

# Curriculum Vitae

## Personal information

Name  
Institution Address  
  
Email-ID  
Nationality  
Religion  
Permanent Address

**Dr. SUBBARAO MATHANGI**  
M.Sc., B.Ed., CSIR-NET-JRF., Ph. D  
Assistant Professor,  
Dept. of Physics,  
Dr. B.R. Ambedkar University,  
Etcherla, Srikakulam,  
Andhra Pradesh-532410



**subbarao.mathangi@gmail.com**  
Indian  
Hindu  
Dr. M. SUBBARAO, S/o JAYAPPAUL  
D.NO: 11-110, HORRISPET (V)  
GURUNADHA NAGAR (P)  
NIZAMPATNAM (M)  
GUNTUR- 522262  
Andhra Pradesh, India  
subbarao.mathangi@gmail.com

Skyp-ID

## Academic Qualification

PhD Degree Details

Ph.D (PHYSICS)  
From **Acharya Nagarjuna University**, Year of Award 2017,  
Synthesis and Characterization of Transition Metal ions doped  
 $Zn_3(PO_4)_2ZnO$  Nanocrystalline Phosphors  
Nanomaterials, Spectroscopy, Bio Active Materials & Glass Sciences  
B. Ed (Mathematics & Physical Science),  
From St. Johns College of Education, Cumbum, in the year 2008,

Title of the Thesis:

Research Area:  
Professional Course

**Acharya Nagarjuna University**,  
Marks Obtained : 68.00 %

Masters Degree

M. Sc (PHYSICS)  
From University College of Sciences,  
**Acharya Nagarjuna University**, in the year 2010,  
Marks Obtained: 62.00 %

Bachelors Degree

B.Sc (Mathematics, Physics, Chemistry)  
From Andhra Christian College, Guntur, in the year 2006,  
**Acharya Nagarjuna University**, Marks Obtained : 54.00 %

Secondary Exam

SSC, From **Z.P. High School**, Adavuladeevi, Guntur  
Board of Secondary Education, Andhra Pradesh, in the year 2000,  
Marks Obtained : 54.00 %

**Scholarship/Fellowship****CSIR-NET-JRF/SRF**, Funding from UGC on 27 Feb, 2012

## Publications

Journal(SCI): **10**, Conference Papers: **15**  
Book Chapters: **3**

## Teaching Experience

Working as an Assistant Professor, Department of Physics,  
Dr. B.R. Ambedkar University, Etcherla, Srikakulam,  
Andhra Pradesh, from 04-09-2018 to till date.

## Research Experience

Research Fellow in Physics (CSIR-JRF/SRF) at Acharya Nagarjuna University,  
From: 27 Feb, 2012 to 26 Feb, 2017

## Total Experience

Teaching-7+ Research-5 = 12 Years

**Additional Details**

1. 9<sup>th</sup> International Scientist Awards on Engineering, Science and  
Medicine-**Young Scientist Award-2020**
2. **CSIR-NET** (JRF) and Lectureship (LS)-June 2011
3. Graduate Aptitude Test in Engineering (GATE-2010), Feb 2010 in Physics
4. First Place in Cricket. University College of Sciences, 2014-2015,  
Acharya Nagarjuna University
5. First Place in Cricket. University College of Sciences, 2016-2017,  
Acharya Nagarjuna University
- An active volunteer of National Service Scheme (NSS) for 3 years.  
Participated in two special camping programs 2003-2006.
6. Krishna Pushkarams-Amaravathi. Youth for Swachatha.
7. Acharya Nagarjuna University, Guntur. Youth for Swachatha.

**Current Research Area:**Synthesis and Characterizations of Zinc Phosphate based  
Nano-Bio Implant Materials.**Conferences/ Seminars Conducted:**

1. **Convenor** "National Webinar on Recent Activities of Nanomaterials" Organized by  
Department of Physics, Dr. B.R. Ambedkar University, Srikakulam, on 6<sup>th</sup> Aug-2020.

## References

**Referee Name :** **Prof. Sandhya Cole,**  
Address : Dept. of Physics, Acharya Nagarjuna University  
Nagarjuna Nagar-522 510, Guntur, Andhra Pradesh  
Phone Number : +91-9441902295,  
Email-ID : **sandhya.cole@gmail.com**

**Referee Name :** **Prof. P. Syam Prasad,**  
Address : Dept. of Physics,  
National Institute of Technology Warangal-506004  
Telangana, India  
Phone Number : +91-8332969472,  
Email-ID : **syamprasad@nitw.ac.in**

**Referee Name :** **Prof. K. Samatha,**  
Address : Dept. of Physics, Andhra University  
Visakhapatnam-530 003  
Andhra Pradesh, India  
Phone Number : +91-9441044529,  
Email-ID : **samatha\_k2002@yahoo.com**

## Administrative Experience:

1. From 7-7-2019 to Till Date BOS Associate member in Department of Physics in Dr. B.R. Ambedkar University, Srikakulam.
2. From 24 Nov 2021 to Till Date, I have working as a course coordinator to the Department of Physics in Dr. B.R. Ambedkar University, Srikakulam.

## Decalaration by the applicant

I, *Dr. Subbarao Mathangi*, hereby certify that all the particulars furnished above are correct to the best of my knowledge and belief and any change in the above information in future will be immediately intimated to the Institute. I understand that if at any point of time, any of the information is found to be false, my candidature may be cancelled/dismissed and the Institute may take any necessary action against me.

**Place: GUNTUR**

**Date:**

**SUBBARAO MATHANGI**

## List of Publications:

1. Structural and Spectral Investigations of undoped and  $Mn^{2+}$  ion doped  $Zn_3(PO_4)_2ZnO$  nanocrystalline Phosphor Materials  
M. Subba Rao, K. Satyavathi, Y. Nagabhaskara Rao, Sandhya Cole  
**Journal of Alloys and Compounds** 682 (2016) 7-13 **IF: 2.999**
2. Synthesis and Characterizations of Chromium ions doped Zinc-Phosphate Zinc Oxide Nanocrystalline Powder. M. Subba Rao, K. Satyavathi, Y. Nagabhaskara Rao, Sandhya Cole  
“**International Journal of Advanced Research in Physical Science**”. 2 (2015) 46-53 **IF: 3.645**
3. Synthesis and characterization of undoped and  $Mn^{2+}$  ion doped  $Zn_3(PO_4)_2ZnO$  Nanocrystalline Powder.  
M. Subba Rao, K. Satyavathi, Y. Nagabhaskara Rao, Sandhya Cole  
“**BLOOMSBURY**, ed., New Delhi London Oxford New York Sydney” (2015)  
**Synthesis and Fabrication of Nanomaterials**, PP. 283-286 (2015) **ISBN: 978-93-85436-76-5**
4. Spectral and Structural Investigations of undoped and  $Fe^{3+}$  ion doped  $Zn_3(PO_4)_2ZnO$  Nanocrystalline Phosphor Materials **ISBN: 978-1-329-77555-8**  
M. Subba Rao, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole
5. Spectroscopic Characterizations of  $Fe^{3+}$  doped  $Zn_3(PO_4)_2 ZnO$  white light nanophosphors  
M. Subba Rao, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole  
“**Anveshana’s International Journal of Research in Engineering and Applied Sciences**” 2 (2017) 387-391 **ISSN: 2455-6300**
6. Structural and Spectral properties of undoped and tungsten doped  $Zn_3(PO_4)_2ZnO$  nanopowders  
K. Satyavathi, M. Subba Rao, Y. Nagabhaskara Rao and Sandhya Cole  
**Journal of Physics Chemistry of Solids**, 112 (2018) 200-208. **IF: 2.059**
7. Synthesis, characterization of undoped and doped  $Zn_3(PO_4)_2ZnO$  nanopowders by sol-gel Method, K. Satyavathi, M. Subba Rao, Y. Nagabhaskara Rao and Sandhya Cole  
**J. Mater. Sci. Mater. Electron (Springer)** 28 (2017) 12226-12238 **IF: 2.019**
8. Undoped and Molybdenum doped  $Zn_3(PO_4)_2ZnO$  nanopowders with structural and Optical Properties  
K. Satyavathi, M. Subba Rao, Y. Nagabhaskara Rao and Sandhya Cole  
“**Anveshana’s International Journal of Research in Engineering and Applied Sciences**” 2 (2017) 376-379 **ISSN: 2455-6300**
9. Structural and Luminescent properties of undoped and tungsten doped  $Zn_3(PO_4)_2ZnO$  Nanocomposites, K. Satyavathi, M. Subba Rao, Sandhya Cole  
**International Journal of Luminescence and applications** 4 (2017) 300-305 **IF: 3.801**
10. Synthesis and Characterization of Vanadium doped Zinc-phosphate Zinc Oxide Nanocrystalline powder **ISBN: 978-93-82570-42-4**  
K. Satyavathi, M. Subba Rao, Y. Nagabhaskara Rao, V. Madhuri and Sandhya Cole
11. Physical and Structural Characterization of Manganese Ions Doped  $SrO-Li_2O-CaO-B_2O_3$  (SLCB) Glasses, M. Ratna Raju, M. Subba Rao, Dr. Sandhya Cole  
**International Journal of Scientific Engineering and Research (IJSER)** 3(2015) 132-135 **IF: 3.8**
12. Physical and Structural Characterization of Chromium Ions Doped  $SrO-Li_2O-CaO-B_2O_3$  (SLCB) Glasses, M. Ratna Raju, M. Subba Rao, Dr. Sandhya Cole **IF: 4.438**  
**International Journal of Science and Research (IJSR)** 4(2015) 1558-1561
13. Synthesis and Characterization of  $Mn^{2+}$  doped  $CdOZn_3(PO_4)_2$  Nanocomposites  
Y. Naga Bhaskararao, K. Satyavathi, M. Subba Rao, Sandhya Cole  
**Journal of Molecular Structure**, 1130 (2016) 585-591 **IF: 1.780**

14. Investigations on spectral features of tungsten ions in sodium lead alumino borate Glasssystem. V. Madhuri, J. Santhan Kumar, **M. Subba Rao**, Sandhya Cole  
**Journal of Physics and Chemistry of Solids** 78 (2015) 70-77 **IF: 2.048**
15. EPR, optical and physical Properties of chromium ions in CdO- SrO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> (CdSBSi) glasses.  
J. Santhan Kumar, J. Lakshmi Kumari, **M. Subba Rao** and Sandhya Cole  
“**Optical materials**” 35 (2013)1320-1326 **IF: 2.183**
16. Spectral Studies of Fe<sup>3+</sup>/CdOZn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> Nano Composite via Chemical Precipitation Method, Y. Naga Bhaskararao, K. Satyavathi, **M. Subba Rao**, Sandhya Cole  
“**Anveshana’s International Journal of Research in Engineering and Applied Sciences**” 2 (2017) 397-401 **ISSN: 2455-6300**
17. XRD, FT-IR and SEM Studies of Cr<sup>3+</sup> doped CdO Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> nanopowders  
**Journal of Chemical and Pharmaceutical Sciences** 9 (2016) 611-614 **ISSN: 0974-2115**  
Y. Nagabhaskara Rao, K. Satyavathi, **M. Subba Rao** and Sandhya Cole
18. Photoluminescence Properties of Undoped and Mn<sup>2+</sup> ion Doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline Phosphor Materials  
**M. Subba Rao**, K. Satyavathi, Y. Naga Bhaskararao, K. Vijaya Babu, Sandhya Cole  
**ISBN: 978-81-929088-4-7**
19. Structural Properties Ti-doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO nanocrystalline powders by Sol-gel technique  
K. Satyavathi, **M. Subba Rao**, Y. Naga Bhaskararao, K. Vijaya Babu, Sandhya Cole  
**ISBN: 978-81-929088-4-7**
20. Physical and Optical Properties of TiO<sub>2</sub> Doped Sodium Lead Alumino Borosilicate Glasses  
**ISBN: 978-81-929088-4-7**  
K. Vijaya Babu, **M. Subba Rao**, K. Satyavathi, Y. Naga Bhaskararao, Sandhya Cole
21. Structural and Morphological Studies of Cu (II) Ion Doped CdOZn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> Nanopowders  
Y. Naga Bhaskararao, K. Satyavathi, **M. Subba Rao**, K. Vijaya Babu, Sandhya Cole  
**ISBN: 978-81-929088-4-7**
22. Structural and spectral investigations of undoped and Cr (III) ion doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline Phosphor Materials. **ISBN: 978-93-5258-740-7**  
**M. Subba Rao**, K. Satyavathi, Y. Naga Bhaskararao, K. Vijaya Babu, Sandhya Cole
23. Investigation on the Physical and Optical Properties of Dy<sup>3+</sup> Doped Sodium lead Alumino Borosilicate Glasses. **ISBN: 978-93-5258-740-7**  
K. Vijaya Babu, **M. Subba Rao**, K. Satyavathi, Y. Naga Bhaskararao, Sandhya Cole
24. Sol-gel synthesis of pure and TiO<sub>2</sub> doped CdOFePO<sub>4</sub>nanocomposites and Investigation of their structural and optical properties  
SK. KhajaMuswareen, **M. Subba Rao**, G. Sridevi, Sandhya Cole  
**Materials Science in Semiconductor Processing** 102 (2019) 104588 **IF: 2.83**
25. Investigation on structural and optical properties of CuO doped CdS-Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> nanocomposite for optoelectronic devices  
G. Sreedevi, K. Srinivas, **M. Subba Rao**, Sandhya Cole  
**Journal of Molecular Structure** 1222 (2020) 128903 **IF: 2.463**
26. P S Prasada Reddy, **M. Subba Rao** “Physical methods for the synthesis of nanoparticles” (2020) Title of the Book: Role of chemical Sciences in technology and Development for Sustainability. **Immortal Publications** **ISBN:978-93-5416-618-1**

27. P S Prasada Reddy, **M. Subba Rao** “*Chemical Methods for the Synthesis of Nanoparticles*” (2021) Published in the Book Title “NANOTECHNOLOGY- A MULTIDIVERSIFIED APPROACH FOR SMART MATERIALS” **Immortal Publications**

ISBN: 978-93-5426-405-4

### **International and national seminars/Conferences:**

01. ‘Meditation Techniques’ Organized by the Acharya Nagarjuna University on 30-08-2008.  
**M. Subba Rao**
02. ‘Communicative skills’ Organized by the Acharya Nagarjuna University on 23-10-2008.  
**M. Subba Rao**
03. **International Seminar** on Science and Technology of Glass Materials (isstgm2009). The Department of Physics, Acharya Nagarjuna University.  
**M. Subba Rao**
04. AP SCIENCE CONGRESS-2012, Acharya Nagarjuna University, Guntur.  
EPR and Optical Absorption Studies in  $\text{Mo}^{5+}$  Ions Doped Strontium-Borosilicate Glasses  
J. Santhan Kumar, S. Ravi Kumar **M. Subba Rao** and Sandhya Cole
05. AP SCIENCE CONGRESS-2012, Acharya Nagarjuna University, Guntur.  
Optical Absorption Studies and Physical Properties of  $\text{Mn}^{2+}$  Ions Doped  $\text{K}_2\text{-CdO-B}_2\text{O}_3\text{-SiO}_2$  Glass Systems.  
G. Keerti Marita, **M. Subba Rao**, S. Ravi Kumar and Sandhya Cole
06. National Conference on Advances in Materials Science and Technology (AMST-2012).  
The Department of Physics, Kakatiya University, Warangal.  
Optical and EPR Studies of Iron Doped  $\text{KO}_2\text{-CdO-B}_2\text{O}_3\text{-SiO}_2$  (KCBSi) Glasses.  
G. Keerti Marita, **M. Subba Rao** and Sandhya Cole
07. National Seminar on Multi Functional Materials (NSMFM-2013).  
The Department of Physics, Andhra Loyola College, Vijayawada.  
Spectroscopic properties of  $\text{Pr}^{3+}$  doped Zinc alumino bismuth borate glasses.  
J. Lakshmi Kumari, S. Ravi Kumar, **M. Subba Rao** and Sandhya Cole
08. National Conference on Physics and Chemistry of Solids” (NCPCS-2013)  
S.R. & B.G.N. Govt. Arts & Science College, Khammam.  
Influence of titanium ions on EPR and Optical Properties of  $\text{CdO-SrO-B}_2\text{O}_3\text{-SiO}_2$  Glasses. J. Santhan Kumar, S. Ravi Kumar, **M. Subba Rao** and Sandhya Cole
09. “Nanotechnology – “A Fuel for Chemical Industry” (NTFC-2013).  
National Workshop, R.V.R. & J.C. College of Engineering, Guntur. **M. Subba Rao**
10. AP SCIENCE CONGRESS-2013, University of Hyderabad  
Innovation in Science and Technology for Emerging Knowledge Society.
11. “National Seminar on “Recent Trends in Surface Sciences and Nanotechnology” (RTSSN-2013). Potti Sriramudu Chalavadi Mallikarjuna Rao College of Engineering & Technology-Vijayawada. Optical and X-ray diffraction characterizations of  $\text{Cu}^{2+}$  doped  $\text{Zn}_3(\text{PO}_4)_2\text{ZnO}$  nanocrystalline powder.  
**M. Subba Rao**, J. Santhan Kumar and Sandhya Cole
12. “National Seminar on Modern Trends In Chemical Sciences” (MTCS-2013)  
The Department of Chemistry, Acharya Nagarjuna University.  
Synthesis and characterization of  $\text{Cu}^{2+}$  doped  $\text{Zn}_3(\text{PO}_4)_2\text{ZnO}$  nano Crystalline Powder  
**M. Subba Rao**, J. Santhan Kumar and Sandhya Cole
13. “**International Symposium** on Environmental Pollution, Nutrition & Genetics” A Special Symposium on Cancer Biology & Therapeutics -2013. The Department of

Chemistry, Vikrama Simhapuri University, Nellore, Nano Materials and Health Hazards.

**M. Subba Rao**, J. Santhan Kumar and Sandhya Cole

14. “National Conference on” Advanced materials for Energy Application (NCAMEA-2014) The Department of Physics, Osmania University, Hyderabad.  
Role of  $\text{Cr}^{3+}$  Ions in  $\text{K}_2\text{O}-\text{CdO}-\text{B}_2\text{O}_3-\text{SiO}_2$  (KCBSi) Glass System by means of Optical Studies.  
G. Keerti Marita, J. Santhan Kumar, **M. Subba Rao** and Sandhya Cole
15. “National Seminar on Renewable Energies, Ecosystems and Sustainable Environmental Management” The Department of Environmental Sciences, Acharya Nagarjuna University.  
Effect of global warming and climate change.  
V. Madhuri, J. Santhan Kumar, **M. Subba Rao** and Sandhya Cole
16. “UGC Sponsored National Seminar on shaping the future with green Chemistry” (SFGC-14).The Department of Chemistry, S.P.M.H, Kalasala, Machilipatnam.  
**M. Subba Rao**
17. “UGC Sponsored National Seminar on Development of Advanced Materials in Physics & Electronics and their applications” The Department of Physics & Electronics KBN College, Vijayawada.  
V. Madhuri, K. Satyavathi, **M. Subba Rao**, Y. Nagabhaskara Rao and Sandhya Cole
18. “**Short Term Programme** on Nano Structural Materials: Processing and Characterization”  
The Department of Physics, National Institute of Technology, Tiruchirapalli-620015, Tamilnadu. During November 7 & 8, 2014.**M. Subba Rao**
19. UGC Sponsored National Seminar on Display Materials (NSDM-14). The Department of Physics, PBN College, Nidubrolu. During November 7 & 8, 2014. Synthesis and Characterization of Vanadium doped Zinc-phosphate Zinc Oxide Nanocrystalline powder  
K. Satyavathi, **M. Subba Rao**, Y. Nagabhaskara Rao and Sandhya Cole
20. **International Seminar** on Glasses and other Functional Materials (isgfm-14).Organized by The Department of Physics, Acharya Nagarjuna University. During 11-13<sup>th</sup> December, 2014. Synthesis and characterization of  $\text{Mn}^{2+}$  doped  $\text{Zn}_3(\text{PO}_4)_2\text{ZnO}$  Nano Crystalline Powder.  
**M. Subba Rao**, Y. Nagabhaskara Rao and Sandhya Cole
21. **International Conference** on Frontiers in Nano Science, Technology and Applications (FINSTA’14), during 20-22, December 2014. Organized by the Dept. of Physics, Sri Sathya Sai Institute of Higher Learning, Prashanthinilayam, A.P., India. Optical and X-Ray Diffraction Characterization of  $\text{Cr}_2\text{O}_3$  doped  $\text{Zn}_3(\text{PO}_4)_2\text{ZnO}$  Nanocrystalline Powder  
**M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao, V. Madhuri and Sandhya Cole
22. National Seminar on Multi Functional Materials Synthesis and application (MFMSA-15) during 23-24 January, 2015 organized by the Dept. of Physics, The Hindu College, Machilipatnam, Krishna District, Andhra Pradesh. Synthesis and Characterization of Chromium ions doped Zinc-Phosphate Zinc Oxide Nanocrystalline Powder  
**M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao, V. Madhuri and Sandhya Cole
23. **National workshop** on Recent Trends in X-ray Diffraction Techniques (NWRTXRD- 2015) during 29-30 May, 2015 organized by the Dept. of Physics, Osmania University, Hyderabad, Telangana State, India. **M. Subba Rao**
24. National Seminar on Optoelectronic device materials (NSODM-2015) Organized by The Department of Physics, Bapatla College of Arts & Sciences, During 20<sup>th</sup> June, 2015.  
**M. Subba Rao**
25. “National Seminar on Shaping the future with Nanoscience” (SFNS-2015) Organized by The Department of Chemistry, PBSCAS, Vijayawada, Krishna University, during 19-20, August 2015. Spectral and photoluminescence Properties of undoped and  $\text{Mn}^{2+}$  ion doped  $\text{Zn}_3(\text{PO}_4)_2\text{ZnO}$  Nanocrystalline Phosphor Materials

- M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole
26. National seminar in Physics Recent developments in Nano technology & Nano science Organized by The Department of Physics, V.K.V. Government Degree College, Kothapeta. Adikavi Nannaya University, Rajahmundry, during 31<sup>st</sup> August & 1<sup>st</sup> September 2015. Spectroscopic Properties of Fe<sup>2+</sup> doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline powder  
**M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole
27. National seminar in Physics Recent developments in Nano Technology & Nano science Organized by the Department of Physics, V.K.V. Government Degree College, Kothapeta. Adikavi Nannaya University, Rajahmundry, during 31<sup>st</sup> August & 1<sup>st</sup> September 2015. Structural and Spectral Properties of Ti<sup>2+</sup> ion doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline Composites  
K. Satyavathi, **M. Subba Rao**, Y. Nagabhaskara Rao and Sandhya Cole
28. National seminar on Trends and Applications of liquid crystals (NLSC-2015) organized by the Dept. of Physics, Andhra Christian College, Guntur-522001, Andhra Pradesh. During 10<sup>th</sup> & 11<sup>th</sup> September 2015. Synthesis and Characterization of Undoped and Cu<sup>2+</sup> ion doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline powder  
**M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole
29. National Conference on “Need and role of Nanosciences in present era” (NRNSPE) Organized by the Department of Chemistry, PBSCAS, Vijayawada, Krishna University, during 7-8<sup>th</sup> October 2015. Structural and Spectral Investigations of undoped and Cu<sup>2+</sup> ion doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline Phosphor Materials  
**M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole
30. **Acquaintance programme** Organized by Inter-University Accelerator Center (IUAC), New Delhi in collaboration with Department of Physics, Acharya Nagarjuna University, Nagarjuna Nagar-522 510, A.P. During 9<sup>th</sup> October 2015. **M. Subba Rao**
31. National seminar on “Advances in Materials Science” (NSAMS-15) with Department of Electronics & Instrumentation Technology, Acharya Nagarjuna University, Nagarjuna Nagar-522 510, A.P. During 25<sup>th</sup> & 26<sup>th</sup> November, 2015.
32. **International Conference** on Nanomaterials and Nanotechnology, (NANO-15) held at K.S. Rangasamy College of Technology, Tiruchengode, India during 7<sup>th</sup>-10<sup>th</sup>, December 2015. Synthesis and characterization of undoped and Mn<sup>2+</sup> ion doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline powder  
**M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole
33. National Seminar on “Recent Trends in Applied Physics” K.R.K. Government Degree College, Addanki, Prakasam District, A.P. During 16<sup>th</sup> & 17<sup>th</sup> December, 2015. XRD, FT-IR and SEM Studies of Cr<sup>3+</sup> doped CdO(PO<sub>4</sub>)<sub>2</sub>ZnO nanopowders.  
Y. Nagabhaskara Rao, K. Satyavathi, **M. Subba Rao** and Sandhya Cole
34. **International Conference** on “Science and Engineering of Materials for future needs” (ICSEMF-2015) S.R. & B.G.N. Govt. Arts & Science College, Khammam, Telangana, India. During 21<sup>st</sup> & 22<sup>nd</sup> December, 2015. Spectral and Structural Investigations of undoped and Fe<sup>3+</sup> ion doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline Phosphor Materials  
**M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole
35. **International Conference** on “Science and Engineering of Materials for future needs” (ICSEMF-2015) S.R. & B.G.N. Govt. Arts & Science College, Khammam, Telangana, India. During 21<sup>st</sup> & 22<sup>nd</sup> December, 2015. XRD, FT-IR and SEM Studies of Mn<sup>2+</sup> doped CdO(PO<sub>4</sub>)<sub>2</sub>ZnO nanopowders. Y. Nagabhaskara Rao, K. Satyavathi, **M. Subba Rao** and Sandhya Cole
36. Photoluminescence Properties of Undoped and Mn<sup>2+</sup> ion Doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline Phosphor Materials



- M. Subba Rao**, K. Satyavathi, Y. Naga Bhaskararao, K. VijayaBabu, Sandhya Cole  
(Proceedings of the National Conference on Materials for Specific Applications Gokaraju Rangaraju Institute of Engineering and Technology Hyderabad, Telangana) 2016
37. Structural Properties Ti-doped  $Zn_3(PO_4)_2ZnO$  nanocrystalline powders by Sol-gel technique  
K. Satyavathi, **M. Subba Rao**, Y. Naga Bhaskararao, K. VijayaBabu, Sandhya Cole  
(Proceedings of the National Conference on Materials for Specific Applications Gokaraju Rangaraju Institute of Engineering and Technology Hyderabad, Telangana) 2016
38. Physical and Optical Properties of  $TiO_2$  Doped Sodium Lead Alumino Borosilicate Glasses  
K. VijayaBabu, **M. Subba Rao**, K. Satyavathi, Y. Naga Bhaskararao, Sandhya Cole  
(Proceedings of the National Conference on Materials for Specific Applications Gokaraju Rangaraju Institute of Engineering and Technology Hyderabad, Telangana) 2016
39. Structural And Morphological Studies of Cu(II) Ion Doped  $CdOZn_3(PO_4)_2$  Nanopowder  
Y. Naga Bhaskararao, K. Satyavathi, **M. Subba Rao**, K. VijayaBabu, Sandhya Cole  
(Proceedings of the National Conference on Materials for Specific Applications Gokaraju Rangaraju Institute of Engineering and Technology Hyderabad, Telangana) 2016.
40. **International Conference** on Recent Advances in Technology, Engineering and Science (ICRATES-2016) organized by C. Abdul Hakeem College of Engineering and Technology, Melvisharam, Vellore, Tamilnadu. (ICRATES'16) on 27 & 28<sup>th</sup> July-2016.  
Structural and spectral investigations of undoped and Cr (III) ion doped  $Zn_3(PO_4)_2ZnO$  Nanocrystalline Phosphor Materials.  
**M. Subba Rao**, K. Satyavathi, Y. Naga Bhaskararao, K. VijayaBabu, Sandhya Cole
41. National Seminar on “Advances in the synthesis of nanomaterials and their multi dimensional applications in Chemical & Bio-Sciences” Andhra Loyola College, Vijayawada, A.P. During 14<sup>th</sup> & 15<sup>th</sup> September, 2016. “Structural Properties Ti-doped  $Zn_3(PO_4)_2ZnO$  Nanocrystalline powders by Sol-gel technique’.  
K. Satyavathi, **M. Subba Rao**, Y. Nagabhaskara Rao and Sandhya Cole
42. Participated in **A Five-day Faculty Development Program** on “Recent advances in nanomaterials & Applications (RANA)” organized by Shri Vishnu Engineering College for Women, Dept. of basic Science, Vishnupur, Bhimavaram, A.P., during 3<sup>rd</sup> - 7<sup>th</sup> October 2016.  
**M. Subba Rao**,
43. “Undoped and titanium doped  $Zn_3(PO_4)_2ZnO$  nanopowders with structural and spectral Properties” at Two-Day National seminar on Energy & Ecology held at Sir C R Reddy Autonomous College, Eluru, A.P., during 4<sup>th</sup> -5<sup>th</sup> October-2016.  
K. Satyavathi, **M. Subba Rao**, Y. Nagabhaskararao, Sandhya Cole
44. “Structural and Optical properties of molybdenum doped  $Zn_3(PO_4)_2ZnO$  Nanocrystalline Composites” at 2<sup>nd</sup> A.P Science Congress (APSC-2016) organized by AP. Academy of Sciences, Amaravathi, Vijayawada, A.P., 2016.  
K. Satyavathi, **M. Subba Rao**, Y. Nagabhaskararao, Sandhya Cole:
45. One day national seminar on “Materials Science and Technology (NAMASTE-2016)” organized by Velagapudi Ramakrishna Siddhartha Engineering College, Kanuru, Vijayawada, A.P., during 19<sup>th</sup> November 2016. **M. Subba Rao**
46. “Effect of MO dopant on optical and luminescent properties of  $Zn_3(PO_4)_2ZnO$  Nanopowders ” at DBT-MHRD, Gov. of India Sponsored National Seminar on Advances in Biomaterials & Characterization Techniques (ABCT-17) organized by Dept. of Physics, Andhra Loyola College (Autonomous) Vijayawada, A.P., during 20<sup>th</sup> and 21<sup>st</sup> January 2017.  
K. Satyavathi, **M. Subba Rao**, Y. Nagabhaskara Rao, Sandhya Cole
47. **International Conference** on “Emerging Trends in Chemical, Pharmaceutical, Environmental Science & Technology” Dept. of Chemistry, Pithapur Rajah’s Govt. College, Kakinada,

Andhra Pradesh, India. During 24<sup>th</sup> & 25<sup>th</sup> January, 2017. Spectroscopic Characterization of Fe<sup>3+</sup> ion doped Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO white light Nanophosphors.

**M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole

48. National Seminar on Human Rights: Trends Issues, Challenges in the Present Scenario Organized by SVKP College (IQAC) Markapur, During 22<sup>nd</sup> Feb 2017. **M. Subba Rao**
49. **International Conference** on “Material for the societal advancement with emphasis on Health and energy” Organized by the Department of Physics, PBSCAS, Vijayawada, Krishna University, during 22<sup>nd</sup> -23<sup>rd</sup> Feb 2017. Oral Presentation by **M. Subba Rao**, and Sandhya Cole
50. National Seminar on Recent Trends in Chemical Speciation, Kinetics and Nanomaterials (RTCSKN-2017) organized by Dept. of Inorganic & Analytical Chemistry, Andhra University, A.P., during 3<sup>rd</sup> and 4<sup>th</sup> March, 2017. Spectral and Photo luminescence Properties of undoped and Mn<sup>2+</sup> Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>ZnO Nanocrystalline Phosphor Materials.  
**M. Subba Rao**, K. Satyavathi, Y. Nagabhaskara Rao and Sandhya Cole
51. National Seminar on “Recent Advances in Materials Science” organized by Dept. of Physics, Andhra University, A.P., during 30<sup>th</sup> and 31<sup>st</sup> May, 2017. Seminar Attended  
**M. Subba Rao**
52. A two day national seminar on “need and role of non-conventional Energy sources for sustainable future” for oral presentation held on 23<sup>rd</sup> and 24<sup>th</sup> January, 2018, Dept. of Physics, ANR College, Gudivada-521 301, **M. Subba Rao**
53. A national seminar on “Emerging in Materials Science and Technology” (NSEMST-2018) organized by Dept. of Physics, Andhra University, A.P., during 9<sup>th</sup> and 10<sup>th</sup> March, 2018. Presented a paper, **M. Subba Rao**
54. A national seminar on “Higher Education System in the Light of Re-organization of the states: Trends, Opportunities and Challenges” held on 11<sup>th</sup> March, 2018, Organized by A.P. Govt. College Teachers Association (AP-GCTA), **M. Subba Rao**
55. A national seminar on “Rural Development of India: Issues and Challenges with Special Reference to Andhra Pradesh” (2018) organized by Dept. of Rural Development and Economics, Dr. B.R. Ambedkar University, Srikakulam, A.P., during 30<sup>th</sup> April, 2018. Seminar Attended, **M. Subba Rao**
56. One day **International seminar** on Nanotechnology for the future energy challenges (NFTFEC) organized by Andhra Pradesh Akademi of Sciences (APAS), Amaravati & Department of Chemistry & Physics, held on 18<sup>th</sup> December, 2018 at P.B. Siddhartha College of Arts & Sciences, Vijayawada, Andhra Pradesh, India. Attended, **M. Subba Rao**
57. **Mahatma Gandhi National Council of Rural Education (MGNCRE)**, Department of Higher Education Ministry of Human Resource Development, Government of India. Participated in the “7 –Days Faculty Development Programme on Rural Community Engagement” From 21-1-2019 to 27-01-2019 organized by Mahatma Gandhi National Council of Rural Education, Hyderabad in collaboration with Dr. B.R. Ambedkar University, Srikakulam.  
**Dr. M. Subba Rao**
58. Two-day Science Academies Lecture **Workshop** on “Applications of Quantum Mechanics to Optics” 1 & 2 February 2019. Organized by Dept. of Physics & Electronics, KBN College, Vijayawada, A.P., **M. Subba Rao**
59. A national seminar on “**Optical Characterization Techniques**” organized by Dept. of Physics, Andhra Loyola College (Autonomous), Vijayawada, A.P., in collaboration with Indian Association of Physics Teachers (IAPT) during 28<sup>th</sup> March, 2019. Seminar Attended,  
**M. Subba Rao**
60. An **International Symposium** on Multi-Disciplinary Trends & Technologies, held on 1<sup>st</sup> & 2<sup>nd</sup> of April 2019, organized by College of Engineering, Dr. B.R. Ambedkar University,

Srikakulam in Collaboration with Lincoln University, Malaysia, Attended, **M. Subba Rao**

61. A national workshop on Analytical Instrumentation for Chemists and Biotechnologists, held on 21<sup>st</sup> October 2019, Dr. B.R. Ambedkar University, Srikakulam, Attended, **M. Subba Rao**
62. AP SCIENCE CONGRESS-2019, Dr. B.R. Ambedkar University, Srikakulam. Participated **M. Subba Rao**
63. National seminar on Advanced Functional Materials, organized by Dept. of Chemistry, Acharya Nagarjuna University, during January-2020. Seminar Attended, **M. Subba Rao**
64. UGC Sponsored National seminar on Recent Trends in Nanoscience & Nanotechnology, Organized by Dept. of Nanotechnology, Acharya Nagarjuna University, during 30<sup>th</sup> & 31<sup>st</sup> January 2020. Seminar Attended, **M. Subba Rao**
65. National workshop on Assessment & Accreditation of HEI's & Colleges, held on 3<sup>rd</sup> of Feb, 2020, Dr. B.R. Ambedkar University, Srikakulam, Attended, **M. Subba Rao**
65. **National Science Day**, Workshop entitled "Women in Science" organized by College of Science, held on 28<sup>th</sup> Feb, 2020, Dr. B.R. Ambedkar University, Srikakulam, Attended, **M. Subba Rao**
66. Online **webinar** organized by Bhaktakavi Narsinh Mehta University, Junagadh on "COVID-19: Prathiraksha- in perspectives of Ayurved and Yoga" held on 4<sup>th</sup> May 2020. **M. Subba Rao**
67. Online **webinar** organized by Baba Institute of Technology & Sciences, Visakhapatnam on "Research Publications, Process, Credentials and Outcomes" held on 9<sup>th</sup> May, 2020. **M. Subba Rao**
60. Three day national level Online **FDP** on "COVID-19 as Global Crisis: Applications and Appreciation of Language and Literature" From 12<sup>th</sup> to 14<sup>th</sup> May 2020. Organized by Andhra Loyola Institute of Engineering and Technology, Vijayawada, Andhra Pradesh. **M. Subba Rao**
70. "5-Day Machine Learning **Faculty Development Program**" held on 11<sup>th</sup> -15<sup>th</sup> May 2020, Conducted by Data Tech Labs. **M. Subba Rao**
71. Online English Quiz conducted by the Department of English, Government College for Men, Kurnool, held on 18<sup>th</sup> May 2020, **M. Subba Rao**
72. Awareness on "World Environment Day-2020" Organized by Green Eco Organization and Youth Red Cross, Arasu Engineering College, Kumbakonam through online pedagogy on 19<sup>th</sup> May 2020 with score of 90%, **M. Subba Rao**
72. Two day national level webinar on "Post COVID-19 pedagogy: Incorporating Digital Resources for an Enhanced Student Engagement and participation" Organized by Andhra Loyola College, Vijayawada, held on 29<sup>th</sup> & 30<sup>th</sup> May 2020, **M. Subba Rao**
73. Virtual Summit on COVID-19: Impact on Education, Technology, Environment & Mankind, Organized by Andhra Loyola College of Engineering & Technology, Vijayawada, held on 30<sup>th</sup> May 2020, **M. Subba Rao**
74. The **webinar** on "Scope of Automobile Engineering 2020-2050" Organized by department of Automobile Engineering, Arasu Engineering College, Kumbakonam on 3<sup>rd</sup> June 2020, **M. Subba Rao**
75. The **webinar** on "Emerging Trends in Nano-Materials for Microwave, Integrated Electronics and Cancer Applications" Organized by department of Basic Sciences & Humanities, GMR Institute of Technology, Rajam, Andhra Pradesh on 4<sup>th</sup> June 2020, **M. Subba Rao**
76. Interdisciplinary **International Symposium** COVID-19: Socio-Economic and Traumatic Challenges Impacting Migrant Workers, Organized by Andhra Loyola College of Engineering & Technology, Vijayawada, held on 9<sup>th</sup> June 2020, **M. Subba Rao**
77. National webinar on Recent Advances in Physics organized by the Department of Physics and IQAC, Government College for Men, Kurnool on 10<sup>th</sup> June 2020, **M. Subba Rao**

- 78. Web Series** “Technological Solutions of Covid and Post Covid challenges in Society” Organized by Department of Electronics and Communications Engineering, Bharat Institute of Engineering & Technology, from 8<sup>th</sup> June 2020 to 12<sup>th</sup> June 2020. **M. Subba Rao**
- 79. One day National Webinar** on “Radiation Processing of Food Materials” Organized by Department of Physics & IQAC, St. Joseph’s College for Women (A) Visakhapatnam, Andhra Pradesh on 19<sup>th</sup> June 2020. **M. Subba Rao**
- 80. International Webinar** on “FTIR & HPLC INSTRUMENTATION” Organized By PG & Research Department of Biochemistry, Rajah Serfoji Govt. College (A), Thanjavur, Tamilnadu, India, 27<sup>th</sup> June 2020. **M. Subba Rao**
- 81. M. Subba Rao:** Attended national seminar on “Basic Research and Analysis in Nano science (BRAIN-2021), organized by Department of Nanotechnology, Acharya Nagarjuna University on 18<sup>th</sup> & 19<sup>th</sup> March, 2021.
- 82. M. Subba Rao:** Participating in the One **Week Faculty Development Program** (Online) on Materials for Energy and Biomedical Applications (MEBA-2021) during 31<sup>st</sup> May - 04<sup>th</sup> June 2021, Organized by Physics Division, Department of Basic Science & Humanities, GMR Institute of Technology, Rajam.