on Publishing Research articles in Scopus indexed journals” by CBIT – School of Management studies on 24-6-20.
44. A one day online “Leadership talk” with Mr. Sridhar venkat, CEO by MHRDS Innovation cell on 20-6-20.
45. A one day online “Covid 19 Awareness program” by JNTU college of Engineering, Jagtial, India on 31-5-20.
46. A one day online “national level quiz” by Holy Mary institute of technology and science on 30/5/20.
47. A one day online webinar on “writing a research paper for good indexed journals” JNTUA, Pulivendula on 30/5/20.
48. A one day online webinar on “Pedagogical use of ICT in a classroom” by Stanley college of Engineering and technology for women, Hyderabad on 29-5-20.
49. A one day online “Leadership talk with Mr. Mahesh babu CEO Mahindra Electric mobility Ltd“ by MHRDS Innovation cell on 23-5-20
50. A one day online webinar on “Graphene-The future material“ by Cambridge institute of technology, Bangalore on 18-5-20.
51. A one day online “Matlab Skill test” by Raghu engineering college, AP on 17-5-20.
52. A one day online “Leadership talk” with Dr. Pramod Chaudhari, Prajindustries limited, Dr.Abhay jere, Chief innovation officer, MHRDS Innovation cell by MHRDS Innovation cell on 16-5-20.
53. A one day online “Awareness program on Intellectual property Rights” by Rajgad Dnyanpeeths Shri Chhatrapati Shivajiraje college of engineering on 15-5-20.
54. A one day online “the India First leadership talk” webinar with Prof.Singh by MHRDS Innovation cell on 9-5-20.
55. A one day online webinar on “Major challenges in auto component industries- post Covid 19” by Chennai institute of technology on 7-5-20.
56. A one day online “Faculty Awareness program on outcome based education and NBA accreditation” by Sinhgad Institute of Technology and Science, Pune held on 7-5-20
57. A one day online “quiz on Covid 19 Awareness program” by Unnat bharat Abhiyan, Thiagarajar College of engineering, India on 6-5-20.
58. A one day online “Webinar and Live tour of 3D printing, leading towards Industry 4.0” through you tube live Streaming on 3-5-20.
59. 3 days day “online Faculty development program” by Tilak college of science and commerce, India on 3-5-20.
60. A one day online “Awareness program on E-Learning opportunities’ @Covid 19 Lockdown” organized by Silver Jubilee Government College (A), Ap on 2-5-20.
61. Presented a Paper titled “Investigation of novel anode materials for Lithium ion batteries” by CBIT, Hyderabad, during research day 2019.
62. 2 days “induction program for new joiners” by the academic staff college during 18-7-2017 to 19-7-2017.

Details of Journal Publications/ Conferences (National and International) from the year 2017

International Journals from the year 2017

1. D Saritha (2022)“A concise review on the removal of heavy metals from wastewater using adsorbents”, Material Today: Proceedings, vol.62(6), pp. 3973-3977.
2. D Saritha, NM Reddy, GV Ramesh (2022)“Pt- and Pd- based intermetallic anode catalysts for direct ethanol fuel cell (DEFC): An overview”, Material Today: Proceedings, vol.64(1), pp. 357-362.
3. N Mahender Reddy, Gubbla V Ramesh, D Saritha (2022)“Contemporary advancement on the alloy-based anodes for Sodium-ion batteries”, Material Today: Proceedings, vol.64(1), pp. 290-294.
4. Prachi Singhal, R Sujithra, D Saritha(2022)“Effect of alternate fill pattern on mechanical properties of FDM printed PC-PBT alloy”, Material Today: Proceedings, vol.62(6), pp. 3791-3799.
5. D Saritha, CH Sandeep, R Sujithra(2022)“Current advancement on anode materials for Na-ion batteries: Review”, Material Today: Proceedings, vol.62(6), pp. 3022-3026.
6. R. Sujithra, D. Saritha (2021) “Effect of fill pattern and printing speed on friction characteristics of FDM printed polylactic acid polymer”, Advances in Materials and Processing Technologies, pp.1-10.
7. D Saritha, Dhatreyi Boyina (2021) “A concise review on 4D printing technology”, Material Today: Proceedings, vol.46(1), pp. 692-695.
8. D Saritha* (2021) “Synthesis and electrochemical properties of Fe₂WO₆”, Material Today: Proceedings, vol. 38(5), pp. 2512-2514.

9. D. Saritha* (2021) "Recent progress on ReO₃ type structures as electrodes for Li-ion batteries", *Material Today: Proceedings*, vol. 41(5), pp. 1130-1134.
10. D. Saritha* (2020) "Synthesis and Electrochemical Analysis of Li₃Ti_{0.75}(MoO₄)₃ Phase with Lyonsite Structure", *Russian Journal of Electrochemistry*, vol. 56(8), pp.626-629.
11. D.Saritha (2020) "Sol gel synthesis and electrochemical properties of wolframite FeNbO₄", *IOP Journal of physics: conference series*, vol.1495 (1). pp.012019.
12. Ande Harshavardhan Reddy, Saritha Davuluri, Dhatreyi Boyina (2020) "3D Printed Lattice Structures: A Brief Review", *IEEE paper*, <https://doi.org/10.1109/NAP51477.2020.9309680>.
13. D.Saritha* (2020) "Insertion-Type Electrodes for Li-Ion Batteries" ISBN: 978-81-946476-9-0, pp.136-139.
14. D.Saritha* (2019) "A concise review on the advancement of anode materials for Li-ion batteries", *Material Today: Proceedings*, vol.19, pp. 726-730.
15. D.Saritha* (2019) "Synthesis, Characterization and electrochemical analysis of FeNbO₄ phase with α-PbO₂ Structure", *Russian journal of Electrochemistry*, vol.55, pp.168-174.
16. D.Saritha* (2018) "Electrochemical Reaction of Lithium with SbNbO₄- ReO₃ Structure Type Phase", *Material Today: Proceedings*, vol. 5(9), pp. 17579-17584.
17. D.Saritha* (2018) "Synthesis and electrochemical analysis of AlVMoO₇ oxide prepared via sol-gel method", *Bulletian of material Science*, vol. 41, pp.64
18. D.Saritha (2018) "Sol- Gel synthesis and electrochemical studies on Mo₃Nb₂O₁₄", *Adv. Sci. Lett*, vol.24, pp.5593-5597.
19. D.Saritha* (2018) "Synthesis and electrochemical studies of ReO₃ type phase Nb₃O₇F", *Mechanics, Materials science & Engineering*", vol.14(1) pp.2412.
20. D.Saritha* (2018) "Electrochemical study of the two structurally related compounds FeVMoO₇ and CrVMoO₇ synthesized by sol-gel method", *Journal of Chemical Sciences*, vol.130, pp. 7.
21. D.Saritha* (2018) "Electrochemical analysis of tetragonal tungsten bronze type phases- W₉Nb₈O₄₇ and W₇Nb₄O₃₁ synthesized by Sol-Gel method", *Material Science and Engineering B*, vol.228, pp.218-223.

International Conferences from the year 2017

1. Dr.D.Saritha,(2022), presented a paper titled "Contemporary advancement on the alloy-based anodes for Sodium-ion batteries at the ICAMIS 2022 conference ", organized by department of Science and Humanities, MLR Institute of Technology, Telangana, Hyderabad, India during 18-19 th Feb 2022.
2. Dr.D.Saritha (2022) has participated in International Conference on Materials Engineering and Manufacturing Systems, Organized by Mattest Research Academy, Chennai, Tamil Nadu, India, during 28,29&30 January 2022.
3. D.Saritha, (2021), Presented a paper titled "Current Progression in anode materials for Lithium ion batteries: Review at "International e-Conference on Advances in Science and Technology (ICAST) ", organized by Institute of Innovations, Tamilnadu , India.
4. D.Saritha, (2021), Presented a paper titled "Current Progression on anode materials for Na ion batteries: Review at "Third International Conference on Material Science and Engineering Technology (ICMSMT) ", organized by Tamilnadu, India.
5. D.Saritha, (2021), Presented a paper titled "Modern Progression in anode materials for Li-ion batteries: Review at "Fourth on Inventive Material Science and Applications ", organized by PPG Institute of Technology, Coimbatore, India.
6. D.Saritha, (2020), Presented a paper titled "A brief review of Cathode materials for Li-ion batteries at "International e-Conference on Smart Technologies for Energy, Environment and Sustainable Development sponsored by AICTE (ICSTEESD-2020) ", organized by G.H. Rasoni college of Engineering, Nagpur, India.
7. D.Saritha, (2020), Presented a paper titled "Synthesis and Electrochemical properties of Fe₂WO₆ at "International e-Conference and exposition on Mechanical, Material and Manufacturing Technology (ICE3MT2020) ", organized by CVR, Hyderabad on 9th & 10th October.
8. D.Saritha, (2020), Presented a paper titled "Insertion-type electrodes for Li-ion batteries at "(ICMP&C-2020) ", organized by CBIT, Hyderabad on 18th & 19th September.
9. D.Saritha, (2020), Presented a paper titled "Nanomaterials as electrodes for Li-ion batteries at "Indo-Korea e-Conference on Development of Advanced materials for Future Technologies (DAMFT-2202) ", organized by VIT University, Vellore on 9th & 10th July.
10. D.Saritha, (2020), Participated in the one-day International virtual conference Microplastics "Microplastics 20", held at VIT, Vellore
11. D.Saritha, (2019), Presented a Paper titled "Sol-gel Synthesis and Electrochemical properties of wolframite FeNbO₄"ICMM 19", held at Geethanjali college of Engineering ad Technology, Hyderabad.
12. D.Saritha, (2019), Presented a Paper titled "Synthesis and Electrochemical properties of Fe₂WO₆"ICAM5 19", held at NIT, Warangal.
13. D.Saritha, (2019), Presented a Paper titled "Recent progress on ReO₃ type structures as electrode materials for Li-ion batteries "ICAM5 19", held at NIT, Warangal.
14. D.Saritha, (2019), Presented a Paper titled "Investigation of novel anode materials for Lithium-ion batteries during research day at CBIT, Hyderabad, 2019.
15. D.Saritha, (2019), Presented a Paper titled "A concise Review on the advancement of anode materials for Li-ion batteries "ICMMSE 19", held at CMR, Hyderabad.
16. D.Saritha, (2019), Presented a Paper titled "ReO₃ type structures as electrode materials for Lithium-ion batteries "ICONN 19", held at SRM, Chennai.
17. D.Saritha, (2018), Presented a Paper titled "Current trends in Nano materials as anodes for Li ion batteries "ICONAN 18", held at JNTU, Hyderabad, 2018.
18. D.Saritha, (2018), Presented a Paper titled "Lithium insertion into FeNbO₄ phase with wolframite structure "ICTEMPS 18", held at GCET, Hyderabad, 2018.
19. D.Saritha, (2018), Presented a Paper titled "Electrochemical Reaction of Lithium with SbNbO₄-ReO₃ structure Type Phase "ICMPC 18", held at GRIET, Hyderabad, 2018.

20. D.Saritha, (2017), Presented a Paper titled "Sol-Gel Synthesis and Electrochemical studies on ReO_3 structure "ICMAT 17", held at VIT University, Vellore, 2017.