Name of Faculty Dr. M.SUBHADRA
Designation Assistant Professor

Nature of Job/Appointment Regular

Date of Joining 18-09-2012

E-mail <u>msubhadra_physics@cbit.ac.in</u>

Education QualificationsName of the DegreeClassPh. DDoctor of Philosophy (Material Science)AwardedPGM.Sc. Physics (Solid State)DistinctionUGB. Sc. (MPC)Distinction

Work Experience

Teaching 19 Years (includes research experience)

Research 13 years

Industry --Others ---

Area of Specialization Material Science

Responsibilities held at Department Level

Courses Handled at Under Graduate level

No. of Papers Published/Presented

Professional Memberships

Lifetime Membership – International Journal for Research

under Literal Access (IRJULA)

Responsibilities held at Institution Level Member, Maintenance Committee

1. Department Library Incharge (2016-18)

2. ISO In-Charge (2018-19)

3. Member BOS

4. Member IQAC

5. NAAC- Coordinator

6. NBA- Coordinator

Research Guidance --

Awards Received

1. UGC-RFSMS Research Fellow ship

2. Research Ratna Award of the Year 2019 by IRJULA

Engineering Physics, Applied Physics, Introduction to Mechanics and Electromagnetic Theory, Optics and

Semiconductor Physics.

International Journals -

09(published)

National Conference -

12(presented)

International Conference – 02

Projects Carried out

Patents --

Technology Transfer --

Invited Speaker --

No. of Books/Chapter Published with

details

details

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.Other

Trainings (Attended).

Workshops/Seminars/Conferences/STTPS/FDPs Organized

- 1. **Coordinator**, Two day" International-e-Conference on Materials Processing & Characterization (ICMP&C- 2020)" organized by Department of Physics, CBIT, Gandipet, Hyderabad, Telangana during 18-09-2020 and 19-09-2020.
- 2. **Coordinator,** One week on line FDP on "Student Induction & Universal Human Values" organized by Department of Physics, CBIT during 26-08-2020 to 30-08-2020.
- 3. **Co-cordinator**, of One week FDP on "Engineering Physics and Materials Science: organized by Department of Physics , CBIT, Gandipet, Hyderabad during 03-08-2020 to 07-08-2020.



- 4. **Member,** Organizing Committee of Seven Day refresher course on "Bharatheeya Chaitanyam" organized by Gheervana Bharathi of Chaitanya Samskruti, CBIT, Gandipet, Hyderabad., during 29th June 2020 to 5th July 2020.
- Co-coordinator, One day workshop on "Recent Trends in Materials and Its Applications in Engineering" "Organised by Department of Physics, at N Block Seminar Hall, CBIT, Gandipet, Hyderabad on 20th November 2019.
- 6. **Co-cordinato**r, One day Seminar on "Physics and its applications in Engineering" at CBIT, Gandipet, Hyderabad on 13th March 2019.
- 7. Organized, One day Workshop on "Role of Physics in Engineering Curriculum, at CBIT, Gandipet, Hyderabad on 30th June 2017.

Workshops/Seminars/Conferences/STTPS/FDPs Attended

- 8. Completed One week Online worshop on "AICTE Incorporating Universal Human Values in Education (An AICTE Initiative)" from 27-09-2021 to 01-10-2021.
- 9. Completed Three day online workshop on "Universal Human Values-II Understanding Harmony", organized at CBIT, Gandipet, Hyderabad from 20-09-2021 to 22-09-2021.
- 10. Completed one week National level online FDP on "Materials for Photonic Applications" organized by Dept. of Physics and Chemistry, MGIT, Gandipet, Hyderabad from 09-08-2021 to 13-08-2021.
- 11. Completed one week online FDP on "Nano Sensors and Devices: organized by Department of Applied Science, NITTTR Chandigarh from 02-08-2021 to 06-08-2021.
- Completed two day online FDP on "Development of Students' Skills in Learning", Jointly Organized by Department of History & Faculty of Physical Science, Govt. Degree College, Dharmanagar, North Tripura in Collaboration with Department of Physics, Sao Chang College, Tuensang, Nagaland from 31-07-2021 to 01-08-2021.
- 13. Completed one week online FDP on "Chemistry for Societal Advancements" organized by Department of Chemistry in association with AP Academi of Sciences Amaravathi, AP from 26-07-2021 to 31-07-2021.
- 14. Completed "4 week course on The Story of Photoelectric effect", organized by Center for continuing Education, IIT Kanpur from 15-07-2021 to 17-08-2021.
- 15. Completed "16 week course in Classical Mechanics-1" organized by Center for continuing Education, IIT, Kanpur from 26-01-2021 to 25-04-2021.
- 16. One week online FDP on "Recent Trends in Advanced Materials Science and Engineering Technology(RTAMSET-21)" organized by department of chemistry, CBIT(A) , Gandipet, Hyderabad from 08-03-2021 to 12-03-2021.
- 17. Completed "16 week course in Classical Electromagnetism-1(Electrostatics)" organized by Center for continuing Education, IIT, Kanpur from 15-08-2020 to 13-12-2020.
- 18. One week online FDP on "Recent Trends in Advanced Materials Science and Engineering Technology(RTAMSET-21)" organized by department of chemistry, CBIT(A), Gandipet, Hyderabad from 08-03-2021 to 12-03-2021.
- 19. Completed "Two week Refresher Course in Engineering Physics" organized by Department of Applied Science, NITTTR, Chandigarh from 12-10-2020 to 23-10-2020.
- 20. One day Webinar on "Environmental Issues and Challenges" organized by Department of Civil Engineering and Department of Sciences and Humanities , Matrusri Engineering College on 15- 09-2020.

- 21. National level one day awareness workshop on "Outcome based education and Accreditation for Engineering Colleges", organized by G H Raisoni Instittue of Engineering & Technology, Nagapur on 11-09-2020.
- Three day FDP on "Virtual Physics Labs" sponsored by TEQIP-III (NPIU-MHRD, Govt. of India) and organized by JNTUA college of Engineering(A) Ananthapuramu, A.P. in association with University college of Engineering & Technology, Bikaner Technical University, Bikaner(Raj.) during 07-09-2020 to 09-09-2020.
- 23. One day National level webinar in Physics on "Innovative Practices if Teaching & Learning in Sciences" organized by Department of Physics (Humanities &Sciences) Balaji Institute of Technology & Science Narsampet, Warangal on 21-08-2020.
- 24. One day National webinar on "A New Look at Energy and Sustainability" organized by Atma Ram Sanatan Dharma College, Dhaulakuan, New Delhi on 18-08-2020.
- 25. Completed, One week Online AICTE Recognized FDP on "Nano Electronics Devices & Circuits "Organized by Department of Electronics and Communication Engineering NITTTR, Chandigarh, Ministry of HRD, Govt. of India during 17-08-2020 to 21-08-2020.
- 26. One Week On line FDP on "The Role of Materials Science in Engineering: Applications Perspective" organized by Department of Physics and Chemistry, MGIT, Gandipet during 03-08-2020 to 07-08-2020.
- 27. Participated in One Day National Webinar on "Applications of Fluid Mechanics in Engineering and Technology" organized by Department of Maths, CBIT, Gandipet, Hyderabad on 27.07.2020.
- 28. Participated in One day workshop on "Materials processing and Technology" organized by Department of Physics & Chemistry, MGIT, Gandipet, Hyderabad on 27.06.2020.
- 29. Participated in Three Day Online FDP on "Perovskite Solar Cells –An Emerging Photovoltaic Technology", there are 3 sessions during the programme, Session I: Perovskite solar cells Introduction held on 26th june 2020, Session 2: Device Architecture and Fabrication Techniques held on 27th June 2020 and Session3: Presentation on recent publications held on 28th June 2020, organized by Sreenivasa Institute of Technology and Management Studies, Chittor. (26.06.2020 to 28.06.2020).
- 30. Attended, One Week Webinar on "NAAC Online teaching Learning" organized by Inpods India Pvt. Limited. during 16th June 2020 to 20th June.2020.
- 31. Attended, One day Online workshop on Intellectual Property rights" organized by Pandit Deendayal Petroleum, Gujarat. on 11th April 2020.
- 32. Participated in a Webinar on "Advanced Materials Processings" organized by Narasaraopeta Engineering College(NEC), Dept. of Mechanical Engg., Narasaraopeta, AP. on 4th June 2020.
- 33. Participated in One Week Online FDP on "Materials: Recent trends and Engineering Application" organized by GRIET, Kukatpally, from 2nd June 2020 to 7th June 2020.
- 34. Participated in One Week Online FDP on "Outcome Based Education and NBA Accreditation Process- (UG)" organized by CBIT, Gandipet, Hyderabad during 28th May.2020 to 1st June 2020.
- 35. Participated in, One Week Online FDP on "Outcome Based Education" organized by Govt. College of Engineering Karad , Maharastra, (AICTE sponsored) during 11th May 2020 to 15th May 2020.
- 36. Participated in One Week Online FDP on "Material Sciences: Synthesis and Characterization" organized by Dept. of Physics, Institute of Science, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Ujjain Road, Indore., during 11th May 2020 to 15th May 2020.
- 37. Participated in Three day Online workshop on "Effective and Efficient teaching in the age of Corona–A Hands on Workshop" organized by Teaching Learning Centre (ICT), IIT Bombay. Funded by PMMNMTT, MHRD. Interaction on 24th May 2020.
- 38. **Completed**, Six Weeks online course on "Physics of Silicon Solar Cells" conducted by École Polytechnique through **Coursera** w.e.f 27th April 2020.
- 39. Completed, Seven Week online course on "Programming For Everybody (Getting started with

- Python) conducted by University of Michigan through **Coursera** w.e.f 14th April 2020.
- 40. **Completed**, Eight Week online course on "Learning Physics Through Simple Experiments" organized by IIT Kanpur, during 2nd April 2020 to 10th June 2020.
- 41. **Completed,** Two Week online course on "Digital Transformation In Teaching Learning Process" sponsored by MHRD, TEQUIP 3, IIT Bombay during 6th April 2020 to 22nd April 2020.
- 42. Participated in One day National Seminar on "Intellectual properties Rights in Academic Research" organized by Intellectual Property Rights Cell , RBVRR Women's College, Narayanguda, Hyderabad on 15th February 2020.
- 43. Completed, 12 weeks NPTEL online course on "NATE-NBA Accreditation" from 27th January 2020 to 26th April 2020.
- 44. Attended Guest lecture on "Light emitting dides" organized by the department of physics ,CBIT Hyderabad-75 on 20th February 2020.
- 45. Completed, Three Weeks "Orientation Programme", organized by UGC- HRDC, OU, Hyderabad during 4th July 2019 to 25th July 2019.
- 46. Participated in One week STTP on "NBA Accreditation "at CBIT in collaboration with NITTTR, Kolkata through ICT mode during 22nd April 2019 to 26th April 2019.
- 47. Attended, Two day National workshop on "Alternative Liquid Fuels in IC Engines(ALFICE-17) organized by the Department of Mechanical Engineering, CBIT and TEQUIP- held at Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad during 17th February.2017 to18th February 2017.

Details of Journal Publications/ Conferences (**International**)

- M. Subhadra, K. RajGopal, Y. Srinivasa Reddy and P. Kistaiah (2020), "Physical and dc Electrical Properties of Vanadium doped Mixed Alkali Bismuth Borate Glasses", e-book of full paper Proceedings of International e-Conference on Materials Processing & Characterization ICMP&C-2020, ISBN: 978-81-946476-9-0, Page 68. Sep 18-19.
- Chittepu Obula Reddy, Yanala Srinivasa Reddy, Maringanti Subhadra & Kurapati Rajagopal ,(2020), "Effect of long-term storage on the fatty-acid profile of biodiesel and its impact on key ultrasonic properties of biodiesels and blends", ", Energy Sources, Part A: Recovery, Utilization, and Environmental Effects.
 - a. DOI:10.1080/15567036.2020.1817193
- Yanala Srinivasa Reddy , Chittepu Obula Reddy , Maringanti Subhadra & Kurapati Rajagopal, (2020), "Long – term storage effect on molecular interactions of biodiesels and blends", Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, DOI:10.1080/15567036.2020.1776798.june 16
- 4. .M.Subhadra, S. Sulochana and P.Kistaiah (2018), "Effect of V2O5 content on physical and optical properties of Lithium Bismuth Borate Glasses"., Materials Today: Proceedings, Volume 5, Issue 13,pp. 26417-26423.
- 5. M.Subhadra and P.Kistaiah (2012), "Infrared and Raman Spectroscopic Studies of Mixed Alkali Bismuth Borate glasses with Vanadium ions", Journal of Vibrational Spectroscopy, Volume 62, pp. 23-27.
- M.Subhadra and P.Kistaiah (2011)," Electron paramagnetic resonance and thermal behavior of Vanadyl-doped mixed alkali bismuth borate glasses.", Journal of Non-Crystalline Solids, Volume 357, pp. 3442-3446.

- 7. M.Subhadra and P.Kistaiah (2011), "Effect of Bi₂O₃ Addition on Electron Paramagnetic Resonance, Optical Absorption, and Conductivity in Vanadyl-Doped Li₂O-K₂O-Bi₂O₃-B₂O₃ glasses", Journal of Physical Chemistry A, Volume 115, pp 1009 1017.
- 8. .M. Subhadra and P. Kistaiah (2011), "Effect of Bi_2O_3 content on physical and optical properties of $15Li_2O 15K_2O xBi_2O_3 (65-x)$ B_2O_3 : $5V_2O_5$ glass system", Physica B, Volume 406, pp. 1501 1505.
- M. Subhadra and P. Kistaiah (2010) "Characterization and Optical absorption studies of VO²⁺: Li₂O - K₂O - Bi₂O₃ - B₂O₃ glass system", Journal of Alloys and Compounds, Volume 505, pp. 634 - 639.

Papers Presented at National/International Conferences

- 1. M.Subhadra, K.RajGopal, Y.Srinivasa Reddy and P.Kistaiah (2020), "Physical and dc Electrical Properties of Vanadium doped Mixed Alkali Bismuth Borate Glasses", International e-Conference on Materials Processing & Characterization, held at Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad, Telangana, India, during 18th-19th September.
- 2. M.Subhadra and K.RajGopal (2020),"The behavior of Ultrasonic waves in long-term stored biodiesels and blends", International Conference on Advanced Materials Science and Applications(online)(ICASMA-2020), held at M.S.Ramaiah Institute of Technology, Bangalore, Karnataka, during 3-4th September.
- 3. M.Subhadra and P.Kistaiah, (2018), "Influence of V_2O_5 on Physical, Optical and Electrical Properties of Mixed Alkali Bismuth Borate Glasses.", 5^{th} National conference on Applied Physics and Materials Science (APMS-2018), held at Vasavi College of Engineering (A), Imbrahimbagh, Hyderabad, during 7-8th September.
- 4. M.Subhadra and P.Kistaiah (2017), "Effect of V_2O_5 content on physical and optical properties of Lithium Bismuth Borate Glasses.", National seminar on Physics and Chemistry of Non-crystalline materials held at Kakani Venkata Ratnam College, Nandigama, A.P., India during 1st and 2nd December.
- 5. M.Subhadra and P.Kistaiah (2015), "Characterization and Optical Absorption Studies of R_2O ZnO- B_2O_3 (R = Li, Na, K) Glass System", National Conference on Engineering Materials Energy and Environment(EMEE-15) held at Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad., during $24^{th} 25^{th}$ April.
- 6. G.Padmaja, M.Subhadra and P.Kistaiah (2015), "Low Temperature Specific Heat of Mixed Alkali Borate Glasses: An Evidence of Mixed Alkali Effect," National Conference on Environmental Radiation and Functional Materials -2015 held at Osmania university on Feb 28th and 1st March.
- 7. M.Subhadra and P.Kistaiah (2014), "Electrical Conductivity Studies in Vanadium Doped Mixed Alkali Borate Glasses", National Conference on Advanced Materials ForEnergy Applications-NCAMEAOU-2014 held at Osmania University on 31st Jan 2014 and 1st Feb.
- 8. M.Subhadra and P.Kistaiah (2013), "Electrical Conductivity Studies in Mixed Alkali Bismuth Vanadoborate Glasses: An Evidence of Mixed Alkali Effect.", National seminar on "Advanced Materials and their Applications (NSAM-2013)", held at Department of Physics, Osmania University, Hyderabad-07, during 27th- 28th February.
- M.Subhadra and P.Kistaiah (2010), "Mixed Alkali Effect in Vanadyl Doped Bismuth Borate Glasses", International Conference on "Applications of Renewable and Sustainable energy for Industry and Society – 2010", held at Dept of Physics, Osmania University, Hyderabad during 16-18th December.
- 10. M.Subhadra and P.Kistaiah (2010), "EPR of Vanadyl ions in mixed alkali bismuth borate glasses, , 3rd AP Science Congress", "Science, Technology, Education for Prosperity (STEP)", held at JNTU, Hyderabad during 18-20th November.
- 11. M. Subhadra and P. Kistaiah (2010), "Effect of Bi_2O_3 content on the Optical properties of $15Li_2O_3$ (65-X) Bi_2O_3 : $5Vi_2O_5$ glass system", UGC-SAP National Seminar on "Recent Trends in Solid State Materials NSRTSSM 2010", held at Dept. of Physics, Osmania University,

Hyderabad on 26th February.

- 12. M. Subhadra and P. Kistaiah (2009), "Optical characterization of VO^{2+} : $Li_2O-K_2O-Bi_2O_3-B_2O_3$ glass system, 2^{nd} AP Science Congress , "Science and Technology: Its Role in the Changing Global Scenario", held at S.V. University, Tirupati, during $14-16^{th}$ November.
- 13. J.Anjaiah, M.Subhadra and P.Kistaiah (2008), "Luminescence Properties of Ternary $\text{Li}_2\text{O-ZnO-B}_2\text{O}_3$ Glass doped with Pr^{3+} ions", 1^{st} AP Science Congress 2008, Emerging Trends in Science and Technologies, held at Dept. of Physics, Osmania University, Hyderabad during 14-16th November.