



**PROFILE  
OF  
Dr. P. NARAYANA REDDY  
PRINCIPAL  
GOVT. DEGREE COLLEGE,  
MYDUKUR, YSR DIST  
Phone: 9704522925  
Email: [mydukur.jkc@gmail.com](mailto:mydukur.jkc@gmail.com)**

**Dr. P. Narayana Reddy Ph.D.**  
**Principal**

**Govt. Degree College,**  
**Mydukur -516172, INDIA**

**Mobile: 919704522925**

**Mail : pnreddy66@gmail.com**



### **Qualifications :**

**Ph.D.** (2012) Dept. of Physics, S.V. University, Tirupati.

**M.Ed.** (1995) Annamalai University, Chidambaram, Tamilnadu.

**M.Phil.** (1992) Dept of Physics, Sri Krishnadevaraya University, Anantapur (A.P.)

**M.Sc.** (1990) Dept. of Physics, Sri Krishnadevaraya University, Anantapur (A.P.)

### **Principal:**

- April 2022 GDC, Mydukur
- November 2021 to March 2022 GDC(W), Sri Kalahasti

### **Teaching Experience:**

- October 2021 Lecturer in Physics, SCNR GDC, Proddatur
- June 2016 - September 2021 Lecturer in Physics, GCMA, KADAPA.
- August 2006 – June 2016 Lecturer in Physics, SCNR GDC, Proddatur.
- March 2001 - August 2006 JL in physics, GJC, Kadapa
- October 1996 - March 2001 School Assistant (Maths)
- September 1989 - October 1996 S.G. Teacher

### **Achievements**

- Research citations: 71
- **h index: 4**
- Member in Indian Physics Teachers Association
- Master Trainer –Census of India-2011
- Master Trainer – Socioeconomic Survey-2011
- Jury member –State Inspire (2020), District Inspire (2018)

### **Papers published in National and International Journals**

International	National	Total
7	10	17

### **Papers presented at National and International Conferences**

International	National	Total
8	36	44

### **Books published - 2**

- Physical Properties of Pure and Copper doped Silver Oxide Thin Films for micro electro device
- Proceedings of Advanced Trends in Material Science

### **National Seminar Conducted - 1**

- UGC sponsored National Seminar Advanced Trends in Material Science (ATMS-2017)

### **Ph.D. and M. Phil., guided - 1**

- M.Phil., -- 1  
Glasses – spectroscopic principles & techniques – Spectroscopic techniques transition metals ions in glasses

## Details of significant paper publications:

### International Journals

- 1. Physical properties of nano-crystalline silver oxide thin films deposited by RF magnetron sputtering: Effect of oxygen partial pressure**  
*P. Narayana Reddy, A. Sreedhar, M. H.P. Reddy, S. Uthanna and J.F. Pierson*  
**Crystal Research Technology, 46 (2011) 961 – 966.**
- 2. Process parameter dependent structural, electrical and optical properties of reactive magnetron sputtered Ag-Cu-O films**  
*P. Narayana Reddy, A. Sreedhar, M.H. Prasad Reddy, S. Uthanna, and J.F. Pierson*  
**Journal of Nanotechnology, (2011), Article ID 986021, 6 pp.**  
**doi:10.1155/2011/986021.**
- 3. Structural, electrical and optical behaviour of RF magnetron sputtered nanocrystalline Silver oxide films: Bias effect**  
*P. Narayana Reddy, M. Hari Prasad Reddy, J.F. Pierson and S. Uthanna*  
**American Institute of Physics: Conference Series 1391 (2011) 570.**
- 4. Substrate temperature influenced structural, electrical and optical behaviour of reactively sputtered Ag-Cu-O films**  
*M. H. Prasad Reddy, P. Narayana Reddy, B. Sreedhar, J.F. Pierson and S. Uthanna,*  
**Physica Scripta, 84 (2011) 045602.**
- 5. Structural, electrical and optical properties of reactively sputtered Ag-Cu-O films**  
*P. Narayana Reddy, A. Sreedhar, M. Hari Prasad Reddy and S. Uthanna*  
**ISRN Condensed Matter Physics (2012), Article ID 293032, 7pp.**
- 6. Characterization of Silver Oxide Films Formed by Reactive RF Sputtering at Different Substrate Temperatures**  
*P. Narayana Reddy, M. Hari Prasad Reddy, J.F. Pierson and S. Uthanna*  
**ISRN Optics (2014), Article ID 684317, 7pp.**
- 7. Magnetic and Resonance Study of Double doped M-type hexaferrite  $Ba_{1-x}(Cu_xAl_xFe_{12-x})O_{19}$**   
*T. Ravindra Reddy, P. Narayana Reddy, S. lakshmi Reddy, Yoshinobu Nakamura, Satoru Kaneko, Paolo Mele, Taras Polek, Tamio Endo*  
**Frontier Research Today (2019) Vol.2 Article number 2007 7pp.**

## National journals:

1. Structural, electrical and optical behaviour of RF magnetron sputtered Cuprous oxide films: Bias effect  
**M. Hari Prasad Reddy, P. Narayana Reddy and S. Uthanna**  
**Indian Journal of Pure and Applied Physics, 48 (2010) 420-424.**
2. Influence of oxygen partial pressure on the physical behaviour of nanocrystalline Silver oxide films formed by RF magnetron sputtering  
**S. Uthanna, M. Hari Prasad Reddy and P. Narayana Reddy**  
**Proc. Of 2<sup>nd</sup> National Conference on Nanomaterials and Nanotechnology, Ed. N.K.Pandey, R.K.Shukla and Anchal Srivastava, Excel India Publishers, New Delhi, (2009) 8-10.**
3. RF magnetron sputtered nanocrystalline Ag-Cu-O films: Substrate temperature influenced physical properties  
**P. Narayana Reddy, M. Hari Prasad Reddy and S. Uthanna,**  
**Proc. Of International Conference on Nanoscience & Nanotechnology (ICONN-2010), Allied Publishers Pvt. Ltd, Chennai, (2010) 303-304.**
4. Physical behaviour of nanocrystalline Cu<sub>2</sub>O films formed by RF magnetron sputtering influence of substrate bias voltage  
**S. Uthanna, M. Hari Prasad Reddy, P. Narayana Reddy and J. F. Pierson,**  
**Proc. International Conference on Nanoscience and Technology in Chemistry, Health, Environment and Energy, Ed. L.D. Khemani and Sahab Dass, Tata Mc Graw Hill, New Delhi, (2010) 160 -166.**
5. Economic Growth of Green chemistry and Design for the Environment  
**P. Narayana Reddy and G.V. Lokeswara Reddy**  
**Proc. National Seminar on Green Chemistry: Contribution to the Environmental Sustainability, Paramount Publishing House, New Delhi, (2014) 34-37.**
6. Role of sports in the personality development of youth  
**P. Narayana Reddy and G.V. Lokeswara Reddy**  
**Proc. National Seminar on Role of sports and Nutrition – Its Impact on Personality Development Paramount Publishing House, New Delhi, (2014) 211-214.**
7. The physical properties of AZO films grown by RF magnetron sputtering: Influence of target to substrate distance  
**P. Narayana Reddy and G.V. Lokeswara Reddy**  
**National Seminar on New Trends on Advanced Materials (NTAM) Paramount Publishing House, New Delhi, (2015) 34-37.**
8. Clean India- Perspectives and future vision on water Pollution  
**P. Narayana Reddy and G.V. Lokeswara Reddy**  
**Proceedings of National Seminar on Swachh Bharat – Role of Society, SJGC (A) Kurnool Paramount Publishing House, New Delhi, (2015) 28-30.**

9. **Physical Tb<sup>3+</sup> activated GdAl<sub>3</sub>(BO<sub>3</sub>)<sub>4</sub> phosphors for solid state lighting**  
*P. Narayana Reddy, G.V. Lokeswara Reddy and B.C. Jamalaiah*  
**Proceedings of National Seminar on Advanced Trends in Material Science (ATMS)**  
**Roshan Publications, Vishakapatnam, (2017) 1-5.**
10. **Organic Solar Cells: A mini review**  
*P. Narayana Reddy, P. Bayapu Reddy, B. Rajeswari, A. Ramesh Babu, P.Suresh and G.V. Lokeswara Reddy*  
**Proceedings of National Seminar on Advanced Trends in Material Science (ATMS)**  
**Roshan Publications, Vishakapatnam, (2017) 126-131.**

## **Papers presented at National and International Conferences:**

### **International Conferences**

1. **Physical behaviour: of nanocrystalline Cu<sub>2</sub>O films formed by RF magnetron sputtering influence of substrate bias voltage**  
*S. Uthanna, M. Hari Prasad Reddy, P. Narayana Reddy and J.F. Pierson*  
**Nanoscience and Technology in Chemistry, Health, Environment and Energy (NATCHEE-2010)**  
**Department of chemistry Dayalbagh Educational Institute Dayalbagh, Agra, India**  
**January 7-9, 2010**
2. **Structural, Electrical and Optical Properties of RF magnetron sputtered Ag- Cu- O films: Influence of Oxygen Partial Pressure**  
*S. Uthanna, P. Narayana Reddy, M. Hari Prasad Reddy and J.F. Pierson*  
**International Conference on Recent Trends on Materials and Characterisation (RETMAC-2010),**  
**Dept of Physics, NIT, Surathkal, India, February 14-15, 2010.**
3. **RF magnetron sputtered nanocrystalline Ag-Cu-O films: Substrate temperature influenced physical properties**  
*P. Narayana Reddy, M. Hari Prasad Reddy and S. Uthanna*  
**International Conference on Nanoscience & Nanotechnology (ICONN-2010),**  
**S. R. M. University, Chennai, India, February 24-26, 2010.**
4. **Bias magnetron sputtered silver oxide films: Structural and optical properties**  
*P. Narayana Reddy, M. Hari Prasad Reddy and S. Uthanna,*  
**International Conference on Recent Trends In Nano & Bio- science,**  
**Department of Physics, Osmania University Hyderabad, February 24-26, 2010.**
5. **Structural, electrical and optical behaviour of bias magnetron sputtered nanocrystalline silver oxide films**  
*P. Narayana Reddy, M. Hari Prasad Reddy, A. Sreedhar and S. Uthanna,*  
**International Conference on Multifunctional Materials (ICMM),**  
**Department of Physics, Banaras Hindu University, Varanasi, December 7-9, 2010.**

6. **Structural, electrical and optical behaviour of RF magnetron sputtered nanocrystalline Silver oxide films: Bias effect**  
*P. Narayana Reddy, M. Hari Prasad Reddy, J.F. Pierson and S. Uthanna,*  
 International Conference on OPTICS'11,  
 NIT Calicut, Kerala, India, May 23- 25, 2011.
7. **Influence of deposition temperature on the physical properties of silver oxide films Formed by RF magnetron sputtering**  
*S. Uthanna, P. Narayana Reddy, M. Hari Prasad Reddy, K.T. Ramakrishna Reddy and J.F. Pierson,*  
 E-MRS 2011 Spring & Bilateral Meeting,  
 Nice (France), May 9 -13, 2011.
8. **Physical properties of the nanocrystalline Silver oxide thin films deposited using RF magnetron sputtering: Effect of sputtering power**  
*P. Narayana Reddy, M. Hari Prasad Reddy and S. Uthanna*  
 2<sup>nd</sup> Annual International Conference (AIC-2) & Industry-CCRS Congress (ICC) 2014  
 Mrs. AVN College, Vishakhapatnam, A.P. December 13-14, 2014.

### *National Conferences*

1. **Substrate temperature influenced physical properties of RF magnetron sputtered Cu<sub>2</sub>O films**  
*M. Hari Prasad Reddy, P. Narayana Reddy and S. Uthanna,*  
 8<sup>th</sup> National Conference on Solid State Ionics 2009 (8<sup>th</sup> NCSSI2009),  
 Dept. of Physics, Dr. Harisingh Gour University, Sagar, December 21-23, 2009.
2. **Influence of oxygen partial pressure and substrate temperature on the physical behaviour of nanocrystalline silver oxide films formed by RF magnetron sputtering**  
*S. Uthanna, M. Hari Prasad Reddy and P. Narayana Reddy*  
 2<sup>nd</sup> national conference on nanomaterials & nanotechnology, Department of Physics,  
 University of Lucknow, December 21-23, 2009.
3. **Substrate temperature influenced physical behaviour of RF magnetron sputtered Silver Oxide films**  
*P. Narayana Reddy, M. Hari Prasad Reddy and S. Uthanna*  
 National conference on materials for energy storage and conversion,  
 Department of Physics, S. V. University, Tirupati, India, January 23-24, 2010.
4. **Structural, Electrical and Optical Properties of RF Reactive Magnetron Sputtered Ag-Cu-O films: Effect of Substrate Temperature**  
*S. Uthanna, P. Narayana Reddy and M. Hari Prasad Reddy,*  
 National conf. on Experimental Tools for Material Science Research: State of Art,  
 Department of Physics, Mahila Maha Vidyalaya, Banaras Hindu University,  
 Varanasi, UP, India, December 3 – 4, 2010.

5. **Physical behavior of RF magnetron sputtered Ag<sub>2</sub>Cu<sub>2</sub>O<sub>3</sub> films: Influence of oxygen partial pressure**  
**A. Sreedhar, M. Hari Prasad Reddy, P. Narayana Reddy and S. Uthanna**  
Second National Conference on Multifunctional Nanomaterials and Nanocomposites (NCMNN-2011),  
Department of Nanoscience and Technology, Coimbatore. March 24-25, 2011.
6. **Influence of the sputtering power on the physical properties of the nanocrystalline Silver oxide thin films deposited using RF magnetron sputtering**  
**P. Narayana Reddy, M. Hari Prasad Reddy and S. Uthanna**  
National seminar on frontiers of material sciences  
Department of Chemistry, GDC, Kalyandurg, A.P., September 17-18, 2012.
7. **Biosorption of heavy metals and its advantages**  
P.Narayana Reddy  
National Seminar on Recent Trends in Chemistry Research – 2014(NSRTPCR)  
Department of Physics, GDC, Kodur(RS), A.P., India, 30 July 2014.
8. **Phyto chemicals: Extraction methods**  
**P. Narayana Reddy and G.V. Lokeswara Reddy**  
National seminar on Medicinal Plants and its Conservation  
Department of Botany, GDC, Porumamilla, A.P., August 21-22, 2014.
9. **Trace metal pollution in soils affected by Industrial activities**  
**P. Narayana Reddy**  
National seminar on Recent trends in Geo-Chemical Environmental Aspects of the mineralization in Kadapa Basin  
Loyola Degree College (YSRR), Pulivendula, A.P., October 25-26, 2014.
10. **Fluorence properties of Sm doped YAl<sub>3</sub>(BO<sub>3</sub>)<sub>4</sub> Phospors**  
**P. Narayana Reddy and G.V. Lokeswara Reddy**  
National Conference on Recent Advances in Material Science  
Dept of Physics, Loyola Degree College (YSRR), Pulivendula, November 1-2, 2014.
11. **Properties and applications of nanostructured Zinc oxide**  
**P. Narayana Reddy and G.V. Lokeswara Reddy**  
National Seminar on Nanomaterials and global Perspectives  
Dept of Chemistry, Govt. College for Men, Anantapur, January 30-31, 2015.
12. **Economic Growth of Green chemistry and Design for the Environment**  
**P. Narayana Reddy and G.V. Lokeswara Reddy**  
National Seminar on Green Chemistry: Contribution to the Environmental Sustainability  
Dept of Chemistry, KVR Govt College (W), Kurnool, January 28-29, 2015.
13. **Role of sports in the personality development of youth**  
**P. Narayana Reddy and G.V. Lokeswara Reddy**  
National Seminar on Role of ports and Nutrition – Its Impact on Personality Development  
Dept of Physical Education, KVR Govt College (W), Kurnool, February 18-19, 2015.

14. The physical properties of AZO films grown by RF magnetron sputtering: Influence of target to substrate distance  
*P. Narayana Reddy and G.V. Lokeswara Reddy*  
National Seminar on New Trends on Advanced Materials (NTAM)  
Dept of Physics, Govt. College for Men (A), KADAPA, February 27, 2015.
15. Impacts of mining on water pollution  
*P. Narayana Reddy and G.V. Lokeswara Reddy*  
National Seminar on Impact of Mining on Cropping Pattern and Environment  
Dept of Environmental studies, GDC Rajampeta, A.P., March 6-7, 2015.
16. Luminescent properties of  $\text{Na}_3\text{Gd}(\text{PO}_4)_2 : \text{Tm}^{3+}$  phosphors for optoelectronic Applications  
*B.C. Jamalaiah, S. Nayab Rasool and G.V. Lokeswara Reddy and P. Narayana Reddy*  
National Eevel Technical Symposium on Emerging Trends in Engineering and Sciences (NLTSETE & S)  
Chadalawada Ramanamma Enginnering College, Tirupati, A.P., March 13-14, 2015.
17. Effect of mining activities on ground and surface water quality status  
*P. Narayana Reddy and G.V. Lokeswara Reddy*  
National Seminar on Environmental Hazards – Causes, Controlling Measures  
Dept of Sciences, Govt. College for Men (A), KADAPA, March 17, 2015.
18. Nanoscale Transparent Conductive Oxide thin films  
*P. Narayana Reddy and G.V. Lokeswara Reddy*  
National Seminar on Advances in Material Science and Nanotechnology  
Dept of Physics, S.B.V.R Degree College, Badvel, A.P., April 6, 2015.
19. Photoluminescence and energy transfer studies of  $\text{Dy}^{3+}/\text{Tm}^{3+}$  Co-doped  $\text{Na}_3\text{Gd}(\text{PO}_4)_2$  Phosphors for white LEDS  
*B.C. Jamalaiah, S. Nayab Rasool and G.V. Lokeswara Reddy and P. Narayana Reddy*  
National Seminar on Advances in Material Science and Nanotechnology  
Dept of Physics, S.B.V.R Degree College, Badvel, A.P., April 6, 2015.
20. Nanoscale Transparent Conductive Oxide thin films  
*P. Narayana Reddy and G.V. Lokeswara Reddy*  
National Seminar on Advances in Material Science and Nanotechnology  
Dept of Physics, S.B.V.R Degree College, Badvel, A.P., April 6, 2015.
21. Effective use of technology in classroom teaching  
*P. Narayana Reddy and G.V. Lokeswara Reddy*  
National Seminar on Innovative and Creative Teaching, Learning & Evaluation Methods  
IQAC, S.V.G.M. GOVT. Degree College, Kalyandurg, A.P., AUGUST 6-7, 2015.



- 22. Innovative teaching method – Just-in-Time teaching**  
G. Easwara Reddy, *P. Narayana Reddy* and *G.V. Lokeswara Reddy*  
National Seminar on Innovative and Creative Teaching, Learning & Evaluation Methods  
IQAC, S.V.G.M. GOVT. Degree College, Kalyandurg, A.P., AUGUST 6-7, 2015.
- 23. Research as an integral part of Curriculam**  
*G.V. Lokeswara Reddy* and *P. Narayana Reddy*  
National Seminar on Innovative and Creative Teaching, Learning & Evaluation Methods  
IQAC, S.V.G.M. GOVT. Degree College, Kalyandurg, A.P., AUGUST 6-7, 2015.
- 24. Clean India- Perspectives and future vision on water Pollution**  
*P. Narayana Reddy* and *G.V. Lokeswara Reddy*  
National Seminar on Swachha Bharath – Role of society  
Dept of Botany, Silver Jubilee Degree College(A), Kurnool, A.P., December 11, 2015.
- 25. A Study of UG level Students Attitude towards Choice Based Credit System in Higher Education**  
*P. Narayana Reddy* and *G.V. Lokeswara Reddy*  
National Workshop on Strategies to enhance relevance of Higher Education  
IQAC & JKC, Govt. Degree College, Uravakonda, A.P., December 14, 2015.
- 26. Applications of Magnetron Sputtering Plasma Discharge in Copper Oxide Thin Film Fabrication**  
*P. Narayana Reddy* and *G.V. Lokeswara Reddy*  
National Seminar on Recent Trends in Applied Physics  
Dept. of Physics, KRK Govt. Degree College, Addanki, A.P., December 16-17, 2015.
- 27. A perspective view on nanoplastics in the aquatic environment**  
*P. Narayana Reddy*  
National Conference on Coastal and Marine Biodiversity of India: Prospects, Threats and Conversation Strategies (CMBI+2016)  
Dept. of Marine Biology, Vikram simhapuru University, Nellore, A.P., September 16-17, 2016.
- 28.  $Sr_{(1-x)}Dy_xAl_2O_4(0 < x > 2.0\%)$  Phosphors for White LEDs**  
*P. Narayana Reddy*, *G.V. Lokeswara Reddy*, *B.C. Jamalaih*, *Sk. Nayab Rasool*  
National Seminar on Advanced Materials in Science & Technology  
Dept. of Physics, P.R. G.C (A), Kakinada, A.P., September 23-24, 2016.
- 29 The impact of globalization on gender equality: Past and future**  
*P. Narayana Reddy* and *G.V. Lokeswara Reddy*  
National Seminar on Globalization–A Stragety towards Women’s Empowerment  
Dept. of Political Science Govt. College for Men, Kurnool, A.P., September 24-25, 2016.

- 30 The impact of globalization on gender equality: Past and future**  
*P. Narayana Reddy V. Adinarayana and G.V. Lokeswara Reddy*  
National Seminar on Skill Development to Empower Higher Education  
Govt. Degree College , Uravakonda, A.P., October 27, 2016.
- 31 Study of Thermal Annealing Effects on the Optical Properties of Ag<sub>2</sub>O nanocrystal Thin Films Prepared by Thermal Evaporation**  
*P. Narayana Reddy V. Adinarayana and G.V. Lokeswara Reddy*  
National Seminar on Modern Trends in Chemistry Research  
Dept. of Chemistry, Govt. College for Men (A), Kadapa, A.P., January 27-28, 2017.
- 32. Future Trends and Emerging Opportunities in Higher Education in Academics And Research**  
*P. Narayana Reddy V. Adinarayana and G.V. Lokeswara Reddy*  
National Science day celebrations and National Workshop on "Emerging trends in Academics and Research"  
Yogi Vemana University, Kadapa, A.P., February 28, March 01, 2017.
- 33. The impact of yoga on academic stress and well being among under graduate students**  
*P. Narayana Reddy V. Adinarayana and K. Shanthi Latha*  
National Science day celebrations and National Workshop on "Emerging trends in Academics and Research"  
Yogi Vemana University, Kadapa, A.P., February 28, March 01, 2017.
- 34. Oxygen partial pressure influenced electrical and optical properties of RF magnetron sputtered Cu-Ag-O thin films**  
*M. Hari Prasad Reddy, P Narayana Reddy and S. Uthanna*  
National Seminar on Advanced Trends in Material Science  
Dept. of Physics, Govt. College for Men (A), Kadapa, A.P., March 10, 2017.
- 35. Tb<sup>3+</sup> activated GdAl<sub>3</sub>(BO<sub>3</sub>)<sub>4</sub> phosphors for solid state lighting**  
*G.V. Lokeswara Reddy, B.C. Jamalaiah, P. Narayana Reddy*  
National Seminar on Advanced Trends in Material Science  
Dept. of Physics, Govt. College for Men (A), Kadapa, A.P., March 10, 2017.
- 36. Organic Solar Cells for Renewable Energy: A mini review**  
*P. Narayana Reddy, P. Bayapu Reddy, A. Ramesh Babu, P.Suresh and G.V. L.Reddy*  
National Seminar on Advanced Trends in Material Science  
Dept. of Physics, Govt. College for Men (A), Kadapa, A.P., March 10, 2017.