Curriculum Vitae

Personal Information

Dr. Davuluri. Venkatesh

C/o PVN Prasad F.No 40, Plot No 175, Nalluri Empire, Mathrusrinagar, Kurmanapallem, Visakhapatnam-530046

+91 9676089275

dvsphy@gmail.com dvs275@yahoo.com

Sex Male | **Date of birth** 19/07/1990 | **Nationality** Indian

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Research Experience

08/2014- 12/2017 **Researcher**

Department of Physics, GITAM Institute of Science, GITAM University,Visakhapatnam, Andhra Pradesh, India**.**
Supervisor: Prof. K.V. Ramesh Department of Physics, GITAM Institute of Science, GITAM University, Andhra Pradesh India.
Thesis Title: ***"Study of electrical and magnetic properties of Cu substituted Ni-Zn nanocrystalline ferrites synthesized via citrate gel Autocombustion route."***

07/2013- 03/2017 **Project Fellow**

Department of Physics, GITAM Institute of Science, GITAM University,Visakhapatnam, Andhra Pradesh, India**.**
Supervisor: Prof. K.V. Ramesh Department of Physics, GITAM Institute of Science, GITAM University, Andhra Pradesh India.
Subject:***"Synthesis and study of magnetic and electrical properties of ferrites for memory and sensor applications"***

Teaching Experience

08/2018- Till Date **Assistant Professor (Ad-hoc)**

Department of Physics, College of science, Dr.B.R.Ambedkar University, Etcherla, Srikakulam, Andhra Pradesh, India. Handling theory and laboratory classes for M.Sc. Physics students.

09/2017- 08/2018 **Degree Lecturer**

I have handled theory and laboratory classes for B.Sc. Physics students in Department of Physics, Telangana Tribal Welfare Residential Degree College Men (T.T.W.R.D.C) Manuguru, Telangana, India.

06/2012- 07/2013 **Junior Lecturer**

New Generation Junior college, Khammam, Telangana, India.

Education

08/2014- 12/2017 **Ph.D. in Physics,**

Department of Physics, GITAM Institute of Science, GITAM University, Visakhapatnam, Andhra Pradesh, India.

Supervisor: Prof. K.V. Ramesh Department of Physics, GITAM Institute of Science, GITAM University, Andhra Pradesh India.

Thesis Title: "*Study of electrical and magnetic properties of Cu substituted Ni-Zn nanocrystalline ferrites synthesized via citrate gel autocombustion route*"

06/2010- 04/2012 **M.Sc. in Physics**

Department of Physics, GITAM Institute of Science, GITAM University, Visakhapatnam, Andhra Pradesh, India.

06/2007- 04/2010 **B.Sc. in Physics**

Kakatiya University, Warangal, Telangana, India.

Achivements/awards

2015 Best poster award from AcharyaNagarjuna University in (NSAMS-15).

2010-2012 Merit Scholarship award from GITAM University.

Skills

- Strong knowledge and research experience in magnetic materials.
- Strong background in preparation, characterization and analysis of structural, electrical and magnetic properties of nano crystalline ferrites.
- Experience in the preparation of nanomaterials by sol-gel autocombution, citrate gel autocombution, coprecipitation and Ball milling methods.
- Experience in analysis of magnetization data and Impedance data.
- Experience in analysis of temperature variation dielectric properties.
- Profficient in Microsoft office, Origin8.1 and Retvield Refinement software.

Experimental Tools Used/Handled

- X-ray diffractometer (PANanlyticalX'Pert-PRO diffractrometer)
- Fourier Transform Infrared Spectroscopy (Perkin-Elmer)
- Scanning Electron Microscopy (ZEISS Scanning electron microscope)
- Vibrating sample magnetometer (Lakeshore VSM 7410 magnetometer)
- Dielectric/Impedance analyzer (PSM-1735 Newton 4th Ltd)
- Dc Resistivity two probe system
- High Energy Ball Mill
- Box Furnace

Research Interest

- Synthesis, characterization of nanoferrite materials and their applications.
- Magnetic materials ferro and antiferro magnetic materials, rare earth ferrites.
- Ferro electric materials, multiferroics, thin films and thermo electric materials.
- CNT based composite materials, high frequency and Multi-Layer Chip Inductor applications of ferrite materials
- Magnetic storage devices and bio medical applications of magnetic materials.

List of publications

1. **DavuluriVenkatesh** and K. V. Ramesh,*Structural and electrical properties of Cu doped Ni-Zn nanocrystalline ferrites for MLCI applications*, **International Journal of Modern Physics B,** Vol**31**, No. **33** 1750318 (2017). DOI:10.1142/S0217984917503183
2. **DavuluriVenkatesh**, C.V.S.S.Sastry, K. V. Ramesh, *Effect of Sintering Temperature on Micro Structural and Impedance Spectroscopic Properties of* $Ni_{0.5}Zn_{0.5}Fe_2O_4$*nano Ferrite*, **AIP Conference Proceedings**, Vol**1859**, 020035 (2017). DOI:10.1063/1.4990188.
3. **DavuluriVenkatesh**and K. V. Ramesh, *Structural, dielectric and impedance spectroscopic studies of* $Ni_{0.5}Zn_{0.5-x}Li_xFe_2O_4$*nanocrystalline ferrites*, **International Journal of Modern Physics B,** Vol. **31** 1750153 (2017). DOI:10.1142/S0217979217501533.
4. **D. Venkatesh**, M. Siva Ram Prasad, B. RajeshBabu, K. V. Ramesh, K. Trinath,*Effect of sintering temperature on the Micro Strain and Magnetic Properties of Ni-Zn Nanoferrites*, **Journal of Magnetics**, Vol 20(3), 229-240 (2015). DOI: 10.4283/JMAG.2015.20.3.229
5. **DavuluriVenkatesh**, G. Himavathi, K. V. Ramesh,*Structural, Magnetic, and Electrical Properties of* $Ni_{0.65}Zn_{0.35-x}Cu_xFe_2O_4$ *Nano ferrite System*, **Journal of Superconductivity and Novel Magnetism**, Vol**28(6)** (2015). DOI:10.1007/s10948-015-3098-2

6. **DavuluriVenkatesh** and K. V. Ramesh,*Structural and Magnetic properties of Cu substituted Ni-Zn nano crystalline ferrites for MLCI applications*, **under review** journal of inorganic and organometallic polymers and materials (2018).
7. **DavuluriVenkatesh** and K. V. Ramesh, Structural and magnetic properties of Li+ substituted nano-crystalline ferrites synthesized through citrate gel process, **under review,**Journal of Superconductivity and Novel Magnetism(2018).

List of Conferences participated

- Oral presentation on Effect of Sintering Temperature on Micro Structural and Impedance Spectroscopic Properties of $Ni_{0.5}Zn_{0.5}Fe_2O_4$ Nano Ferrite in international conference on **functional materials, characterization, solid state physics, power, thermal and combustion energy** (FCSPTC), April 7-8th 2017.
- Participated in two day national seminar on **recent trends in nanoscience and nano technology** (RTNSNT-2016), organized by department of physics, M.R.college, Vizianagaram held on 26th and 27th November 2016.
- Presented Poster presentation on "Effect of sintering temperature on structural and impedance spectroscopic studies of $Ni_{0.5}Zn_{0.5}Fe_2O_4$ ferrite synthesized via citrate gel combustion route" in **National Seminar on Advances in Materials Science** (NSAMS-15), organized by Dept.of EIT, AcharyaNagarjuna University held on 25-26th Nov 2015.
- Oral presentation on "Structural and Electrical Properties of Copper Doped Nickel-Zinc Nano Ferrites" in the **6th National Symposium for Materials**

Research Scholars, MR-14 held at Department of Metallurgical Engineering & Materials Science, IIT Bombay held on 13th and 14th May 2014.

- Participated in "One day workshop on Advanced Characterization Techniques" during 6th **National Symposium for Materials Research scholars**, MR-14 held at Department of Metallurgical Engineering & Materials Science, IIT Bombay on 12th May 2014.
- Participated in five days training program on **Fundamentals of Nanotechnology**, GITAM University, Visakhapatnam Feb 17-21 2014.

References contact information

1. Prof. K.V. Ramesh
Professor (HoD)
Department of Electronics &Physics
GITAM Institute of Science
GITAM University
Visakhaptnam- 530045
Mob: +91-9848292228
Email: kvramesh11@gmail.com

2. Prof. K Ramakrishna
Professor
Department of Chemistry
GITAM Institute of Science
GITAM University
Visakhapatnam-530045
Mob: +91-9866234551
Email: karipeddirk@gmail.com

3. Prof. AnkamBhaskar
Visiting scientist
Department of Physics
National ChanghuaUniversity of Education
Changhua
Taiwan
Mob: +91-9032200275
Email: ankambhaskar@gmail.com
