

## -CURRICULUM VITAE-

### **Dr. R.V.S.S.N. RAVIKUMAR**

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Department of Physics  
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**Date of Birth and Nationality:** 14<sup>th</sup> May 1968 and Indian

**Marital Status & Family status:** Married & Two sons

### **Administrative Experience**

**Principal Investigator:** MHRD project with Design Innovation Centre (DIC) of JNTU Kakinada, 2016 onwards

**Expert member:** Board Of Studies Physics: JNTUK, Kakinada, 2016 onwards

**Director:** Central Laboratory, Acharya Nagarjuna University, Nagarjuna Nagar, May 2013 – onwards.

**Assistant Director:** Internal Quality Assurance Cell, Acharya Nagarjuna University, Nagarjuna Nagar, September 2014

**Assistant Coordinator,** TePP Outreach cum Cluster Innovation Center (TOCIC), Acharya Nagarjuna University, Nagarjuna Nagar (DSIR, New Delhi) July 2007 – till today

**Assistant Director,** Central Laboratory, Acharya Nagarjuna University, Nagarjuna Nagar, Dec. 2006 – August 2008.

**Assistant Chief superintend of PG Examinations:** Acharya Nagarjuna University, April 2008 - April 2010.

**Dy Coordinator:** UGC-DRS III, Department of Physics, Acharya Nagarjuna University, March 2010 onwards

### **Teaching and Research Experience:**

**October 2006 onwards: Assistant Professor, Department of Physics,** Acharya Nagarjuna University, Nagarjuna Nagar, India.

**June 2005 to October 2006: Pool Scientist (Senior Research Associate- CSIR)** Department of Chemistry, Pondicherry University, Pondicherry, India (With Prof. P.Sambasiva Rao).

**December 2003 to March 2005 : 21<sup>st</sup> COE, Post Doctoral Fellow,** Department of Chemistry, Kyoto University, Kyoto, Japan (with Prof. Jun Yamauchi).

**November 2001 –October 2003: Post Doctoral Fellow - VBL,** Department of Advanced

Materials Sciences and Engineering, Yamaguchi University, Ube, Japan (With Prof. Ryuichi Komatsu).

**April 1997 - October 2001: Post Doctoral Researcher**, Department of Physics, Sri Venkateswara University, Tirupati, India (Advisor: Prof. Y.P. Reddy).

**April 1996 - April 1997: Doctoral Researcher**, Department of Physics, Sri Venkateswara University, Tirupati, India (Supervisor: Prof. Y.P. Reddy).

**October 1994 - April 1996: M.Phil. Researcher**, Department of Physics, Sri Venkateswara University, Tirupati, India (Supervisor: Prof. B.J. Reddy).

**April 1994 - July 1995: Project Fellow** in UGC Project entitled "Optical and Magnetic properties of Transition Metal bearing Crystals" with Prof. B.J. Reddy, Dept. of Physics, Sri Venkateswara University, Tirupati, India.

#### **Educational Background:**

**1997-Ph.D.: Electronic Spectra of Transition Metal Ions in Solids: Struvite Analogues** - Sri Venkateswara University, Tirupati, India (Supervisor: Prof. Y. Prabhakara Reddy)

**1996-M.Phil.: Electronic Spectra of Transition Metal Ions in Solids: Tetragonal site of  $\text{Cu}^{2+}$  and  $\text{Mn}^{2+}$  in Chrysocolla (73%)** - Sri Venkateswara University Tirupati, India (Supervisor: Prof. B. Jagannadha Reddy)

**1992-M.Sc.: Physics with Electronics and Chemical Physics (65%)**- Sri Venkateswara University, Tirupati, India.

**1990-P.G.D.C.A.: Computer Applications (70.70%)**- Jawaharlal Nehru Technological University, Hyderabad, India.

**1988-B.Sc.: Physics (Main), Mathematics and Electronics (77.91%)** – Andhra University, Waltair, India.

#### **Academic Awards:**

**Associate Fellow, AP Akademi of Sciences, Hyderabad (2008)**

**Best Poster award at Russia; Best paper award at Eluru, India**

**June 2005 – Pool Scientist** awarded by Council of Scientific and Industrial Research (CSIR), Govt. of India, New Delhi.

**December 2003 – March 2005: 21st COE, Post Doctoral Fellow**, Department of Chemistry, Kyoto University, Kyoto, Japan

**November 2001-October 2003: Post Doctoral Fellow-VBL**, Yamaguchi University, Ube, Japan

**October 1997 - October 2001: Research Associate** awarded by Council of Scientific and Industrial Research (CSIR), Govt. of India, New Delhi.

**July 1995 - September 1997: Senior Research Fellow** awarded by Council of Scientific and Industrial Research (CSIR), Govt. of India, New Delhi.

**April 1994 - July 1995: Project Fellow** in UGC Project entitled "Optical and Magnetic properties of Transition Metal bearing Crystals" with Prof. B.J. Reddy, Dept. of Physics, Sri Venkateswara University, Tirupati, India.

**Visits abroad: Hong Kong, Japan**

### **Academic Activities:**

1. Member- Board of Studies Physics, Acharya Nagarjuna University (2007 – Present)
2. Member - Indian Physics Association (1995 - Present)
3. **Founding Member - Asia Pacific EPR/ESR Society (1997 - Present)**
4. Member - International EPR (ESR) Society (1999- Present)
5. **Founding Member- Indian EPR/ESR Society (2004- Present)**
6. Member - Physical Society, Dept. of Physics, Sri Venkateswara University, (1990-2001).
7. **Associate Fellow, AP Akademi of Sciences, Hyderabad (2008)**
8. **Executive member Nagarjuna University Teacher's Association (2008- till to date)**
9. **Executive member Andhra Pradesh University Teacher's Association (2009- till to date)**
10. Member - Board of Studies in **Bachelor of Audiology and Speech-Language Pathology**, Acharya Nagarjuna University (2015 – Present)

### **Research Interests:**

- ✧ Preparation and characterization of nano-materials.
- ✧ Optical properties of solids, including composite materials, transition metal ions and Rare Earth ions.
- ✧ Optical spectroscopy from UV-VIS to Far-Infra-Red.
- ✧ Electron Paramagnetic Resonance Spectroscopy (X-band, Q-band, Pulsed) - Single crystals, glasses, Thin Films, Magnetic metal oxides.
- ✧ Crystal Growth Solution, gel, melt, Czochralski and biological/hydro-thermal and their characterisation.
- ✧ Spectroscopic characterisation of natural and synthetic minerals.
- ✧ Photochemical deposition of transition metal doped films.
- ✧ Growth and characterization of Bio-materials, Laser host materials and Computational Physics.
- ✧ X-ray characterisation of inorganic materials, SEM, EPMA, ICP, TEM, XPS studies of materials.
- ✧ Synthesis and structural characterization of transition metal doped layered phosphates.

### **Research Papers Published:**

- (a) Papers in Journals/accepted/communicated: 173 Please See **Annexure -III**  
(b) Papers presented at conference/symposium: 271 (National: 223 & International: 48)  
(c) Conferences/Workshops/Symposia attended: **93** (National: 73 and International: 13)

**Cited Research works:** <http://minerals.gps.caltech.edu/WHOSWHO/Index> -  
**Citations of some of my research papers see annexure –II**

### **Skills**

- ✧ Low temperature synthesis of nano-materials preparation and characterisation
- ✧ Experience in growing number of transition metal bearing crystals
- ✧ Experience in collection of minerals and their characterisation by spectroscopic studies
- ✧ Preparation and characterisation of glasses both transition metal and rare earth ions
- ✧ Well experience in handling the instruments like UV-VIS-NIR Spectrophotometer, XRD, Infra Red Spectrophotometer, EPR (X-band, Q-band, pulsed and Variable Temp. up to 4K) and Atomic Absorption Spectrometers and Magnetic Susceptibility apparatus.
- ✧ Well experience in handling, HPLC-GC, AAS, FT-IR, ultra centrifuge apparatus.
- ✧ Knowledge in evaluating the data statistically using various statistical tools
- ✧ Knowledge in Computer languages: Basic, Fortran, PaSPECTROCHIM ACTA Al, Cobal and C++
- ✧ Proficiency in following Computer Software Wordstar, Lotus, Dbase3+, DbaseIV,

- FoxPro, CW, Ms Word, Ms Office, Word Perfect, Harvard Graphics and Oracle 7.X  
✧ Computer Systems handling : MsDOS, Windows and Unix

**References**

- |     |  |     |   |
|-----|--|-----|---|
| (1) | Prof. Y. Prabhakara Reddy<br>Coordinator Physical Sciences<br>Sri Padmavathi Mahila University<br>Tirupati-517 502, INDIA<br>Phone :91-877-2288106 (R)<br>Email :profypreddy@yahoo.co.in | (2) | Prof. B. Krishnamma (Emeritus Professor)<br>Department of Physics<br>Sri Venkateswara University<br>Tirupati- 517 502, INDIA<br>Phone: 91-877-2240306 (R)<br>Email:borrak2001@yahoo.com |
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### ANNEXURE III

#### LIST OF PAPERS PUBLISHED IN JOURNALS

1. Optical absorption spectra of cobalt and nickel doped kainite  
S.N. Rao, S. Vedanand, R. Ravikumar, **R.V.S.S.N. Ravikumar** & Y.P. Reddy: Solid State Communications (Great Britain) 92, 815-819 (1994).
2. Optical and EPR spectra of libethenite mineral  
S.N. Reddy, **R.V.S.S.N. Ravikumar**, B.J. Reddy & P.S. Rao: Ferroelectrics (USA) 166, 55-62 (1995).
3. Characterisation of the six coordinated octahedral site in  $\text{Cd}(\text{C}_4\text{H}_2\text{O}_4)\cdot 2\text{H}_2\text{O}$  crystals  
**R.V.S.S.N. Ravikumar**, S.N. Reddy, S.N. Rao, B.J. Reddy & Y.P. Reddy: Crystal Research and Technology (Germany) 30, 1121-1126 (1995).
4. Detailed spectroscopic studies on cornetite from southern Shaba, Zaire  
M.Venkata Ramanaiah, **R.V.S.S.N. Ravikumar**, G. Srinivasulu, B.J. Reddy & P.S. Rao: Ferroelectrics (USA) 175, 175-182 (1996).
5. Electronic spectra of hexa-aqua coordinated transition metal doped zinc struvite  
**R.V.S.S.N. Ravikumar**, S.N. Rao, B.J. Reddy & Y.P. Reddy: Ferroelectrics (USA) 189, 139-147 (1996).
6. Electronic and vibrational absorption spectra in nickelblodite  
M. Venkata Ramanaiah, G. Srinivasulu, **R.V.S.S.N. Ravikumar**, S. Vedanand & B.J. Reddy: Indian Journal of Physics (India) 70B, 87-92 (1996).
7. Spectroscopic investigations on vanadyl doped cadmium struvite  
**R.V.S.S.N. Ravikumar**, N. Madhu, B.J. Reddy, Y.P. Reddy & P.S. Rao: Physica Scripta (Sweden) 55, 637-638 (1997).
8. Electronic spectra of cobaltite  
**R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & P.S. Rao: "Modern Applications of EPR/ESR from Biophysics to Materials Science" Ed. C.Z. Rudowiz, Springer (Singapore) 1, 523-527 (1997).
9. Electronic spectra of pseudomalachite and olivenite  
A.V. Chandrasekhar, M. Venkataramanaiah, **R.V.S.S.N. Ravikumar**, B.J. Reddy & Y.P. Reddy: Indian Journal of Pure & Applied Physics (India) 35, 71-72 (1997).
10. Optical absorption studies on ferrous ion doped CMDH crystals  
**R.V.S.S.N. Ravikumar**, N. Madhu, S.N. Rao, B.J. Reddy & Y.P. Reddy: Indian Journal of Physics (India) 71B, 117-120 (1997).
11. Cu(II), Mn(II) in tetragonal site in chrysocolla  
**R.V.S.S.N. Ravikumar**, N. Madhu, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & P.S. Rao: Radiation Effects and Defects in Solids (USA) 143, 263-272 (1998).
12. Optical absorption spectra of nickel and cobalt doped  $\text{ZnKPO}_4\cdot 6\text{H}_2\text{O}$   
N. Madhu, **R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, B.J. Reddy & Y.P. Reddy: Physica Scripta (Sweden) 58, 345-347 (1998).
13. Optical absorption spectra of transition metal doped  $\text{ZnKPO}_4\cdot 6\text{H}_2\text{O}$  single crystals  
**R.V.S.S.N. Ravikumar**, N. Madhu, A.V. Chandrasekhar, B.J. Reddy & Y.P. Reddy: Bulletin of Electrochemistry (India) 14, 344-348 (1998).

14. Tetrahedral site of Cu(II) in bornite and bournonite  
M. Venkata Ramanaiah, **R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & P.S. Rao: *Ferroelectrics (USA)* 216, 27-34 (1998).
15. Orthorhombic site symmetry of Cr<sup>3+</sup> in ZnNH<sub>4</sub>PO<sub>4</sub>·6H<sub>2</sub>O crystals  
**R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, S.N. Rao, N. Madhu, B.J. Reddy & Y.P. Reddy: *Crystal Research and Technology (Germany)* 34, 911- 914 (1999).
16. Optical absorption and EPR spectral studies on vanadyl doped zinc phosphate glass  
**R.V.S.S.N. Ravikumar**, B.C. Jamalaih, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & P. Sambasiva Rao: *Journal of Alloys and Compounds (UK)* 287, 84-86 (1999).
17. Spectroscopic investigations of Mn<sup>2+</sup> in wavellite  
A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**, B.J. Reddy, Y.P. Reddy & P.S. Rao: *Asian Chemistry Letters (India)* 3, 30-35 (1999).
18. Spectroscopic investigations of Cu<sup>2+</sup> in zinc phosphate glass  
**R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, B.J. Reddy & Y.P. Reddy: *Asian Journal of Physics (India)* 8, 223-226 (1999).
19. EPR and optical absorption spectra of Cu(II) doped zinc potassium phosphate hexahydrate  
N. Madhu, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy, **R.V.S.S.N. Ravikumar** & P.S.Rao: *Indian Journal of Chemistry (India)* 38A, 590-591 (1999).
20. Electronic spectra of nickel doped CAPH crystals  
**R.V.S.S.N. Ravikumar**, M. Venkataramanaiah, B.J. Reddy & Y.P. Reddy: *Asian Journal of Physics (India)* 9, 391-394 (2000).
21. Spectroscopic studies on Cr-tremolite  
A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**, B.J. Reddy, Y.P. Reddy & P. Sambasiva Rao: *Asian Journal of Physics (India)* 9, 405-409 (2000).
22. Spectral studies on VO<sup>2+</sup> doped MPPH crystals  
R. Poonguzhali, R. Venkatesan, T.M. Rajendiran, P.S. Rao, **R.V.S.S.N. Ravikumar** & Y.P. Reddy: *Crystal Research and Technology (Germany)* 35, 1203-1207 (2000).
23. Chemical and electronic spectral studies of ullmannite  
S.N. Reddy, **R.V.S.S.N. Ravikumar**, B.J. Reddy & Y.P. Reddy: *Indian Journal of Engineering & Materials Sciences (India)* 7, 459-460 (2000).
24. Spectral investigations on melanterite mineral from France  
S.N. Reddy, P.S. Rao, **R.V.S.S.N. Ravikumar**, B.J. Reddy & Y.P. Reddy: *Spectrochimica Acta (UK)* 57A, 1283-1287 (2001).
25. Spectroscopic investigations on Fe<sup>3+</sup>, Fe<sup>2+</sup> and Mn<sup>2+</sup> bearing antigorite mineral  
S.N. Reddy, **R.V.S.S.N. Ravikumar**, B.J. Reddy, Y.P. Reddy & P.S. Rao: *Neues Jahrbuch fur Mineralogie Monatshefte (Germany)* 2001(6),261-270 (2001).
26. EPMA, Optical, EPR and IR spectral studies of prehnite mineral  
S. Narasimha Reddy, P.S. Rao, **R.V.S.S.N. Ravikumar** & B.J. Reddy: *Indian Journal of Physics (India)* 75A, 429-432 (2001).

27. Structural and spectral studies of  $\text{ZnKPO}_4 \cdot 6\text{H}_2\text{O}$  crystals  
**R.V.S.S.N. Ravikumar**, Y.P. Reddy, K. Ikeda, B.J. Reddy & A.V. Chandrasekhar: Crystal Research and Technology (Germany) 36, 1429-1433 (2001).
28. Single crystal EPR and optical studies of paramagnetic ions doped zinc potassium phosphate hexahydrate Part I: Cu(II)-a case of orthorhombic symmetry  
P. Sambasiva Rao, T.M. Rajendiran, R. Venkatesan, N. Madhu, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & **R.V.S.S.N. Ravikumar**: Spectrochimica Acta (UK) 57A, 2781-2787 (2001).
29. Single crystal EPR and optical studies of paramagnetic ions doped zinc potassium phosphate hexahydrate - Part II: VO(II)-a case of substitutional site  
**R.V.S.S.N. Ravikumar**, N. Madhu, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy, P. Sambasiva Rao, T.M. Rajendiran & R. Venkatesan: Spectrochimica Acta (UK) 57A, 2789-2794 (2001).
30. Optical and EPR spectra of  $\text{Ti}^{3+}$  in lamprophyllite from Kola Peninsula, Russia  
B.J. Reddy, J. Yamauchi, Y.P. Reddy, **R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar & M. Venkataramanaiah: Neues Jahrbuch fur Mineralogie Monatshefte (Germany) 2002(3), 138-144 (2002).
31. Tetragonal site of transition metal ions doped sodium phosphate glasses  
**R.V.S.S.N. Ravikumar**, V. Rajagopal Reddy, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & P.S. Rao: Journal of Alloys and Compounds (UK) 337, 272-276 (2002).
32. Distorted octahedral sites of  $\text{Cr}^{3+}$  in sodium phosphate glasses  
A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**, B.J. Reddy, Y.P. Reddy & P.S. Rao: Glass Technology (UK) 43, 32-33 (2002).
33. EPR and optical absorption spectra of Mn(II) ions in sodium phosphate glasses  
A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**, B.J. Reddy, Y.P. Reddy & P.S. Rao: Physics Chemistry of Glasses (UK) 43, 173-175 (2002).
34. EPR and optical absorption spectroscopy on minerals  
B.J. Reddy, Jun Yamauchi, Y.P. Reddy, A.V. Chandrasekhar & **R.V.S.S.N. Ravikumar**: EPR in the 21<sup>st</sup> Century: Basic and applications to materials, life and Earth Sciences, Ed. A. Kawamori, Jun Yamauchi & H. Ohto, Proceedings of Third Asia-Pacific EPR/ESR Symposium (APES'01) Elsevier Pub. 575-584 (2002).
35. Spectroscopic investigations on Co(II) doped ZAPH and CAPH crystals  
**R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & Jun Yamauchi: Ferroelectrics (USA) 274, 127-134 (2002).
36. X-ray powder diffraction, DTA and vibrational studies of  $\text{CdNH}_4\text{PO}_4 \cdot 6\text{H}_2\text{O}$  crystals  
**R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & K. Ikeda: Crystal Research and Technology (Germany) 37, 1127-1132 (2002).
37. Single crystal EPR and optical studies of Cu(II) doped zinc ammonium phosphate hexahydrate: A case of rhombic distortion  
E. Poonguzhali, R. Srinivasan, **R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & P. Sambasiva Rao: Physica Scripta (Sweden) 66, 391-394 (2002).

38. EPR and optical studies on transition metal doped  $\text{LiRbB}_4\text{O}_7$  glasses,  
**R.V.S.S.N. Ravikumar**, R. Komatsu, K. Ikeda, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & P.S. Rao: *Journal of Physics and Chemistry of Solids (UK)* 64, 261-264 (2003).
39. Optical absorption spectrum of dysprosium doped zinc phosphate glass  
A.V. Chandrasekhar, A. Radhaphathy, B.J. Reddy, Y.P. Reddy, L. Ramamoorthy & **R.V.S.S.N. Ravikumar**: *Optical Materials (USA)* 22, 215-220 (2003).
40. Electron paramagnetic resonance and optical absorption spectra of  $\text{Cr}^{3+}$  ions in cadmium phosphate glass  
**R.V.S.S.N. Ravikumar**, Ryuichi Komatsu, Ko Ikeda, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy & P.S. Rao: *Solid State Communications (UK)* 126, 251-253 (2003).
41. Variable temperature EPR study for confirming dynamic Jahn -Teller distortion in Cu(II) doped zinc ammonium phosphate hexahydrate  
E. Poonguzhali, R. Srinivasan, R. Venkatesan, **R.V.S.S.N. Ravikumar** & P. Sambasiva Rao: *Journal of Physics and Chemistry of Solids (UK)* 64, 1139-1146 (2003).
42. Optical and EPR studies of iron bearing phosphate minerals: satterlyite, gormanite from Yukon Territory, Canada  
A.V. Chandrasekhar, M. Venkata Ramanaiyah, B.J. Reddy, Y.P. Reddy, P.S. Rao & **R.V.S.S.N. Ravikumar**: *Spectrochimica Acta (UK)* 59A, 2115-2121 (2003).
43. Spectroscopic studies of copper doped  $\text{ARbB}_4\text{O}_7$  (A=Na, K) glasses  
**R.V.S.S.N. Ravikumar**, R. Komatsu, K. Ikeda, A.V. Chandrasekhar, L. Ramamoorthy, B.J. Reddy, Y.P. Reddy & P.S. Rao: *Physica B Condensed Matter (The Netherlands)* 334,398-402 (2003).
44. Spectroscopic studies of a  $\text{LiRbB}_4\text{O}_7:\text{Cu(II)}$  crystal grown by the Czochralski technique  
**R.V.S.S.N. Ravikumar**, R. Komatsu, B.J. Reddy & K. Ikeda: *Spectrochimica Acta (UK)* 59A, 3321-3324 (2003).
45. Site Symmetry of Mn(II) and Co(II) in zinc phosphate glass  
**R.V.S.S.N. Ravikumar**, K. Ikeda, A.V. Chandrasekhar, Y.P. Reddy, P.S. Rao & Jun Yamauchi: *Journal of Physics Chemistry of Solids (UK)* 64, 2433-2436 (2003).
46. Spectroscopic studies of transition metal doped sodium phosphate glasses  
**R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, L. Ramamoorthy, B.J. Reddy, Y.P. Reddy, Jun Yamauchi & P.S. Rao: *Journal of Alloys and Compounds (UK)* 364, 176-179 (2004).
47. Identification of crystal symmetry in Kramer's and non-Kramer's ions by optical absorption Divalent copper and nickel ions in diamagnetic lattices  
K. Velavan, **R.V.S.S.N. Ravikumar**, R. Venkatesan & P. Sambasiva Rao: *Crystal Research Technology (Germany)* 39, 448-453 (2004).
48. Spectral investigations of iron bearing fluorapatite  
**R.V.S.S.N. Ravikumar**, N. Madhu, A.V. Chandrasekhar, B.J. Reddy, P.S. Rao & Y.P. Reddy: *Radiation Effects and Defects in Solids (UK)* 159, 87-91 (2004).



49. Optical and EPR investigations on smithsonite minerals  
B.J. Reddy, J. Yamauchi, M. Venkataramanaiah, A.V. Chandrasekhar & **R.V.S.S.N. Ravikumar**: Radiation Effects and Defects in Solids (USA) 159, 141-147 (2004).
50. Identification of chromium and nickel sites in zinc phosphate glasses  
**R.V.S.S.N. Ravikumar**, J. Yamauchi, A.V. Chandrasekhar, Y.P. Reddy & P.S. Rao: Journal of Molecular Structure (UK) 740, 169-173 (2005).
51. Lasing properties of Pr<sup>3+</sup>-doped tellurofluorophosphate glasses  
L.R. Moorthy, M. Jayasimhadri, A. Radhapathy & **R.V.S.S.N. Ravikumar**: Materials Physics and Chemistry (UK) 93, 455-460 (2005).
52. Tetrahedral site of iron in natural mineral: sodalite  
**R.V.S.S.N. Ravikumar**, J. Yamauchi, A.V. Chandrasekhar, Y.P. Reddy & P.S. Rao: Radiation Effects and Defects in Solids (USA) 160, 109-115 (2005).
53. Radiative emission properties of Dy<sup>3+</sup> doped alkali borate and fluoroborate glasses  
L.R. Moorthy, A. Radhapathy, M. Jayasimhadri, D.V.R. Moorthy & **R.V.S.S.N. Ravikumar**: Journal of Alloys and Compounds (UK) 408-412, 724-727 (2006).
54. Identification of doped paramagnetic vanadyl impurity in dipotassium diaquabis (malonato-κ<sup>2</sup>O,O') zincate dehydrate single crystal using EPR and optical techniques  
B. Natarajan, S. Mithira, S. Deepa, **R.V.S.S.N. Ravikumar** & P. Sambasiva Rao: Radiation Effects and Defects in Solids (USA) 161, 177-187 (2006).
55. Spectroscopic characteristics of Sm<sup>3+</sup> doped alkali fluorophosphate glasses  
M. Jayasimhadri, L. Rama Moorthy, S.A. Saleem & **R.V.S.S.N. Ravikumar**: Spectrochim. Acta A (UK) 64, 939-944 (2006).
56. Site determination of vanadyl impurity in cadmium sodium sulphate hexahydrate: single crystal EPR and optical studies  
C. Shiyamala, S. Mithira, B. Natarajan, **R.V.S.S.N. Ravikumar** & P. Sambasiva Rao: Physica Scripta (Sweden) 74, 549-554 (2006).
57. Synthesis, characterization and biological activity of phthalimide derivatives of Cu(II) complex  
Y. Lingappa, S. Sreenivasa Rao, **R.V.S.S.N. Ravikumar** & P. Sambasiva Rao: Radiation Effects and Defects in Solids (USA) 162, 11-16 (2007).
58. Exhibition of low hyperfine coupling constant for copper(II) in magnesium rubidium sulphate hexahydrate  
A. Chandrasekhar Rao, S. Mithira, H. Anandhalakshmi, **R.V.S.S.N. Ravikumar** & P. Sambasiva Rao: Journal of Physics Chemistry of Solids (UK) 68, 305-310 (2007).
59. Investigations on vanadyl doped ARbB<sub>4</sub>O<sub>7</sub> (A= Li, Na, K) glasses by optical and EPR studies  
**R.V.S.S.N. Ravikumar**, J. Yamauchi, K. Ikeda, R. Komatsu, A.V. Chandrasekhar, Y.P. Reddy & P.S. Rao: Materials Physics and Chemistry (UK) 103, 5-8 (2007).
60. An investigation of the optical properties of Nd<sup>3+</sup> ions in alkali tellurofluorophosphate glasses  
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**R.V.S.S.N. Ravikumar**, R. Komatsu, K. Ikeda, A.V. Chandrasekhar, Y.P. Reddy and L. Ramamoorthy: National Seminar on Recent Trends in Opto-electronic Materials and Devices (NSRTOM-2002) S.V. University, Tirupati, Nov., 21-22 (2002).
31. Spectroscopic studies on transition metal ions doped sodium phosphate glasses  
A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**, B.J. Reddy, L. Ramamoorthy, P.S. Rao, Jun Yamauchi and Y.P. Reddy: National Seminar on Recent Trends in Opto-electronic Materials and Devices (NSRTOM-2002) S.V. University, Tirupati, Nov., 21-22 (2002).

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R. Srinivasan, E. Poonguzhali, R. Venkatesan, T.M. Rajendiran, P. Sambasiva Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Recent Trends in Opto-electronic Materials and Devices (NSRTOM-2002) S.V. University, Tirupati, Nov., 21-22 (2002).
33. Spectroscopic studies of copper doped  $ARbB_4O_7$  (A=Na,K) glasses  
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**R.V.S.S.N. Ravikumar**: YU-VBL 2003 Annual Conference, Venture Business Laboratory, Yamaguchi University, Ube (Japan) October 31, (2003).
35. A case of interstitial position: single crystal EPR study of Mn(II) in Cadmium Sodium Sulphate Hexahydrate  
C. Shiyamala, S. Mithira, **R.V.S.S.N. Ravikumar**, R.Venkatesan and P. Sambasiva Rao: National symposium on Current Trends in Inorganic Chemistry, Cochin University of Science and Technology, Cochin, Kerala, March 15 – 17, (2004).
36. Octahedral and tetrahedral sites of iron bearing silicate minerals  
**R.V.S.S.N. Ravikumar** and Jun Yamauchi: 8<sup>th</sup> ESR forum Niigata University, Niigata (Japan) June 11-12, (2004).
37. CW-ESR and optical absorption studies on  $Cu^{2+}$  doped  $SrB_4O_7$  glass  
**R.V.S.S.N. Ravikumar**, J. Yamauchi, A.V. Chandrasekhar, Y.P. Reddy and P.S. Rao: National Symposium on Electron Magnetic Resonance Spectroscopy (NSEMRS), Pondicherry University, Pondicherry, Feb. 4-5 (2005).
38. Room Temperature EPR Studies of Ni(II) Ion in a Paramagnetic Host Lattice: A Case of Large D  
K. Velavan, **R.V.S.S.N. Ravikumar**, R. Venkatesan and P. Sambasiva Rao: National Symposium on Electron Magnetic Resonance Spectroscopy (NSEMRS), Pondicherry University, Pondicherry, Feb. 4-5 (2005).
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A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**, J. Yamauchi, Y.P. Reddy and P.S. Rao: National Symposium on Electron Magnetic Resonance Spectroscopy (NSEMRS), Pondicherry University, Pondicherry, Feb. 4-5 (2005).
40. EPR and optical absorption studies of vanadyl doped dipotassium diaquobis (malonato  $\kappa^2O, O'$ ) zincate dehydrate single crystal  
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41. Structural study of copper(II) doped dipotassium diaquobis (malonato- $\kappa^2O, O'$ ) zincate dehydrate complex using Electron Paramagnetic Resonance Technique  
S. Deepa, S. Mithira, B. Natarajan, **R.V.S.S.N. Ravikumar** and P. Sambasiva Rao: Platinum Jubilee celebrations 75 annual session the national academy of sciences, India, Pondicherry University, Pondicherry, December 8-9 (2005).

42. The interstitial position of VO(II) in diaqua malonato zinc(II)- EPR and optical studies  
B. Natarajan, S. Mithira, S. Deepa, **R.V.S.S.N. Ravikumar** and P. Sambasiva Rao: Platinum Jubilee celebrations 75 annual session the national academy of sciences, India, Pondicherry University, Pondicherry, December 8-9 (2005).
43. Anisotropic and optical behavior of Cu(II) ion in Diaquamalonatozinc(II)  
S. Mithira, B. Natarajan, S. Deepa, **R.V.S.S.N. Ravikumar** and P. Sambasiva Rao: National conference on novel materials and Technologies (NCNMT-2006), S.V. University, Tirupati, February 17-18 (2006).
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45. Interstitial disorder of Cu(II) ion in Bis(thiosemicarbazide-S,N)zinc(II) dehydrate single crystal-an EPR over view  
S. Ramani, S. Deepa, **R.V.S.S.N. Ravikumar** and P. Sambasiva Rao: National Symposium on Electron Magnetic Resonance Spectroscopy (NSEMERS), Pondicherry University, Pondicherry, March 24-25 (2006).
46. Site determination of vanadyl impurity in cadmium sodium sulphate hexa hydrate: single crystal EPR and optical studies.  
C. Shiyamala, S. Mithira, B. Natarajan, **R.V.S.S.N. Ravikumar** and P. Sambasiva Rao: National Symposium on Electron Magnetic Resonance Spectroscopy (NSEMERS), Pondicherry University, Pondicherry, March 24-25 (2006).
47. EPR characteristics of plagioclase feldspars from Kadavur area, Tamil Nadu  
S. Vijay Anand, M.S. Pandian, S. Mithira, **R.V.S.S.N. Ravikumar** and P. Sambasiva Rao: National Symposium on Electron Magnetic Resonance Spectroscopy (NSEMERS), Pondicherry University, Pondicherry, March 24-25 (2006).
48. Absorption and EPR studies on transition metal doped strontium tetraborate glasses  
**R.V.S.S.N. Ravikumar**, V. Vijaya, P.S. Rao, A.V. Chandrasekhar and Y.P. Reddy: National Seminar on Advances in Amorphous Materials (NAAM 2007) Acharya Nagarjuna University PG Centre, Nuzvid, Feb.1-3, (2007).
49. Distorted octahedral sites of  $\text{Cr}^{3+}$  in  $\text{ARbB}_4\text{O}_7$  (A = Li, Na, K) glasses  
K.S.N. Murthy, N. Krishna Jyothi, P. Narayana Murthy, **R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, P.S. Rao and Y.P. Reddy: National Seminar on Advances in Amorphous Materials (NAAM 2007) Acharya Nagarjuna University PG Centre, Nuzvid, Feb.1-3, (2007).
50. Absorption spectra of  $\text{Nd}^{3+}$  ions doped PBO-MO- $\text{B}_2\text{O}_3$  (MO =  $\text{SB}_2\text{O}_3$ ,  $\text{AS}_2\text{O}_3$ ,  $\text{BI}_2\text{O}_3$ ) glasses  
P. Narayana Murthy, G. Srinivasa Rao, V. N. V. Radha Krishana Murthy and **R.V.S.S.N. Ravikumar**: National Seminar on Advances in Amorphous Materials (NAAM 2007) Acharya Nagarjuna University PG Centre, Nuzvid, Feb.1-3, (2007).

51. Advanced materials –characterization- Invited talk  
**R.V.S.S.N. Ravikumar:** Seminar on advances in materials science, P.B. Siddhartha College of Arts & Sciences, Vijayawada, Feb, 10 (2007).
52. Role of Disaster management in India- Invited talk  
G. Giridhar, K. Venkateswarlu, Sandhya Cole and **R.V.S.S.N. Ravikumar:** National Seminar on Natural Calamities- Role of Scientists and Administrators, Y.N.College, Narsapur, Feb., 2 (2008).
53. Structural determination and bonding nature of Vanadyl doped cadmium phosphate glasses  
G. Giridhar, K.S.N. Murthy, M. Rangacharyulu, P. Sambasiva Rao and **R.V.S.S.N. Ravikumar:** National Conference on Advanced materials Devices and Technologies (NCAMDT-2008), S.V. University, Tirupati, Feb. 20-22 (2008).
54. Bonding nature of copper doped MB<sub>4</sub>O<sub>7</sub> (M = Zn, Cd) glasses  
K.S.N. Murthy, G. Giridhar, P. Narayana Murty, P.S. Rao and **R.V.S.S.N. Ravikumar:** National Conference on Advanced materials Devices and Technologies (NCAMDT -2008), S.V. University, Tirupati, Feb., 20-22 (2008).
55. EPR and Optical spectral investigations on natural mineral covellite  
G. Subhashchandra Bose, P. Narayana Murty, A.V. Chandrasekhar, P.S. Rao, Y.P. Reddy and **R.V.S.S.N. Ravikumar:** National Conference on Advanced Materials Devices and Technologies (NCAMDT-2008), S.V. University, Tirupati, Feb., 20-22 (2008).
56. Nano-Technology from energy conversion to science ethics- Invited Talk  
**R.V.S.S.N. Ravikumar,** Seminar on Nano-Technology, Nalanda Degree College, Vijayawada, Sept.11, (2008).
57. Bonding nature of vanadyl doped MB<sub>4</sub>O<sub>7</sub> (M = Zn, Cd) glasses  
K.S.N. Murthy, P. Narayana Murthy, P. Sambasiva Rao and **R.V.S.S.N. Ravikumar:** AP Science Congress 2008, Osmania University, Hyderabad, Nov 14-16, (2008).
58. Preparation and characterization of Cu(II) doped ZnO nano material  
U.S. Udaychandran Thampy, Ch. Rama Krishna, Y.P. Reddy, **R.V.S.S.N. Ravikumar** and P.S.Rao: AP Science congress 2008, Osmania University, Hyderabad, Nov 14-16, (2008).
59. Growth and Characterization of new layered Co(II), Cr(III) doped in Chlorocadmiumphosphate, Cd(HPO<sub>4</sub>)Cl·[H<sub>3</sub>N(CH<sub>2</sub>)<sub>6</sub>NH<sub>3</sub>]<sub>0.5</sub> crystals  
Ch. Rama Krishna, U.S. Udaychandran Thampy, P.S. Rao, Jun Yamauchi, Y.P. Reddy and **R.V.S.S.N. Ravikumar:** AP Science Congress 2008, Osmania University, Hyderabad, Nov 14-16, (2008).
60. Preparation of Transition metal doped ZnO nano materials,  
**R.V.S.S.N. Ravikumar:** Guest Lecturer on Seminar Nano-Materials at TJPS College, Guntur on Feb.18, (2009).
61. Advanced Material Preparation and characterization  
**R.V.S.S.N. Ravikumar:** Guest Lecturer delivered at Sir CRR Degree College, Eluru, 26<sup>th</sup> June (2009).

62. Octahedral and tetrahedral sites of copper and iron ions in natural minerals  
**R.V.S.S.N. Ravikumar** and P. Sambasiva Rao: Invited talk at National Conference on Advances in Nano Materials Devices and Technologies (NCANDT-2009), S.V. Degree College, Kadapa, India, July 11-12, (2009).
63. Distorted octahedral sites of Cu(II),VO(II),Cr(III) doped MB<sub>4</sub>O<sub>7</sub> (M= Zn, Cd) glasses  
 K.S.N. Murthy, Ch. Rama Krishna, P.S. Rao, P. Narayana Murty and **R.V.S.S.N. Ravikumar**: National Conference on Advances in Nano Materials Devices and Technologies (NCANDT-2009), S.V. Degree College, Kadapa, India, July 11-12, (2009).
64. Preparation and characterization of LiCoO<sub>2</sub> by low temperature Molten Salt Synthesis (MSS) method  
**R.V.S.S.N. Ravikumar**, Ch.L. Nagasudha, U.S. Udayachandran Thampy, Ch. Rama Krishna, Y.P. Reddy and P. Sambasiva Rao: Invited talk at National Conference on Emerging Materials, (NCEM-2009), NBKR Science & Arts College, Vidyanagar, July 18-19, (2009).
65. Electron Paramagnetic Resonance investigations of Cu<sup>2+</sup> doped Cobalt L-histidine hydrochloride monohydrate crystals  
 N.B.V. Reddy, Ch. Rama Krishna, Y. Sunandamma, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Conference on Emerging Materials, (NCEM-2009), NBKR Science & Arts College, Vidyanagar, July 18-19, (2009).
66. Spectroscopic characteristics of VO<sup>2+</sup> doped alkali fluor borophosphate glasses  
 B. Nagalakshmi, D.V. Satish, U.S. Udayachandran Thampy, P.N. Murty, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Conference on Emerging Materials, (NCEM-2009), NBKR Science & Arts College, Vidyanagar, July 18-19, (2009).
67. EPR and Optical studies on natural mineral diopside  
 A.V. Chandrasekhar, B. Sekhar, Y.P. Reddy P.S. Rao and **R.V.S.S.N. Ravikumar**: National Conference on Emerging Materials, (NCEM-2009), NBKR Science & Arts College, Vidyanagar, July 18-19, (2009).
68. Synthesis and spectroscopic characterization of Transition metal ions doped ZnO based Nanomaterials- Invited talk  
 U.S. Udayachandran Thampy, Ch. Rama Krishana, Y.P. Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Recent Trends in Emerging Frontiers of Physical Sciences, Sindri College, Sindri, Nov., 02-03, (2009).
69. FT-IR spectral studies of alkali cadmium phosphate glasses  
 G. Giridhar, R. Ramesh Raju, M. Rangacharyulu and **R.V.S.S.N. Ravikumar**: National Seminar on Recent Trends in Emerging Frontiers of Physical Sciences, Sindri College, Sindri, Nov., 02-03, (2009).
70. Nano Structured Materials: ZnO and CdO nano powders- Invited talk  
**R.V.S.S.N. Ravikumar**, P.S. Rao and Y.P. Reddy: National Seminar on Nano Materials and their Applications, D.A.R. College, Nuzvid, Dec., 10-11, (2009).
71. Optical absorption and band gap studies of Ni<sup>2+</sup> doped ZnO nano powder  
 U.S. Udayachandran Thampy, Ch. Rama Krishna, C.V. Reddy, Y.P. Reddy and **R.V.S.S.N. Ravikumar**: National Seminar on Nano Materials and their Applications, D.A.R. College, Nuzvid, Dec. 10-11<sup>th</sup> (2009).

72. XRD, optical and EPR studies of  $\text{Co}^{2+}$  doped chlorocadmium phosphate  $\text{Cd}(\text{HPO}_4)\text{Cl}\cdot[\text{H}_3\text{N}(\text{CH}_2)_6\text{NH}_3]_{0.5}$  crystals  
Ch. Rama Krishana, Y.P. Reddy, P.S. Rao, Jun Yamuchi and **R.V.S.S.N. Ravikumar**: National Seminar on Nano Materials and their Applications, D.A.R. College, Nuzvid, Dec., 10-11, (2009).
73. Optical properties of copper doped cadmium oxide nano material  
L.V. Krishna Rao, U.S. Udaychandran Thampy, D.V. Satish and **R.V.S.S.N. Ravikumar**: National Seminar on Nano Materials and their Applications, D.A.R. College, Nuzvid, Dec., 10-11, (2009).
74. Structural variations of  $\text{Cu}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Co}^{2+}$ ,  $\text{Fe}^{3+}$  doped ZnO Nanomaterials- Invited talk  
U.S Udayachandran Thampy, Ch Ramakrishna, K Venkateswarlu, Y.P Reddy, P.S Rao and **R.V.S.S.N Ravikumar**: National Seminar on insight into Nano Materials, Andhra Loyola College, Vijayawada, Jan. 5-6, (2010).
75. Spectroscopic investigations of  $\text{Cu}^{2+}$  ion doped chlorocadmium phosphate crystals  
Ch. Rama Krishna, U.S. Udaychandran Thampy, C.V. Reddy, Y.P. Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on insight into Nano Materials, Andhra Loyola College, Vijayawada, Jan. 5-6, (2010).
76. Spectroscopic studies of Nickel doped Chlorocadmium Phosphate  $\text{Cd}(\text{HPO}_4)\text{Cl}\cdot[\text{H}_3\text{N}(\text{CH}_2)_6\text{NH}_3]_{0.5}$  crystals  
Ch. Rama Krishna, U.S. Udayachandran Thampy, C.V. Reddy, K. Venkateswarlu, Y.P. Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: National seminar on nanomaterials and technology, SKBR College, Amalapuram, Jan. 9-10, (2010).
77. Spectral investigations on  $\text{Cu}^{2+}$  doped Barium borate nano powders  
Ch. Venkata Reddy, Ch. Rama Krishna, Y.P. Reddy, A.V. Chandra Sekhar, P.S. Rao, and **R.V.S.S.N. Ravikumar**: National Conference on Materials for Energy Storage and Conversion (NCMESC-2010), S.V. University, Tirupati, Jan. 23-24, (2010).
78. Spectral Characterization of  $\text{LiCoO}_2$  nano battery material  
Ch. Lakshmi Naga Sudha, Ch. Rama Krishna, U.S. Udayachandran Thampy, Y.P. Reddy, P. Sambasiva Rao, Jun Yamauchi and **R.V.S.S.N. Ravikumar**: National Conference on Materials for Energy Storage and Conversion (NCMESC-2010), S.V. University, Tirupati, Jan. 23-24, (2010).
79. Investigations on  $\text{Cu}^{2+}$  doped Cobalt L-histidine hydrochloride monohydrate crystals  
N.B.V. Reddy, Ch. Rama Krishna, C.V. Reddy, Y. Sunandamma, P.S.Rao and **R.V.S.S.N. Ravikumar**: National Conference on Materials for Energy Storage and Conversion (NCMESC-2010), S.V. University, Tirupati, Jan. 23-24, (2010).
80. Growth and characterization of Fe(III) doped Cobalt L-histidine hydrochloride monohydrate crystals  
N.B.V. Reddy, V. Parvathi, Ch. Rama Krishna, P.S. Rao, **R.V.S.S.N. Ravikumar** and Y.Sunandamma: National Seminar on Recent Research Trends in Synthetic Organic and Natural Products Chemistry (RRTSONPC-II), S.V. University, Tirupati, March 29-30, 2010.

81. Synthesis and characterization of Au(III) complexes of thiosemicarbazones and phenyl hydrazones as potential anticancer drugs.  
Y.A.S.J. Prasanna Kumari, K.M.M.S. Prakash, B. Sreenivasa Rao, **R.V.S.S.N. Ravikumar** and Y.Sunandamma: National Seminar on Recent Research Trends in Synthetic Organic and Natural Products Chemistry (RRTSONPC-II), S.V. University, Tirupati, March 29-30, 2010.
82. Physical and optical properties of Cu<sup>2+</sup> and Ni<sup>2+</sup> doped Alkali Zinc Borate glasses  
T. Raghavendra Rao, G. Ramasundari, Ch. Rama Krishna, Ch. Venkata Reddy and **R.V.S.S.N. Ravikumar**: National Seminar on Emerging Trends in Material Science-An Application to Amorphous, Nano & Liquid Crystals, Sir C.R. Reddy (A) College, Eluru, 30 Oct, 2010.
83. Preparation and Spectral characterization of Cu<sup>2+</sup> doped CdO Nanopowders  
L.V. Krishna Rao, U.S. Udayachandran Thampy, D.V. Satish, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Emerging Trends in Material Science-An Application to Amorphous, Nano & Liquid Crystals, Sir C.R. Reddy (A) College, Eluru, 30 Oct, 2010.
84. Absorption and Electron Paramagnetic Resonance Studies of Co<sup>2+</sup> doped ARbB<sub>4</sub>O<sub>7</sub> (A = Li, Na, K) glasses  
N. Krishna Jyothi, Ch. Rama Krishna, P. Narayana Murty, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Emerging Trends in Material Science-An Application to Amorphous, Nano & Liquid Crystals, Sir C.R. Reddy (A) College, Eluru, 30 Oct, 2010.
85. Spectroscopic studies of Mn<sup>2+</sup> doped MB<sub>4</sub>O<sub>7</sub> (M = Zn, Cd) glasses  
P. Rekha Rani, K.S.N. Murthy, Ch. Rama Krishna, R. Ramesh Raju, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Emerging Trends in Material Science-An Application to Amorphous, Nano & Liquid Crystals, Sir C.R. Reddy (A) College, Eluru, 30 Oct, 2010.
86. Investigations on Cu<sup>2+</sup> doped PVA capped ZnSe nano polymer films  
Sk. Muntaz Begum, G. Nirmala, K. Ravindranadh, Ch. Venkata Reddy, M.C. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Emerging Trends in Material Science-An Application to Amorphous, Nano & Liquid Crystals, Sir C.R. Reddy (A) College, Eluru, 30 Oct, 2010.
87. Synthesis and spectral investigations of Co<sup>2+</sup> doped ZnO Nano powders  
R.Nagaraja, U.S.Udayachandran Thampy, B.Babu, V. Pushpa Manjari, T.Asواني, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Emerging Trends in Material Science-An Application to Amorphous, Nano & Liquid Crystals, Sir C.R. Reddy (A) College, Eluru, 30 Oct, 2010. **Best Paper Presentation award**
88. EPR, Optical and FT-IR studies of Mn<sup>2+</sup> doped Alkali Fluoroborophosphate Glasses  
B. Naga Lakshmi, P. Narayana Murty, G.S. Bose, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Emerging Trends in Material Science-An Application to Amorphous, Nano & Liquid Crystals, Sir C.R. Reddy (A) College, Eluru, 30 Oct, 2010.

89. Structural Investigations on Ni<sup>2+</sup> doped ARbB<sub>4</sub>O<sub>7</sub> (A = Li, Na, K) glasses  
N. Krishna Jyothi, Ch. Rama Krishna, R. Ramesh Raju, P. Narayana Murty, P.S. Rao and **R.V.S.S.N. Ravikumar**: AP Science Congress 10, Jawaharlal Nehru Technological University, Hyderabad, 18-20 Nov, 2010.
90. Spectroscopic Investigations of Tennantite from Tsumeb, Namibia  
G.S.C. Bose, A.V. Chandra Sekhar, Ch. Venkata Reddy, Y. Srinivasa Rao, P.S. Rao and **R.V.S.S.N. Ravikumar**: AP Science Congress 10, Jawaharlal Nehru Technological University, Hyderabad, 18-20 Nov, 2010.
91. Tuning the Bandgap of Zn<sub>x</sub>Cd<sub>1-x</sub>O (0 < x < 10) nanoparticles by Simple Solution method  
D.V. Satish, T. Raghavendra Rao, Ch.V. Reddy, Ch. Rama Krishna, U.S. Udayachandran Thampy, **R.V.S.S.N. Ravikumar**: AP Science Congress 10, Jawaharlal Nehru Technological University, Hyderabad, 18-20 Nov, 2010.
92. Spectroscopic studies of Cu<sup>2+</sup> ions doped Alkali fluoroborophosphate glasses  
B. Naga Lakshmi, P. Narayana Murty, P.S. Rao and **R.V.S.S.N. Ravikumar**: AP Science Congress 10, Jawaharlal Nehru Technological University, Hyderabad, 18-20 Nov, 2010.
93. Mixed Alkali Effect in VO<sup>2+</sup> doped Alkali Zinc Borate Glasses  
T. Raghavendra Rao, G. Rama Sundari, Ch. Rama Krishna, Ch. Venkata Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: AP Science Congress 10, Jawaharlal Nehru Technological University, Hyderabad, 18-20 Nov, 2010.
94. Structural Investigations on Cr(III) doped Cadmium Oxide(CdO) nanopowders  
L.V. Krishna Rao, D.V. Satish, U.S. Udayachandran Thampy, K. Venkateswarlu, P.S. Rao and **R.V.S.S.N. Ravikumar**: National seminar on Recent Advances in Physics, P.R. Govt. College, Kakinada 5-6, Jan. 2011.
95. Investigations on Mn<sup>2+</sup> doped PVA capped ZnSe nano polymer films  
Sk. Muntaz Begum, G. Nirmala, K. Ravindranadh, M.C. Rao, T. Aswani and **R.V.S.S.N. Ravikumar**: National seminar on Recent Advances in Physics, P.R. Govt. College, Kakinada 5-6, Jan 2011.
96. An efficient and green synthesis of Fe<sup>3+</sup> ions doped Chlorocadmium Phosphate molecular sieve crystals  
Ch. Rama Krishna, Ch. Venkata Reddy, U.S. Udayachandran Thampy, Y.P. Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: XV National Seminar on crystal Growth, PSN College of Engineering & Technology, Tirunelveli, 23-25, Feb. 2011.
97. Synthesis and characterization of Cr(III) ions doped ZnO Nanopowders  
U.S. Udayachandran Thampy, Ch. Rama Krishna, D.V. Satish, L.V. Krishna Rao, Y.P. Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: XV National Seminar on crystal Growth, PSN College of Engineering & Technology, Tirunelveli, 23-25, Feb. 2011.
98. Room Temperature synthesis of Co<sup>2+</sup> ions doped Cadmium oxide nanopowders  
L.V. Krishna Rao, D.V. Satish, U.S. Udayachandran Thampy, Y.P. Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: XV National Seminar on Crystal Growth, PSN College of Engineering & Technology, Tirunelveli, 23-25, Feb. 2011.



99. Grading of natural minerals with their trace elements: Spectroscopic investigations  
G.S.C. Bose, G. Rama Sundari, Ch. Venkata Reddy, A.V. Chandrasekhar, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Development and sustainability of earth resources and Environment (DSERE 2011) Adikavi Nannaya University, Rajahmundry, 12-13, March 2011.
100. Spectroscopic investigations into the nature of the Mn(II) active sites in CdHPO<sub>4</sub>Cl [H<sub>3</sub>N(CH<sub>2</sub>)<sub>6</sub>NH<sub>3</sub>]<sub>0.5</sub> Crystals: Ch. Rama Krishna, U.S. Udayachandran Thampy, A.V. Chandrasekhar, D.V. Sathish, Ch. Venkata Reddy, Y.P. Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: Multifunctional Nanomaterials and Nanocomposites (NCMNN2011) Bharathiar University, Coimbatore, March 24-25, 2011.
101. Correlation between physical and structural properties of Co<sup>2+</sup> doped mixed alkali zinc borate glasses  
T. Raghavendra Rao, Ch. Venkata Reddy, Ch. Rama Krishna, U.S. Udayachandran Thampy, R. Ramesh Raju, P. Sambasiva Rao and **R.V.S.S.N. Ravikumar**: National Symposium On Renaissance In Chemistry (NSRC-2011) Pondicherry University, Puducherry, March 30, 2011.
102. Large SPECTROCHIM ACTA Ale Fabrication and Characterization of Zn<sub>1-x</sub>Cd<sub>x</sub>O (x = 0, 0.5, 1) nano powders  
D.V. Sathish, Ch. Rama Krishna, Ch. Venkata Reddy, U.S. Udayachandran Thampy, Y.P. Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Symposium on Renaissance In Chemistry (NSRC-2011) Pondicherry University, Puducherry, March 30, 2011.
103. Spectroscopic investigations on Mn<sup>2+</sup> doped Zinc L-Histidine Hydrochloride Monohydrate crystals  
V. Parvathi, J. Sai Chandra, Y.A.S.J. Prasanna Kumari, P.N.V.V.L. Prameela Rani, G. Brahmaiah, Ch. Venkata Reddy, **R.V.S.S.N. Ravikumar** and Y. Sunandamma: National Symposium on Renaissance in Chemistry (NSRC-2011) Pondicherry University, Puducherry, March 30, 2011.
104. Quantum computing and optical computing  
**R.V.S.S.N. Ravikumar**: Workshop on Scope of Sciences and Maths in Engineering, Gudlavalleru Engineering College, Gudlavalleru, A.P. August 11<sup>th</sup>-13<sup>th</sup>, 2011.
105. Preparation and characterization of transition metal ions doped nanopowders,  
**R.V.S.S.N. Ravikumar**: National workshop on Nano Science and Technology for device applications (NSTDA-2011), K.L. University, October 31, 2011.
106. Synthesis and spectroscopic characterization of transition metal ions doped Chlorocadmiumphosphate Nanocrystals  
Ch. Rama Krishna and **R.V.S.S.N. Ravikumar**: Andhra Pradesh Akademi of Sciences Young Scientists Convention- 2011, Acharya Nagarjuna University, Guntur, October 27-28, 2011.

107. Effect of transition metal ions ( $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ ) doped alkali fluoroborophosphate glasses  
G.S.C. Bose, Sk. Muntaz Begum, Ch. Rama Krishna and **R.V.S.S.N. Ravikumar**: Andhra Pradesh Science Congress (APSC-2011) at GITAM University, Visakhapatnam during 14-16<sup>th</sup> November, 2011.
108. Optical and EPR studies of Cu(II) doped  $\text{NaCaAlF}_3\text{PO}_4$  Phosphor  
V. Pushpa Manjari, T.Aswani, Sk. Muntaz Begum, P.S. Rao and **R.V.S.S.N. Ravikumar**: Andhra Pradesh Science Congress (APSC-2011) at GITAM University, Visakhapatnam during 14-16<sup>th</sup> November, 2011.
109. Synthesis and Spectral investigations of  $\text{Fe}^{3+}$  doped  $\beta\text{-BaB}_2\text{O}_4$  nano-crystallite powders  
Ch. Venkata Reddy, V. Pushpa Manjari, Ch. Rama Krishna, P.S. Rao and **R.V.S.S.N. Ravikumar**: Andhra Pradesh Science Congress (APSC-2011) at GITAM University, Visakhapatnam during 14-16<sup>th</sup> November, 2011.
110. Spectroscopic investigations of  $\text{Fe}^{3+}$  doped PVA capped ZnSe nanoparticles  
Sk. Muntaz Begum, M.C. Rao, P.S. Rao and **R.V.S.S.N. Ravikumar**: Andhra Pradesh Science Congress (APSC-2011) at GITAM University, Visakhapatnam, during 14-16<sup>th</sup> November, 2011
111. Synthesis and structural studies on Cu(II) doped Zinc L-Histidine Hydrochloride Monohydrate Crystals  
P.N.V.V.L. Prameelarani, J. Sai Chandra, Y.A.S.J. Prasanna kumara, V. Parvathi, **R.V.S.S.N. Ravikumar** and Y. Sunandamma: Andhra Pradesh Science Congress (APSC-2011) at GITAM University, Visakhapatnam during 14-16<sup>th</sup> November, 2011.
112. Spectral investigations of Mn(II) doping on the structure of Zinc L-Histidine Hydrochloride Monohydrate Crystals  
J. Sai Chandra, Y.A.S.J. Prasanna kumari, P.N.V.V.L. Prameelarani, V. Parvathi, **R.V.S.S.N. Ravikumar** and Y. Sunandamma: Andhra Pradesh Science Congress (APSC-2011) at GITAM University, Visakhapatnam during 14-16<sup>th</sup> November, 2011.
113. Site Symmetry of  $\text{Cu}^{2+}$  doped PVA capped ZnSe nanoparticles  
Sk. Muntaz Begum, M.C. Rao M.V. Subramanyam, P.S. Rao and **R.V.S.S.N. Ravikumar**: National conference on Advanced Research concepts in Physics during 24-25<sup>th</sup> November, 2011 at Gov. College (A), Rajahmundry.
114. Synthesis and spectral investigations of Fe(III) ion doped CdO Nano material  
T. Aswani, V. Pushpa Manjari, B. Babu, P.S. Rao and **R.V.S.S.N. Ravikumar** National conference on Advanced Research concepts in Physics during 24-25<sup>th</sup> November, 2011 at Gov. College (A), Rajahmundry.
115. Synthesis and Spectral Characterizations of  $\text{Cu}^{2+}$  doped CdO Nanomaterial by Sonochemical Method  
T.Aswani, V. Pushpa Manjari, Sk. Muntaz Begum, B.Babu, P.S.Rao and **R.V.S.S.N. Ravikumar**: National Conference on Latest Trends in Emerging Materials during 20-21<sup>st</sup> January, 2012 at JNTU College of Engineering, Kukatpally, Hyderabad.

116. Optical properties and Mixed alkali effect of  $\text{Co}^{2+}$  doped  $20\text{ZnO} + x\text{Li}_2\text{O} + (30-x)\text{K}_2\text{O} + 50\text{B}_2\text{O}_3$  ( $5 \leq x \leq 25$ ) glasses  
G. Krishna Kumari, Sk. Muntaz Begum, Ch.Rama Krishna, V. Pushpa Manjari, P.N. Murthy, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Conference on Latest Trends in Emerging Materials during 20-21<sup>st</sup> January, 2012 at JNTU College of Engineering, Kukatpally, Hyderabad.
117. Investigations on Mn(II) doped  $\text{NaCaAlF}_3\text{PO}_4$  nano Phosphor  
V. Pushpa Manjari, T. Aswani, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Conference on Latest Trends in Emerging Materials during 20-21<sup>st</sup> January, 2012 at JNTU College of Engineering, Kukatpally, Hyderabad.
118. Preparation and Structural Properties of  $\text{Ni}^{2+}$  doped ZnSe nanoparticles  
G. Nirmala, Sk. Muntaz Begum, V. Pushpa Manjari, M.C. Rao, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Conference on Latest Trends in Emerging Materials during 20-21<sup>st</sup> January, 2012 at JNTU College of Engineering, Kukatpally, Hyderabad.
119. Physical and Spectral Characterization of  $\text{Ni}^{2+}$  doped  $20\text{ZnO} + x\text{Li}_2\text{O} + (30-x)\text{K}_2\text{O} + 50\text{B}_2\text{O}_3$  ( $5 \leq x \leq 25$ ) glasses  
G. Krishna Kumari, Sk. Muntaz Begum, Ch. Rama Krishna, D.V. Sathish, P.N. Murthy, L.V. Krishna Rao, P.S. Rao and **R.V.S.S.N. Ravikumar**: National Conference on Recent Trends in Advanced Materials during 27-28<sup>th</sup> January, 2012 at Sir CR Reddy Autonomous College, Eluru.
120. Spectroscopic Investigations on  $\text{Ni}^{2+}$  doped Cadmium Oxide nanopowder  
L.V. Krishna Rao, D.V. Satish, Ch. Rama Krishna, Y.P. Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**  
National Conference on Recent Trends in Advanced Materials during 27-28<sup>th</sup> January, 2012 at Sir CR Reddy Autonomous College, Eluru.
121. Structural and Spectral Characterization of nanopowders  
**R.V.S.S.N. Ravikumar**: Workshop on Soft Materials, J.M.J. College for Women, Tenali, Guntur (Dt), A.P. on 24-25<sup>th</sup> January, 2012.
122. Spectral Characterization of nanopowders  
**R.V.S.S.N. Ravikumar**: National Seminar on Advanced Materials for Device Applications on 25<sup>th</sup> January, 2012 at Sri Subbaraya & Narayana College, Narasaraopet, Guntur (Dt), A.P.
123. Spectral investigations on  $\text{Cr}^{3+}$  doped ZnCdO nanopowders: room temperature synthesis  
D.V. Sathish, Ch. Rama Krishna, Ch. Venkata Reddy, P.S. Rao and **R.V.S.S.N. Ravikumar**: National seminar on new frontiers in scientific research (NFSC), Andhra Loyola College, Vijayawada, Feb, 27<sup>th</sup>, 2012.
124. Nanostructured materials  
**R.V.S.S.N. Ravikumar**: National Seminar on Nano Science and Technology, D.R.W. College, Gudur, Mar. 2, 2012.
125. Synthesis and spectral characterization of transition metal ions doped nanopowders  
Ch. Venkata Reddy and **R.V.S.S.N. Ravikumar**: National Seminar on Nano Science and Technology, D.R.W. College, Gudur, Mar. 2, 2012.

126. Nano structural materials: Transition metal ions doped ZnO nanopowders  
**R.V.S.S.N. Ravikumar:** PHYSI FEST-2K12, A one day national workshop on Emerging Trends in Physics, Guntur Engineering College, Guntur (Dt.) A.P. March 3<sup>rd</sup>, 2012.
127. Synthesis and Spectral Characterizations of Cr(III) ions doped CdO Nanomaterial  
 T. Aswani, V. Pushpa Manjari, B. Babu, Sk. Muntaz Begum and **R.V.S.S.N. Ravikumar:** National Seminar on Applications of Nanotechnology in Energy Capture, Transform & Storage, PBR Visvodaya Institute of Technology & Science, Kavali, Aug. 3-4, 2012.
128. Spectral investigations on transition metal ions ( $\text{Cr}^{3+}$ ,  $\text{Fe}^{3+}$ ,  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$  and  $\text{Cu}^{2+}$ ) doped  $\beta\text{-BaB}_2\text{O}_4$  nanopowders  
 Ch. Venkata Reddy, Ch. Rama Krishna, U.S. Udayachandran Thampy, **R.V.S.S.N. Ravikumar:** National Seminar on Applications of Nanotechnology in Energy Capture, Transform & Storage, PBR Visvodaya Institute of Technology & Science, Kavali, Aug. 3-4, 2012.
129. Investigations of  $\text{VO}^{2+}$  doped Poly vinyl alcohol (PVA) capped ZnSe nanoparticles  
 Sk. Muntaz Begum, V. Pushpa Manjari, M.C. Rao and **R.V.S.S.N. Ravikumar:** National Seminar on Applications of Nanotechnology in Energy Capture, Transform & Storage, PBR Visvodaya Institute of Technology & Science, Kavali, Aug. 3-4, 2012.
130. Luminescence properties of Blue emitting Fe(III) ions doped  $\text{NaCaAlF}_3\text{PO}_4$  nanophosphor for White LEDs  
 V. Pushpa Manjari, T. Aswani, Sk. Muntaz Begum, G. Ramasundari, R.J. Stella and **R.V.S.S.N. Ravikumar:** National Seminar on Applications of Nanotechnology in Energy Capture, Transform & Storage, PBR Visvodaya Institute of Technology & Science, Kavali, Aug. 3-4, 2012.
131. Synthesis and optical characterization of Cr(III) doped  $\text{NaCaAlPO}_4\text{F}_3$  nanophosphor  
 V. Pushpa Manjari, Ch. Rama Krishna, T. Aswani and **R.V.S.S.N. Ravikumar:** Andhra Pradesh Science Congress (APSC-2012) at Acharya Nagarjuna University, Guntur during 14-16<sup>th</sup> November, 2012.
132. Physical and Spectroscopic Investigations of  $\text{Fe}^{3+}$  doped mixed Alkali Zinc Borate Glasses.  
 G. Rama Sundari, D.V. Sathish, T. Raghavendra Rao, Ch. Rama Krishna, **R.V.S.S.N. Ravikumar:** Andhra Pradesh Science Congress (APSC-2012) at Acharya Nagarjuna University, Guntur during 14-16<sup>th</sup> November, 2012.
133. Spectral characterizations of  $\text{Co}^{2+}$  doped CdO Nanopowder by solid state reaction  
 T. Aswani, V. Pushpa Manjari, Sk. Muntaz begum, D.V.Sathish and **R.V.S.S.N. Ravikumar:** Andhra Pradesh Science Congress (APSC-2012) at Acharya Nagarjuna University, Guntur during 14-16<sup>th</sup> November, 2012.
134. Preparation and Characterization of ZnSe nanomaterial with the aid of polyvinyl alcohol  
 Sk. Muntaz Begum, Ch. Venkata Reddy, B. Sailaja, M.C. Rao and **R.V.S.S.N. Ravikumar:** Andhra Pradesh Science Congress (APSC-2012) at Acharya Nagarjuna University, Guntur during 14-16<sup>th</sup> November, 2012.

135. Synthesis and structural characterization of  $\text{Co}^{2+}$  ions doped ZnO nanopowders by solid state reaction through Sonication  
B. Babu, B. JayaRaja, Ch. Rama Krishna, **R.V.S.S.N. Ravikumar**: Andhra Pradesh Science Congress (APSC-2012) at Acharya Nagarjuna University, Guntur during 14-16<sup>th</sup> November, 2012.
136. Characterizations on  $\text{Fe}^{3+}$  doped PVA capped CdSe nanopolymer  
B. Sekhar, R. Joyce Stella, J. Madhavi, Ch. Rama Krishna, K. Venkateswarlu, **R.V.S.S.N. Ravikumar**: Andhra Pradesh Science Congress (APSC-2012) at Acharya Nagarjuna University, Guntur during 14-16<sup>th</sup> November, 2012.
137. Photoluminescence properties  $\text{Co(II)}$  ions doped  $\text{NaCaAlPO}_4\text{F}_3$  Phosphor  
V. Pushpa Manjari, R.J. Stella, Sk. Muntaz Begum, Ch. Venkata Reddy and **R.V.S.S.N. Ravikumar**: National Conference on Advances in Material Science and Technologies during 19-21 November, 2012 at Kakatiya University, Warangal
138. Spectral characterization of Tennantite from Switzerland  
G.S.C. Bose, A.V. Chandrasekhar, V. Pushpa Manjari, B. Rajesh, G. Thirumala Rao and **R.V.S.S.N. Ravikumar**: Andhra Pradesh Science Congress (APSC-2012) at Acharya Nagarjuna University, Guntur during 14-16<sup>th</sup> November, 2012.
139. Site determination of  $\text{Fe}^{3+}$  ions in Zinc Borate,  $\text{Zn}_3(\text{BO}_3)_2$  Nanopowder  
G.V.S.S. Sarma, Ch. Venkata Reddy, D.V. Sathish, P.N. Murthy and **R.V.S.S.N. Ravikumar**: Andhra Pradesh Science Congress (APSC-2012) at Acharya Nagarjuna University, Guntur during 14-16<sup>th</sup> November, 2012.
140. Spectroscopic studies on  $\text{Cr}^{3+}$  doped PVA capped ZnSe nanoparticles  
Sk. Muntaz Begum, M. Rajesh Yadav, Ch. Rama Krishna, M.C. Rao and **R.V.S.S.N. Ravikumar**: National Conference on Advances in Material Science and Technologies during 19-21 November, 2012 at Kakatiya University, Warangal.
141. Synthesis and optical properties of  $\text{Mn}^{2+}$  doped Zinc Borate nanopowder by co-precipitation method  
G.V.S.S. Sarma, Ch. Venkata Reddy, Ch. Rama Krishna, P. Narayana Murthy and **R.V.S.S.N. Ravikumar**: National Conference on Advances in Material Science and Technologies during 19-21 November, 2012 at Kakatiya University, Warangal.
142. Preparation and Characterization of  $\text{Mn}^{2+}$  doped CdSe Nanopolymer  
B. Sekhar, G. Thirumala Rao, B. Jayaraja, Sk. Muntaz Begum and **R.V.S.S.N. Ravikumar**: National Conference on Advances in Material Science and Technologies during 19-21 November, 2012 at Kakatiya University, Warangal.
143. Electrical Properties of Transition Metal Ions ( $\text{Mn}^{2+}$ ,  $\text{Fe}^{3+}$ ,  $\text{Cu}^{2+}$ ) Doped PVA Capped ZnSe Nanoparticles.  
Sk. Muntaz Begum, V. Pushpa Manjari, U.S. Udaychandran Thampy, M.C. Rao and **R.V.S.S.N. Ravikumar**: National Seminar on Multifunctional materials during 6-7 March, 2013 at Andhra Loyola College (Autonomous), Vijayawada.

144. Synthesis and Characterization of Transition Metal Ions Doped Chlorocadmium phosphate Crystals  
Ch. Rama Krishna and **R.V.S.S.N. Ravikumar**: National Seminar on Multifunctional Materials during 6-7<sup>th</sup> March, 2013 at Andhra Loyola College (Autonomous), Vijayawada.
145. Photoluminescence properties of VO(II) ions doped NaCaAlF<sub>3</sub>PO<sub>4</sub> Phosphor .  
V. Pushpa Manjari, Ch. Ramakrishna, Sk. Muntaz Begum, T. Aswani and **R.V.S.S.N. Ravikumar**: National Conference on Physics and Chemistry of Solids during 12-13 April, 2013 at SR & BGNR Govt. Arts & Science College, Khammam.
146. Synthesis and Characterization of Ni<sup>2+</sup> ions doped ZnO nanopowder.  
B. Babu and **R.V.S.S.N. Ravikumar**: National Conference on Physics and Chemistry of Solids during 12-13 April, 2013 at SR & BGNR Govt. Arts & Science College, Khammam.
147. Synthesis and spectroscopic characterization of Cr<sup>3+</sup> ions doped ZnO nanopowder  
B. Babu, A.V. Chandrasekhar and **R.V.S.S.N. Ravikumar**: National Seminar on Nanomaterials and Nanotechnology (NSNN-13) Oct. 2<sup>nd</sup> 2013 at Govt. Degree College, Puttur.
148. Synthesis of crystalline Co<sup>2+</sup>, Ni<sup>2+</sup> doped Zinc Borate nano powders and its spectral characterizations  
G.V.S.S. Sarma, Ch. Venkata Reddy, P. Narayana Murthy and **R.V.S.S.N. Ravikumar**: National Seminar on Nanomaterials and Nanotechnology (NSNN-13) Oct. 2<sup>nd</sup> 2013 at Govt. Degree College, Puttur.
149. Investigation on structural, optical and magnetic properties of Mn(II) ions doped ZnO/CdS nanocomposites  
G. Thirumala Rao, R. Joyce Stella, B. Babu, V. Pushpa Manjari, M. Rajesh Yadav and **R.V.S.S.N. Ravikumar**: A.P. Science Congress 2013, Nov.14-16, 2013 at University of Hyderabad, Hyderabad.
150. A novel chemical method to develop CdO-ZnS Nanocomposite  
R. Joyce Stella, G. Thirumala Rao, V. Pushpa Manjari, B. Babu, B. Jayaraj and **R.V.S.S.N. Ravikumar**: A.P. Science Congress 2013, Nov.14-16<sup>th</sup>, 2013 at University of Hyderabad, Hyderabad.
151. Optical and physical properties of Sm<sup>3+</sup> doped mixed alkali zinc borate glasses  
B. Sailaja, B. Babu, T. Aswani, M. Avinash and **R.V.S.S.N. Ravikumar**: A.P. Science Congress, 14-16<sup>th</sup> Nov-2013, University of Hyderabad, Hyderabad.
152. Ultra sound assisted synthesis and characterizations of CdO: Ni<sup>2+</sup> nanopowder  
T. Aswani, V. Pushpa Manjari and **R.V.S.S.N. Ravikumar**: A.P. Science Congress 2013, Nov.14-16, 2013 at University of Hyderabad, Hyderabad.
153. Synthesis and photoluminescence studies of undoped and divalent ions (Mn(II), Cu(II)) doped NaCaAlPO<sub>4</sub>F<sub>3</sub> Nanophosphor  
V. Pushpa Manjari, T. Aswani, B. Babu, G. Ramasundari, R. Joyce Stella and **R.V.S.S.N. Ravikumar**: National Seminar on modern trends in chemical sciences (MTCS 2013), 20-21<sup>st</sup> Dec. 2013 at Acharya Nagarjuna University.

154. Room temperature Ferromagnetism of transition metal ions doped ZnO nanopowder: Sonochemical assisted synthesis  
B. Babu, T. Aswani, G. Ramasundari, K. Ravindranadh and **R.V.S.S.N. Ravikumar**: National Seminar on modern trends in chemical sciences (MTCS 2013), 20-21<sup>st</sup> Dec. 2013 at Acharya Nagarjuna University.
155. Physical and Spectral Investigations on TiO<sub>2</sub> doped Alkali Zinc Borate Glasses.  
G. Rama Sundari, V. Pushpa Manjari, B. Babu, T. Aswani, T. Raghavendra Rao **R.V.S.S.N. Ravikumar**: National conference on advanced materials for energy applications, NCAMEA-2014, Osmania University, Hyderabad during 31-01-2014 to 01-02-2014.
156. Mixed Alkali Effect in Mn<sup>2+</sup> doped XLi<sub>2</sub>O+(50-X)K<sub>2</sub>O+50B<sub>2</sub>O<sub>3</sub>(10≤X≤30) Glasses  
G. Srinivasa Rao, G. Thirumala Rao, B. Babu, P.N. Murthy and **R.V.S.S.N. Ravikumar**: National conference on advanced materials for energy applications, NCAMEA-2014, Osmania University, Hyderabad during 31-01-2014 to 01-02-2014.
157. Synthesis, Optical and Luminescence properties of transition metal ions doped Inorganic nanophosphors  
**R.V.S.S.N. Ravikumar**, V. Pushpa Manjari, B. Babu, T. Aswani: National Conference on Nanotechnology and Allied Industries, Bapatla Engineering College, Bapatla during 7-8<sup>th</sup> March, 2014. (I.T.)
158. Mechanochemical Synthesis of Nanosized Mn<sup>2+</sup> doped Ca-Li Hydroxyapatite Powder  
K. Ravindranadh, B. Babu, V. Pushpa Manjari, G. Thirumala Rao, M.C. Rao and **R.V.S.S.N. Ravikumar**: National Conference on Nanotechnology and Allied Industries, Bapatla Engineering College, Bapatla during 7-8<sup>th</sup> March, 2014.
159. Optical and Luminescent Properties of LiCaAlF<sub>3</sub>PO<sub>4</sub> nanophosphors  
B. Jayaraja, V. Pushpa Manjari, M. Rajesh Yadav, G. Thirumala Rao and **R.V.S.S.N. Ravikumar**: National Conference on Emerging Nanomaterials on 21-22<sup>nd</sup> March 2014 at SK University, Anantapuram.
160. Investigations on Structural and Optical Properties of Molybdenum Doped Alkali Zinc Borate Glasses  
G. Rama Sundari, M. Avinash, B. Jayaraja, R. Joyce Stella and **R.V.S.S.N. Ravikumar**: National Conference on Emerging Nanomaterials on 21-22<sup>nd</sup> March 2014 at SK University, Anantapuram.
161. Optical and magnetic properties of TM (Co<sup>2+</sup> & Ni<sup>2+</sup>) doped ZnO: Sonochemical assisted synthesis  
B. Babu, M. Rajesh Yadav, N. Bakthavatchala Reddy and **R.V.S.S.N. Ravikumar**: National Conference on Emerging Nanomaterials on 21-22<sup>nd</sup> March 2014 at SK University, Anantapuram.
162. Synthesis and structural, optical, magnetic properties of TM doped ZnO nanopowder  
**R.V.S.S.N. Ravikumar**: Second National Conference on Physics and Chemistry of solids, SR & BGNR Govt. Arts& Science College, Khammam during 29-30<sup>th</sup> March 2014. (I.T.)

163. Preparation and Characterization of Alkali zinc borate glasses  
G. Rama Sundari, M. Avinash, B. Babu and **R.V.S.S.N. Ravikumar**: Second National Conference on Physics and Chemistry of solids, SR & BGNR Govt. Arts & Science college, Khammam during 29-30<sup>th</sup> march 2014.
164. Synthesis and Spectral Investigations of Co(II) Ions Doped NaCaAlPO<sub>4</sub>F<sub>3</sub> Phosphor  
G.S.C. Bose, V. Pushpa Manjari, B. Sekhar, T. Aswani, B. Babu, G. Krishna Kumari & **R.V.S.S.N. Ravikumar**: National Seminar on “Shaping the Future with Green Chemistry (SFGC-14)” on 27-28<sup>th</sup> June 2014, S.P.M.H. Kalasala, Machilipatnam, A.P., India.
165. Mechanochemical Synthesis and Photoluminescence Studies of Fe<sup>3+</sup> doped Ca-Li Hydroxyapatite Nanopowder.  
K. Ravindranadh, M.C. Rao & **R.V.S.S.N. Ravikumar**: National Seminar on “Shaping the Future with Green Chemistry (SFGC-14)” on 27-28<sup>th</sup> June 2014, S.P.M.H. Kalasala, Machilipatnam, A.P., India.
166. Steps to Achieve Environmental Friendly and Potential Antimicrobial Crystalline Solids - Growth, characterization and Antimicrobial Activities of Cu(II) doped Mn(II) L- Histidine Hydrochloride Monohydrate Crystals.  
J. Sai Chandran, V. Parvathi, **R.V.S.S.N. Ravikumar** and Y. Sunandamma: National Seminar on “Shaping the Future with Green Chemistry (SFGC-14)” on 27-28<sup>th</sup> June 2014, S.P.M.H. Kalasala, Machilipatnam, A.P., India.
167. White LED's and applications to industry.  
**R.V.S.S.N. Ravikumar**, (Guest Lecture) Sri Yerramilli Narayana Murthy College (Autonomous), Narsapur, W.G. Dist on 26<sup>th</sup> July 2014.
168. Optical and Structural Investigations of Cu(II) ions dopes Li<sub>2</sub>CaAl<sub>4</sub>(PO<sub>4</sub>)<sub>4</sub>F<sub>4</sub> Nanophosphors  
B. Jayaraja, V. Pushpa Manjari, K. Ravindranadh, M. Rajesh Yadav, M. Avinash, A.V. Chandrasekhar and **R.V.S.S.N. Ravikumar**: National Seminar on Recent Trends in Chemistry Research-2014, Government Degree College, Kodur, Kadapa (DT) on 30<sup>th</sup> July 2014.
169. Basic Spectroscopic Technique.  
**R.V.S.S.N. Ravikumar**: Endowment Lecture at J.M.J. College for Women, Tenali, on 4<sup>th</sup> Sep 2014.
170. Nanomaterials - Applications.  
**R.V.S.S.N. Ravikumar**: Guest Lecture at PRR & VS Govt. College, Vidavalur, Nellore (Dt.), on 15<sup>th</sup> Oct 2014.
171. Simple and novel techniques to make magnetic semiconductors  
**R.V.S.S.N. Ravikumar**: Two days National Seminar on Recent Advances in Physics, Kakatiya University, Warangal (I.T.) during 6-7<sup>th</sup> Nov-2014.
172. New LED materials for applications: Energy savers  
**R.V.S.S.N. Ravikumar**: National Level Symposium on New Dimensions in Physics, SCW Degree & PG College, Kothagudem (I.T.) on 26<sup>th</sup> Nov-2014.
173. Effect of vanadyl ions on structural, optical and magnetic properties of ZnO/CdS nanocomposites  
G. Thirumala Rao, B. Babu, R. Joyce Stella and **R.V.S.S.N. Ravikumar**, APAS Golden Jubilee Science Congress, IICT, Hyderabad during 3-15<sup>th</sup> Nov-2014.



174. Structural and Photoluminescence Studies of  $\text{Co}^{2+}$  doped Ca-Li Hydroxyapatite Nanopowders  
K. Ravindranadh, B. Babu, Sk. Muntaz Begum, Ch. Venkata Reddy, Jaesool Shim, M.C. Rao and **R.V.S.S.N. Ravikumar**, APAS Golden Jubilee Science Congress, ICT, Hyderabad, during 13-15th Nov-2014.
175. Transition Metal Ions Doped Novel Phosphor for Solid State White Lighting  
V. Pushpa Manjari, B. Babu and **R.V.S.S.N. Ravikumar**: National Conference on Advanced Technology Oriented Materials, Rajahmundry (**I.T.**) during 8-10<sup>th</sup> Dec-2014.
176. Physical Properties of  $\text{VO}^{2+}$  and  $\text{Cr}^{3+}$  doped PVA Capped ZnSe Nanoparticles  
Sk. Muntaz Begum and **R.V.S.S.N. Ravikumar**, M.C. Rao: National Conference on Advanced Technology Oriented Materials, Rajahmundry, during 8-10<sup>th</sup> Dec-2014.
177. Synthesis and optical characterization of vanadium ions doped cadmium borate nanopowder  
P.N.V.V.L. Prameela Rani, D. Ramachandran, **R.V.S.S.N. Ravikumar** and C. Rambabu: National Conference on Advanced Technology Oriented Materials, Rajahmundry during 8-10<sup>th</sup> Dec-2014.
178. Theoretical Investigations of Spin Hamiltonian Parameters for the Cu(II) ion centers in Chlorocadmiumphosphate ( $\text{Cd}(\text{HPO}_4)\text{Cl}\cdot[\text{H}_3\text{N}(\text{CH}_2)_6\text{NH}_3]_{0.5}$ ) Crystals  
B. Sekhar, P. Vijaya Saradhi, Ch. Rama Krishna, R. Joyce Stella, V. Pushpa Manjari and **R.V.S.S.N. Ravikumar**: National conference on Recent developments in Mathematics and its applications, Dept. of Physics Mathematics, ANU during 22<sup>nd</sup>-23<sup>rd</sup> Dec-2014.
179. Bio-nanoparticles  
**Dr. R.V.S.S.N. Ravikumar**: Refresher course on nanomaterials, ANU, (**Invited Talk**) on 7-1-2015.
180. Effect of transition metal ions doped ZnO nanopowders by novel sonochemical synthesis: Spintronic applications  
B. Babu, **R.V.S.S.N. Ravikumar**: 6<sup>th</sup> Indian Youth Science Congress, Acharya Nagarjuna University, Nagarjuna Nagar-522510 during 19<sup>th</sup>-21<sup>st</sup> Jan 2015. (**Best Oral Presentation**)
181. Spectroscopic Characterizations of  $\text{Cu}^{2+}$  doped Ca-Li Hydroxyapatite Nanopowders using Mechanochemical Synthesis  
K. Ravindranadh, B. Babu, R. Joyce Stella, Ch. Venkata Reddy, Jaesool Shim, M.C. Rao and **R.V.S.S.N. Ravikumar**: 6<sup>th</sup> Indian Youth Science Congress, Acharya Nagarjuna University, Nagarjuna Nagar-522510 during 19<sup>th</sup>-21<sup>st</sup> Jan 2015. (**Best Poster Presentation**).
182. Luminescent Properties of Undoped and Transition Metal Ions Doped Ca-Li Hydroxyapatite Nanopowder  
K. Ravindranadh, M.C. Rao and **R.V.S.S.N. Ravikumar**: National seminar on Multi Functional Materials Synthesis and Applications, Dept. of Physics, The Hindu College, Machilipatnam during 23<sup>rd</sup> - 24<sup>th</sup> Jan 2015.

183. Physical and Structural Properties of Fe<sup>3+</sup> Doped Alkali Borate Glasses  
G. Srinivasa Rao, G. Thirumala Rao, B. Sailaja, P. Narayana Murthy, N. Madhu, **R.V.S.S.N. Ravikumar**: National seminar on Multi Functional Materials Synthesis and Applications, Dept. of Physics, The Hindu College, Machilipatnam during 23<sup>rd</sup> - 24<sup>th</sup> Jan 2015.
184. Determination of site symmetry of Fe<sup>3+</sup> doped Cadmium Borate Nanopowder  
P.N.V.V.L. Prameela Rani, D. Ramachandran, C. Rambabu, **R.V.S.S.N. Ravikumar**: National seminar on Multi Functional Materials Synthesis and Applications, Dept. of Physics, The Hindu College, Machilipatnam during 23<sup>rd</sup> - 24<sup>th</sup> Jan 2015.
185. Absorption Spectrum of Dy<sup>3+</sup> Doped Alkali Zinc Borate Glass  
B. Sailaja, M. Avinash, M. Rajesh Yadav, R. Joyce Stella, **R.V.S.S.N. Ravikumar**: National seminar on Multi Functional Materials Synthesis and Applications, Dept. of Physics, The Hindu College, Machilipatnam during 23<sup>rd</sup> - 24<sup>th</sup> Jan 2015.
186. Novel Synthesis of Transition Metal Ions Doped Nanophosphors  
K. Ravindranadh, B. Babu, M.C. Rao and **R.V.S.S.N. Ravikumar**: National Conference On Recent Trends In Materials Science, Department of Physics, S.V. Degree College, Kadapa during 1<sup>st</sup> - 2<sup>nd</sup> March 2015. (**Invited Talk**)
187. Structural and Spectroscopic studies of Mn<sup>2+</sup> doped Calcium Borophosphate Phosphor (CaBP) Nanopowders  
M. Rajesh Yadav, B. Jaya Raja, Sk. Johny Basha, M. Avinash, A.V. Chandrasekhar and **R.V.S.S.N. Ravikumar**: National Conference On Recent Trends In Materials Science, Department of Physics, S.V. Degree College, Kadapa during 1<sup>st</sup> - 2<sup>nd</sup> March 2015.
188. Photoluminescence studies of Pr<sup>3+</sup> doped zinc mixed alkali borate glass.  
B. Sailaja, M. Avinash, V. Khidhirbrahmendra, Sk. Johny Basha and **R.V.S.S.N. Ravikumar**: National Conference On Recent Trends In Materials Science, Department of Physics, S.V. Degree College, Kadapa during 1<sup>st</sup> - 2<sup>nd</sup> March 2015.
189. Cu<sup>2+</sup> doped CdO/ZnS core/shell nanocomposite: Synthesis and Characterizations.  
R. Joyce Stella, G. Thirumala Rao, V. Pushpa Manjari, V. Khidhirbrahmendra and **R.V.S.S.N. Ravikumar**: National Conference On Recent Trends In Materials Science, Department of Physics, S.V. Degree College, Kadapa during 1<sup>st</sup> - 2<sup>nd</sup> March 2015.
190. Synthesis and Spectral investigations of Co<sup>2+</sup> doped Cd<sub>3</sub>(BO<sub>3</sub>)<sub>2</sub> Nano powder  
P.N.V.V.L. Prameela Rani, D. Ramachandran, **R.V.S.S.N. Ravikumar** and C. Rambabu: National Conference On Recent Trends In Materials Science, Department of Physics, S.V. Degree College, Kadapa during 1<sup>st</sup> - 2<sup>nd</sup> March 2015.
191. Synthesis and spectral investigations of Ni<sup>2+</sup> ions doped cadmium borate nanopowder  
P.N.V.V.L. Prameela Rani, D. Ramachandran, C. Rambabu and **R.V.S.S.N. Ravikumar**: National seminar Shaping the future with nano sciences (SFNS), Department of Chemistry, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 19-20<sup>th</sup> August 2015.

192. Structural investigations on undoped and  $\text{Co}^{2+}$  doped  $\text{SrZnP}_2\text{O}_7$  nanophosphors  
V. Khidhirbrahmendra, Sk. Johny Basha, U.S. Udayachandran Thampy and **R.V.S.S.N. Ravikumar**: National seminar Shaping the future with nano sciences (SFNS), Department of Chemistry, P.B.Siddhartha College of Arts & Science, Vijayawada, A.P., during 19-20<sup>th</sup> August 2015.
193. Investigation on the synthesis and optical properties of  $\text{Fe}^{3+}$  doped  $\text{Ca}_6\text{BP}_5\text{O}_{20}$  phosphor for luminescent applications  
M.Rajesh Yadav, B.Jaya Raja, Ch.Rama Krishna, M. Avinash, Sk. Johny Basha and **R.V.S.S.N. Ravikumar**: National seminar Shaping the future with nano sciences (SFNS), Department of Chemistry, P.B.Siddhartha College of Arts & Science, Vijayawada, A.P., during 19-20<sup>th</sup> August 2015.
194. Photoluminescence studies of transition metal doped  $\text{Li}_2\text{CaAl}_4(\text{PO}_4)_4\text{F}_4$  nanophosphors for LED applications.  
B.Jaya Raja, M.Rajesh Yadav, Sk. Johny Basha, V. Khidhirbrahmendra and **R.V.S.S.N. Ravikumar**: National seminar Shaping the future with nano sciences (SFNS), Department of Chemistry, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 19-20<sup>th</sup> August 2015.
195. Novel Nanophosphor materials for LED Applications  
**R.V.S.S.N. Ravikumar**: National seminar on Recent Developments in Nanotechnology & Nano Science (RDNN), Department of Physics, V.K.V. Government Degree College, Kothapeta, A.P., during 31<sup>st</sup> August and 1<sup>st</sup> Sept. 2015.
196. Synthesis and characterization of  $\text{Cu}^{2+}$  doped ZnS Nanocrystals  
Sk. Johny Basha, V. Khidhirbrahmendra, M. Rajesh Yadav, U.S. Udayachandran Thampy, U.V.B.B.K. Prasad and **R.V.S.S.N. Ravikumar**: National seminar on Recent Developments in Nanotechnology & Nano Science (RDNN), Department of Physics, V.K.V. Government Degree College, Kothapeta, A.P., during 31<sup>st</sup> August and 1<sup>st</sup> Sept. 2015.
197. Structural Investigations of  $\text{VO}^{2+}$  doped CdS-ZnS Nanocomposites  
J. Madhavi, M. Rajesh Yadav, M. Avinash, Sk. Johny Basha, V. Khidhirbrahmendra, M.V. Subrahmanyam and **R.V.S.S.N. Ravikumar**: National seminar on Recent Developments in Nanotechnology & Nano Science (RDNN), Department of Physics, V.K.V. Government Degree College, Kothapeta, A.P., during 31<sup>st</sup> August and 1<sup>st</sup> Sept. 2015.
198. Mechanochemical Synthesis of Ca-Li Hydroxyapatite Nanopowder  
K. Ravindranadh, M. Avinash, M.C. Rao and **R.V.S.S.N. Ravikumar**: National seminar on Recent Developments in Nanotechnology & Nano Science (RDNN), Department of Physics, V.K.V. Government Degree College, Kothapeta, A.P., during 31<sup>st</sup> August and 1<sup>st</sup> Sept. 2015.
199. Nanoparticles in Liquid Crystals Display Devices (**Invited Talk**)  
**R.V.S.S.N. Ravikumar**: National seminar on Trends and Applications of Liquid Crystals (NSLC-2015) at Andhra Christian (A.C.) College, Guntur, A.P. on 10<sup>th</sup> & 11<sup>th</sup> Sept. 2015.

200. Room Temperature Ferromagnetism of Transition Metal Ions Doped CdO/ZnS Composite Nanomaterials (**Invited Talk**)  
R. Joyce Stella, G. Thirumala Rao and **R.V.S.S.N. Ravikumar**: National seminar on Need and Role of Nano Sciences in the Present Era, Department of Physics, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 7-8<sup>th</sup> October 2015.
201. Spectral characterization of Cr<sup>3+</sup> doped ZnS nanocrystals by Chemical precipitation method  
Sk. Johny Basha, V. Khidhirbrahmendra, M. Rajesh Yadav, K. Ravindranadh, M. Avinash, J. Madhavi and **R.V.S.S.N. Ravikumar**: National seminar on Need and Role of Nano Sciences in the Present Era, Department of Physics, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 7-8<sup>th</sup> October 2015.
202. Spectroscopic Investigations on VO<sup>2+</sup> Doped SrZn<sub>2</sub>(PO<sub>4</sub>)<sub>2</sub> Nanophosphors  
V. Khidhirbrahmendra, Sk. Johny Basha, M. Rajesh Yadav, K. Ravindranadh, J. Madhavi and **R.V.S.S.N. Ravikumar**: National seminar on Need and Role of Nano Sciences in the Present Era, Department of Physics, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 7-8<sup>th</sup> October 2015.
203. EPR and Optical Studies of Fe<sup>3+</sup> Doped Ca-Li Hydroxyapatite Nanopowders  
K. Ravindranadh, G. Thirumala Rao, M. Rajesh Yadav, Sk. Johny Basha, M.C. Rao and **R.V.S.S.N. Ravikumar**: National seminar on Need and Role of Nano Sciences in the Present Era, Department of Physics, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 7-8<sup>th</sup> October 2015.
204. Optical and Luminescent Properties of VO<sup>2+</sup> Doped CdS-ZnS Nano-composites  
J. Madhavi, M. Rajesh Yadav, K. Ravindranadh, Sk. Johny Basha, V. Khidhirbrahmendra and **R.V.S.S.N. Ravikumar**: National seminar on Need and Role of Nano Sciences in the Present Era, Department of Physics, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 7-8<sup>th</sup> October 2015.
205. Conductivity studies on ZnSe nanopolymers  
Sk. Muntaz Begum, K. Ravindranadh, **R.V.S.S.N. Ravikumar** and M.C. Rao: National seminar on Need and Role of Nano Sciences in the Present Era, Department of Physics, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 7-8<sup>th</sup> October 2015.
206. Transition metal ions doped ZnO-CdS composite nanopowders for enhanced visible light emission  
G. Thirumala Rao, V. Khidhirbrahmendra, Sk. Johny Basha, **R.V.S.S.N. Ravikumar**: National Seminar on Advances in Materials Science (NSAMF-15) at Department of Electronics & Instrumentation Technology, Acharya Nagarjuna University, during 25<sup>th</sup> & 26<sup>th</sup> November, 2015
207. Mn<sup>2+</sup> doped SrZn<sub>2</sub>(PO<sub>4</sub>)<sub>2</sub> nanophosphors for White LEDs

- V. Khidhirbrahmendra, G. Thirumala Rao, Sk. Johny Basha, M. Rajesh Yadav, K. Ravindranadh and **R.V.S.S.N. Ravikumar**: National Seminar on Advances in Materials Science (NSAMF-15) at Department of Electronics & Instrumentation Technology, Acharya Nagarjuna University, during 25<sup>th</sup> & 26<sup>th</sup> November, 2015
208. Structural and thermal properties of chemical precipitation synthesized VO<sup>2+</sup> Doped ZnS Nanocrystals  
Sk. Johny Basha, V. Khidhirbrahmendra, G.Thirumala Rao, U. Udayachandran Thampy, M. Avinash, **R.V.S.S.N. Ravikumar**: National Seminar on Advances in Materials Science (NSAMF-15) at Department of Electronics & Instrumentation Technology, Acharya Nagarjuna University, during 25<sup>th</sup> & 26<sup>th</sup> November, 2015.
209. Investigations on VO<sup>2+</sup> doped mixed Alkali Cadmium Borate Glasses: Physical and Spectroscopic Properties  
M. Avinash, G. Rama Sundari, L.V. Krishna Rao, **R.V.S.S.N. Ravikumar**: National Seminar on Advances in Materials Science (NSAMF-15) at Department of Electronics & Instrumentation Technology, Acharya Nagarjuna University, during 25<sup>th</sup> & 26<sup>th</sup> November, 2015.
210. Structural and Optical properties of Sm<sup>3+</sup> doped NaCaAlPO<sub>4</sub>F<sub>3</sub> Phosphor via solid state reaction method  
R. Nagaraja, V. Pushpa Manjari, A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**: National Seminar on Advances in Materials Science (NSAMF-15) at Department of Electronics & Instrumentation Technology, Acharya Nagarjuna University, during 25<sup>th</sup> & 26<sup>th</sup> November, 2015.
211. Transition Metal Ions Doped CdO/ZnS Composite Nanomaterials: Synthesis and characterization  
**R.V.S.S.N. Ravikumar (Invited Talk)**: National Seminar on Advances in Metal Matrix Nanocomposites (AMMNC-2015) at Department of Mechanical Engineering, Acharya Nagarjuna University, during 11<sup>th</sup> - 12<sup>th</sup> December 2015.
212. Structural and luminescent applications of SrZn<sub>2</sub>(PO<sub>4</sub>)<sub>2</sub> phosphate nanophosphor  
V. Khidhirbrahmendra, Sk. Johny Basha, M. Avinash, N. Madhu, U.S. Udayachandran Thampy and **R.V.S.S.N. Ravikumar**: National Seminar on Recent Trends in Applied Physics at Department of Physics, KRK Government Degree College, Addanki during 16<sup>th</sup> -17<sup>th</sup> December 2015.
213. Influence on Mn(II) ions doping on ZnS nanocrystals by chemical precipitation method  
Sk. Johny Basha, V. Khidhirbrahmendra, M. Rajesh Yadav and **R.V.S.S.N. Ravikumar**: 1<sup>st</sup> AP Science Congress at Sri Venkateswara University, Tirupati, during at 27-29<sup>th</sup> January-2016.
214. Physical and spectral characterizations of Cu<sup>2+</sup> ions doped 19.9 CdO + x Li<sub>2</sub>O + (30-x) Na<sub>2</sub>O + 50 B<sub>2</sub>O<sub>3</sub> borate glasses  
M. Avinash, G. Ramasundari, and **R.V.S.S.N. Ravikumar**: 1<sup>st</sup> AP Science Congress

at Sri Venkateswara University, Tirupati, during at 27-29<sup>th</sup> January-2016.

215. Synthesis of Fe<sup>3+</sup> doped ZnO-CdS composite nanopowder for enhanced visible light emission  
G. Thirumala Rao, K. Ravindranadh, V. Khidhirbrahmendra, Sk. Johny Basha, **R.V.S.S.N. Ravikumar**: 1<sup>st</sup> AP Science Congress at Sri Venkateswara University, Tirupati, during at 27-29<sup>th</sup> January-2016.
216. Structural and optical properties of Vo<sup>2+</sup> doped SrZn<sub>2</sub>(PO<sub>4</sub>)<sub>2</sub> nanophosphors by solution combustion synthesis  
V. Khidhirbrahmendra, Sk. Johny Basha, M. Avinash, U. S. Udayachandran Thampy, and **R.V.S.S.N. Ravikumar**: 1<sup>st</sup> AP Science Congress at Sri Venkateswara University, Tirupati, during at 27-29<sup>th</sup> January-2016.
217. Spectroscopic investigations on Cu<sup>2+</sup> Doped PVA Capped CdSe Polymer  
B. Sekhar, Shaik Muntaz Begum, M. Avinash, V. Pushpa Manjari, **R.V.S.S.N. Ravikumar**: 1<sup>st</sup> AP Science Congress at Sri Venkateswara University, Tirupati, during at 27-29<sup>th</sup> January-2016.
218. Synthesis, structural and thermal properties of Co(II) ions doping on ZnS nanocrystals by chemical precipitation method  
Sk. Johny Basha, Udaychandran Thampy and **R.V.S.S.N. Ravikumar**: National conference on Advanced Functional Materials (NCAFM-2016) at Dept. of Physics, SVU, Tirupati during at 23-24<sup>th</sup> march 2016.
219. Structural and optical properties of D<sup>5</sup> ions (Mn<sup>2+</sup> and Fe<sup>3+</sup>) Doped Ca-Li Hydroxyapatite Nano powders  
K. Ravindranadh, **R.V.S.S.N. Ravikumar** and M. C. Rao: National conference on Advanced Functional Materials (NCAFM-2016) at Dept. of Physics, SVU, Tirupati during at 23-24<sup>th</sup> march 2016.
220. Structural and spectral investigations on Fe<sup>3+</sup> doped SrZn<sub>2</sub>(PO<sub>4</sub>)<sub>2</sub> nanophosphors for white LEDS  
V. Khidhirbrahmendra, U.S. Udayachandran Thampy and **R.V.S.S.N. Ravikumar**: National conference on Advanced Functional Materials (NCAFM-2016) at Dept. of Physics, SVU, Tirupati during at 23-24<sup>th</sup> march 2016.
221. Physical and structural properties of 19.9 CdO + x Li<sub>2</sub>O + (30-x) Na<sub>2</sub>O + 50 B<sub>2</sub>O<sub>3</sub> (5 ≤ x ≤ 25%) doped with 0.1 mol % of paramagnetic VO<sup>2+</sup> ions  
M. Avinash, G. Ramasundari, **R.V.S.S.N. Ravikumar**: National conference on Advanced Functional Materials (NCAFM-2016) at Dept. of Physics, SVU, Tirupati during at 23-24<sup>th</sup> march 2016.
222. Structural and photoluminescence studies on PVA capped ZnSe nanoparticles  
Sk. Muntaz Begum, **R.V.S.S.N. Ravikumar** and M. C. Rao: National conference on Advanced Functional Materials (NCAFM-2016) at Dept. of Physics, SVU, Tirupati during at 23-24<sup>th</sup> march 2016.

223. Estimation of lattice strain in  $\text{VO}^{2+}$  doped CdS-ZnS nanocomposite: X-ray powder diffraction studies  
J. Madhavi and **R.V.S.S.N. Ravikumar**: National conference on Advanced Functional Materials (NCAFM-2016) at Dept. of Physics, SVU, Tirupati during at 23-24<sup>th</sup> march 2016.

## LIST OF PAPERS PRESENTED AT INTERNATIONAL CONFERENCES

1. EPR and optical absorption properties of transition metal ion in melanterite mineral  
B.J. Reddy, S.N. Reddy, **R.V.S.S.N. Ravikumar** and P.S. Rao: 10<sup>th</sup> International Conference on Ternary and Multinary Compounds, Institut für physikalische Elektronik, Stuttgart (Germany) Sept.19-22 (1995).
2. The role of EPR on detection of trace transition metal ions in minerals  
B.J. Reddy, M. Venkata Ramanaiah, B. Madhu Sudhana and **R.V.S.S.N. Ravikumar**: Electron Spin Resonance in Electron Transfer and Organic Solids, Institute für Festkörperforschung IFW Dresden e.V., Dresden (Germany) Nov. 22-25 (1995).
3. Optical absorption spectrum of cobalt doped zinc struvite  
**R.V.S.S.N. Ravikumar**, M.Venkata Ramanaiah, B.J. Reddy and Y.P. Reddy: International Conference on Spectroscopy: Perspectives & Frontiers (INCONS) Bhabha Atomic Research Centre, Bombay (India) Jan. 3-5 (1996).
4. Studies on a naturally occurring mineral, satterlyite  
B.J. Reddy, A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar** and P.S. Rao: International Conference on Spectroscopy: Perspectives & Frontiers (INCONS) Bhabha Atomic Research Centre, Bombay (India) Jan.3-5 (1996).
5. Tetragonal site of transition metal ions in chrysocolla  
**R.V.S.S.N. Ravikumar**, B.J. Reddy and Y.P. Reddy: 2nd International conference on "Electron Paramagnetic Resonance of Radicals and Metal Complexes", Institute of Nuclear Chemistry and Technology, Warsaw (Poland) Sept. 8-13 (1996).
6. EPR and optical absorption spectral investigations on Cr-tremolite  
A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**, Y.P. Reddy, B.J. Reddy and P.S. Rao: 2<sup>nd</sup> Inter-national conference on "Electron Paramagnetic Resonance of Radicals and Metal Complexes", Institute of Nuclear Chemistry and Technology, Warsaw, (Poland) Sept. 8-13 (1996).
7. Electronic spectra of cobaltite  
**R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, B.J. Reddy and Y.P. Reddy: First Asia-Pacific EPR/ESR Symposium at City University of Hong Kong, Hong Kong, Jan. 20-24 (1997).
8. EPR investigations of vanadyl doped cadmium struvite  
**R.V.S.S.N. Ravikumar**, B.J. Reddy, P.S. Rao and Y.P. Reddy: First Asia-Pacific EPR/ESR Symposium at City University of Hong Kong, Hong Kong, Jan. 20-24 (1997).
9. EPR and optical absorption spectra of copper doped zinc struvite  
**R.V.S.S.N. Ravikumar**, N. Madhu, B.J. Reddy and Y.P. Reddy: First Asia-Pacific EPR/ ESR Symposium at City University of Hong Kong, Hong Kong, Jan. 20-24 (1997).
10. EPR and optical absorption spectra of Cr-tremolite  
A.V. Chandrasekhar, B.J. Reddy and **R.V.S.S.N. Ravikumar**: First Asia-Pacific EPR/ESR Symposium at City University of Hong Kong, Hong Kong, Jan. 20-24 (1997).



11. Spectroscopic studies on Cr-tremolite  
A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**, B.J. Reddy and Y.P. Reddy, P. Sambasiva Rao: International Conference on Lasers and their Applications, St. Joseph's College, Trichy, (India) March 1-4 (2000).
12. Electronic spectra of nickel doped CAPH crystals  
**R.V.S.S.N. Ravikumar**, M. Venkataramanaiah, B.J. Reddy and Y.P. Reddy: International Conference on Lasers and their applications, St. Joseph's College, Trichy, (India) March 1-4 (2000).
13. Electron Paramagnetic Resonance of Vanadyl doped sodium phosphate glasses  
**R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, B.J. Reddy and Y.P. Reddy: Ampere Summer School, Applications of Magnetic Resonance in Novel Materials, Nafplion, Greece, 3-9 Sept. (2000).
14. EPR and optical absorption spectroscopy on minerals  
B.J. Reddy, Jun Yamauchi, Y.P. Reddy, A.V. Chandrasekhar and **R.V.S.S.N. Ravikumar**: Third Asia-Pacific EPR/ESR symposium (APES`01) Kobe University, Kobe (Japan), Oct. 29 –1 Nov. (2001).
15. EPR spectra of Fe<sup>3+</sup> ion in silicate minerals  
**R.V.S.S.N. Ravikumar**, M. Venkataramanaiah, A.V. Chandrasekhar, B.J. Reddy, Y.P. Reddy and P.S. Rao: Third Asia-Pacific EPR/ESR symposium (APES`01) Kobe University, Kobe (Japan) Oct.29 – 1 Nov. (2001).
16. EPR and Optical absorption spectra of VO<sup>2+</sup>, Cr<sup>3+</sup>, Mn<sup>2+</sup> and Cu<sup>2+</sup> in sodium phosphate glasses  
A.V. Chandrasekhar, **R.V.S.S.N. Ravikumar**, B.J. Reddy, Y.P. Reddy and P.S. Rao: Third Asia-Pacific EPR/ESR symposium (APES`01) Kobe University, Kobe (Japan) Oct.29 – 1 Nov. (2001).
17. Radiative emission probabilities of Dy<sup>3+</sup> doped alkali borate and fluoroborate glasses  
L.R. Moorthy, A. Radhapathy, M. Jayasimhadri, D.V.R. Moorthy and **R.V.S.S.N. Ravikumar**: Rare Earth 04, Nara (Japan) Nov. 7-12, (2004).
18. EPR of Cr(III) doped zinc phosphate glass  
**R.V.S.S.N. Ravikumar**, J. Yamauchi, A.V. Chandrasekhar, P.S. Rao and Y.P. Reddy: Inter- national School on EPR in radicals APES`04 Satellite School, BARC, Mumbai (India), Nov. 17-20 (2004).
19. EPR and optical studies on VO<sup>2+</sup> doped ARbB<sub>4</sub>O<sub>7</sub> (A=Li, Na, K) glasses  
**R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, Y.P. Reddy, R. Komatsu, K. Ikeda, P.S. Rao and J. Yamauchi: 4<sup>th</sup> Asia-Pacific EPR/ESR symposium (APES`04), Indian Institute of Sciences (IISc.) Bangalore (India), Nov. 22-25 (2004).
20. Tetrahedral site of Fe(III) ions in natural sodalite from Brazil  
A.V. Chandrasekhar, Y.P. Reddy, B.J. Reddy, P.S. Rao, **R.V.S.S.N. Ravikumar** and J. Yamauchi: 4<sup>th</sup> Asia-Pacific EPR/ESR symposium (APES`04), Indian Institute of Sciences (IISc.), Bangalore (India), Nov. 22-25 (2004).
21. Spectral studies of natural incrustation material grown in wells: Rayalaseema region of Andhra Pradesh, India  
Y. Srinivasa Rao, A.V. Chandrasekhar, Y.P. Reddy, P.S. Rao, **R.V.S.S.N. Ravikumar** and J. Yamauchi: 4<sup>th</sup> Asia-Pacific EPR/ESR symposium (APES`04), Indian Institute of Sciences (IISc.) Bangalore (India), Nov. 22-25 (2004).

22. Bonding nature of Cr<sup>3+</sup> and Ni<sup>2+</sup> doped zinc phosphate glasses  
Y.P. Reddy, **R.V.S.S.N. Ravikumar**, A.V. Chandrasekhar, P.S. Rao and J. Yamauchi: 4<sup>th</sup> Asia-Pacific EPR/ESR symposium (APES'04), Indian Institute of Sciences (IISc.) Bangalore (India), Nov. 22-25 (2004).
23. Characterization of New layered Cr(III) doped in Chlorocadmium Phosphate Cd(HPO<sub>4</sub>)Cl.(H<sub>3</sub>N(CH<sub>2</sub>)<sub>6</sub>NH<sub>3</sub>)<sub>0.5</sub>  
**R.V.S.S.N. Ravikumar**, Jun Yamauchi and P.S. Rao: Asia-Pacific EPR/ESR Symposium 2006 (APES'06), Institute of Chemical Kinetics and Combustion, Novosibirsk, (Russia), Aug. 24-27, (2006).
24. Strontium Tetraborate glasses doped transition metal ions: EPR and optical absorption study  
**R.V.S.S.N. Ravikumar**, K. Kayalvizhi, A.V. Chandrasekhar, Y.P. Reddy, J. Yamauchi, K. Arunakumari and P.S. Rao: Asia-Pacific EPR/ESR Symposium 2006 (APES'06), Institute of Chemical Kinetics and Combustion, Novosibirsk, (Russia), Aug. 24-27, (2006). **BEST POSTER PRIZE awarded.**
25. EPR and Optical Absorption Studies on Manganese ion doped in mixed alkali Cadmium Phosphate glasses  
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K.S.N. Murthy, P. Narayana Murthy and **R.V.S.S.N. Ravikumar**: International Seminar on Science and Technology of Glass Materials, Acharya Nagarjuna University, Nagarjuna Nagar, A.P., India, March.16-19, (2009).
27. Review of Research activities at Pondicherry University, Pondicherry, India  
**R.V.S.S.N. Ravikumar** and P. Sambasiva Rao: Asia-Pacific EPR/ESR Symposium 2010 (APES'10), International Convention Center, Jeju, Korea, October 10-14, 2010. **(Invited Talk)**
28. EPR and optical investigation of copper bearing materials  
**R.V.S.S.N. Ravikumar**, P. Sambasiva Rao and Y.P. Reddy: Asia-Pacific EPR/ESR Symposium 2010 (APES'10), International Convention Center, Jeju, Korea, October 10-14, 2010. **(Invited Talk)**
29. EPR Characteristics of Quartz from Degana and Balda area, Rajasthan, India  
S. Vijay Anand, M.S. Pandian, P. Sambasiva Rao, **R.V.S.S.N. Ravikumar**: Asia-Pacific EPR/ESR Symposium 2010 (APES'10), International Convention Center, Jeju, Korea, October 10-14, 2010.
30. EPR Characteristics of Quartz samples from granite pegmatite, Kadavur, India  
S. Vijay Anand, M.S. Pandian, P. Sambasiva Rao and **R.V.S.S.N. Ravikumar**: Asia-Pacific EPR/ESR Symposium 2010 (APES'10), International Convention Center, Jeju, Korea, October 10-14, 2010.
31. Physical and spectral investigations of Cu<sup>2+</sup> doped alkali Zinc Borate glasses  
T. Raghavendra Rao, Ch. Rama Krishna, U.S. Udayachandran Thampy, Ch. Venkata Reddy, Y.P. Reddy, P. Sambasiva Rao and **R.V.S.S.N. Ravikumar**: Asia-Pacific EPR/ESR Symposium 2010 (APES'10), International Convention Center, Jeju, Korea, October 10-14, 2010.

32. Preparation and Characterization of Co(II) ion doped PVA assisted ZnSe nanoparticles.  
N. Sreeram, **R.V.S.S.N. Ravikumar** and J. Siva Rama Krishna: 2<sup>nd</sup> International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2011), at Indian Institute of Technology, Guwahati during December 8-10, 2011.
33. EPR and Optical studies of Cr(III) ions doped NaCaAlPO<sub>4</sub>F<sub>3</sub> nanophosphor  
V. Pushpa Manjari, T. Aswani, B. Babu, G. Thirumala Rao, R. Joyce Stella and **R.V.S.S.N. Ravikumar**: 1<sup>st</sup> International Conference on Advances in Mechanical Sciences 2014 at Vardhaman college of Engineering, Hyderabad during 9-11<sup>th</sup> January, 2014 .
34. Novel Cu<sup>2+</sup> doped ZnO-CdS nanocomposite: synthesis, structural, spectroscopic and magnetic properties  
G. Thirumala Rao, R. Joyce Stella, B. Babu, B. Jaya Raja and **R.V.S.S.N. Ravikumar**: International Conference on Materials and Characterization Techniques 2014 (ICMCT 2014) held in VIT University, Vellore, India during March 10-12, 2014.
35. Structural and Optical properties of Mn(II) ions doped CdO/ZnS nanocomposites,  
R. Joyce Stella, G. Thirumala Rao, V. Pushpa Manjari, M. Rajesh, B. Babu and **R.V.S.S.N. Ravikumar**: International Conference on Materials and Characterization Techniques 2014 (ICMCT 2014) held in VIT University, Vellore, India during March 10-12, 2014.
36. Mixed alkali effect in Cr<sup>3+</sup> doped Li<sub>2</sub>O+K<sub>2</sub>O+B<sub>2</sub>O<sub>3</sub> glasses: Optical and EPR studies  
G. Srinivasa Rao, G. Rama Sundari, G. Thirumala Rao, B. Babu, P. Narayana Murthy and **R.V.S.S.N. Ravikumar**: International Seminar on Glasses and other Functional Materials, Acharya Nagarjuna University, Guntur, India, during 11-13<sup>th</sup> Dec-2014.
37. Physical properties of optical absorption spectral studies of Pr<sup>3+</sup> doped Zinc Mixed Alkali Borate glass  
B. Sailaja, M. Avinash, V. Khidhirbrahmendra, Sk. Johny Basha, **R.V.S.S.N. Ravikumar**: International Seminar on Glasses and other Functional Materials, Acharya Nagarjuna University, Guntur, India during 11-13<sup>th</sup> Dec-2014.
38. Physical and structural investigations of Dy<sup>3+</sup> doped Zinc Lithium Potassium Oxide Borate glass  
R. Hima Bindu, **R.V.S.S.N. Ravikumar** and J. Siva Rama Krishna: International Seminar on Glasses and other Functional Materials, Acharya Nagarjuna University, Guntur, India, during 11-13<sup>th</sup> Dec-2014.
39. Structural and optical studies of ZnCdO nanopowder  
D. Venkata Satish, V. Ashok Babu and **R.V.S.S.N. Ravikumar**: International Seminar on Glasses and other Functional Materials, Acharya Nagarjuna University, Guntur, India, during 11-13<sup>th</sup> Dec-2014.
40. Synthesis and spectral characterization of chromium doped Cadmium borate nano powder  
P.N.V.V.L. Prameela Rani, D. Ramachandran, **R.V.S.S.N. Ravikumar** and C. Rambabu: International Seminar on Glasses and other Functional Materials, Acharya Nagarjuna University, Guntur, India, during 11-13<sup>th</sup> Dec-2014.

41. Properties of Cu-doped ZnSe Nanorods capped with hexamethylenetetramine  
J. Siva Rama Krishna, N. Sriram and **R.V.S.S.N. Ravikumar**: International conference on Frontiers in Nano Science, Technology and Applications, Sri Sathya Sai Institute of Higher learning, Prasanthinilayam, A.P., India during 20-22<sup>nd</sup> Dec-2014.
42. Effect of Transition Metal (TM) ions on PVA Capped ZnSe Nanoparticles  
Sk.Muntaz Begum, M.C.Rao and **R.V.S.S.N.Ravikumar**: Fourth International Conference on natural polymers and biomaterials, Mahatma Gandhi University, Kottayam, Kerala, India during 10-12<sup>th</sup> April 2015.
43. Physical and Spectral Investigations on Fe<sup>3+</sup> Doped Mixed Alkali Cadmium Borate Glasses  
M. Avinash, G. Rama Sundari, M. Rajesh Yadav, Sk. Johny Basha, D.V. Sathish and **R.V.S.S.N. Ravikumar**: International Conference on Science and Engineering of Materials for Future Needs (ICSEMF-2015) at SR & BGNR Govt. Arts & Science College, Khammam during 21<sup>st</sup> & 22<sup>nd</sup> December 2015.
44. Applications of Transition metal ions doped PVA capped CdSe nanopolymers  
**R.V.S.S.N. Ravikumar(Invited Talk)**: International Conference on Science and Engineering of Materials for Future Needs (ICSEMF-2015) at SR & BGNR Govt. Arts & Science College, Khammam during 21<sup>st</sup> & 22<sup>nd</sup> December 2015.
45. Theoretical Investigations of Spin-Hamiltonian Parameters for the Cu(II) ion centers in Chlorocadmiumphosphate (Cd(HPO<sub>4</sub>)Cl·[H<sub>3</sub>N(CH<sub>2</sub>)<sub>6</sub>NH<sub>3</sub>]<sub>0.5</sub>) Crystals  
B. Sekhar, Ch. Rama Krishna, R. Joyce Stella, V. Pushpa Manjari, **R.V.S.S.N. Ravikumar**: International Conference on Science and Engineering of Materials for Future Needs (ICSEMF-2015) at SR & BGNR Govt. Arts & Science College, Khammam during 21<sup>st</sup> & 22<sup>nd</sup> December 2015.
46. Synthesis and characterization of Ni<sup>2+</sup> ions doped ZnO nanopowder  
B. Babu and **R.V.S.S.N. Ravikumar**: International Conference on Science and Engineering of Materials for Future Needs (ICSEMF-2015) at SR & BGNR Govt. Arts & Science College, Khammam during 21<sup>st</sup> & 22<sup>nd</sup> December 2015.
47. Photoluminescence properties of VO(II) ions doped NaCaAlPO<sub>4</sub>F<sub>3</sub> phosphor  
V. Pushpa Manjari, Ch. Ramakrishna, Sk. Muntaz Begum, T. Aswani, **R.V.S.S.N. Ravikumar**: International Conference on Science and Engineering of Materials for Future Needs (ICSEMF-2015) at SR & BGNR Govt. Arts & Science College, Khammam during 21<sup>st</sup> & 22<sup>nd</sup> December 2015.
48. Optical and EPR studies of Transition metal ions (Fe<sup>3+</sup> and Co<sup>2+</sup>) doped Ca-Li Hydroxyapatite nanopowders  
K. Ravindranadh, **R.V.S.S.N. Ravikumar**, and M.C. Rao : International Conference on Science and Engineering of Materials for Future Needs (ICSEMF-2015) at SR & BGNR Govt. Arts & Science College, Khammam during 21<sup>st</sup> & 22<sup>nd</sup> December 2015.

## LIST OF CONFERENCES / WORKSHOPS ATTENDED

1. Sixth National Seminar on Crystal Growth, held at Anna University, Madras (India) Feb 2-4, 1995.
2. **International School on Advance Electronics Materials held at Anna University, Madras (India) Feb 6-15, 1995.**
3. **International Conference on Spectroscopy: Perspectives & Frontiers (INCONS) held at BARC, Bombay (India) Jan 3-5, 1996.**
4. National Conference on Fundamentals of Crystal Growth held at Anna University, Madras (India) Jan 29-30, 1996.
5. Seventh National Seminar on Crystal Growth held at Alagappa University, Karaikudi (India) Jan 6-8, 1997.
6. **First Asia Pacific ESR/EPR Symposium held at City University of Hong Kong, Hong Kong (UK) Jan 20-24, 1997.**
7. Frontier Lecturers in Chemistry held at S.V. University, Tirupati (India) Nov 6-8, 1997.
8. National Seminar on Materials Science: An Indian Scene held at Bharathidasan University, Trichy (India) Jan 19-20, 1998.
9. National Conference on Advances in Condensed Matter Physics held at Pondicherry University, Pondicherry (India) Feb. 26-28, 1998.
10. National Seminar on Spectroscopy Lasers and Laser Applications, held at Cochin University of Science and Technology, Kochi (India), March 23-26, 1998.
11. National Seminar on Recent Trends in Solid State Sciences held at S.V. University, Tirupati (India) Nov. 23-24, 1998.
12. Eighth National Seminar on Crystal Growth held at Anna University, Chennai (India) Feb.3-5, 1999.
13. National Conference on Lasers and Spectroscopy, held at Meerut College, Meerut (India) Feb 25-28, 1999.
14. National Seminar on Recent Trends in Materials Science held at S.V. University, Tirupati (India) Nov 25-27, 1999.
15. **International School on Crystal Growth Methods & Processes held at Anna University, Chennai (India) 24 Jan.- 4 Feb. 2000.**
16. **International Conference on Lasers and their Applications (INCOLA-2000) held at St. Joseph's College, Trichy (India) March 1-4, 2000.**
17. Symposium on Fundamentals of Crystal Growth held at Anna University, Chennai (India) Nov. 6-7, 2000.
18. One day seminar on internet and e-governance held at S.V. University, Tirupati (India) Dec. 23<sup>rd</sup>, 2000.
19. National Seminar on Solid State Spectroscopy (NSSS-2001), S.V. University, Tirupati (India) August 29-31, 2001.
20. **Third Asia - Pacific EPR/ESR Symposium (APES'01), Kobe University, Kobe (Japan) October 29–1 November 2001.**
21. **Management of Technology (MOT), Venture Business Laboratory, Yamaguchi University, Ube (Japan) March 15, 2002.**
22. National Seminar on Recent Trends in Opto-electronic Materials and Devices (NSRTOM- 2002) S.V. University, Tirupati (India) Nov., 21-22, 2002.

23. YU-VBL- 2002 Annual Conference Venture Business Laboratory, Yamaguchi University, Ube (Japan) March 11, 2003.
24. YU-VBL- 2003 Annual Conference Venture Business Laboratory, Yamaguchi University, Ube (Japan) Oct.31, 2003.
25. 8<sup>th</sup> ESR forum, Niigata University, Niigata (Japan) June11-12, 2004.
26. **Fourth Asia - Pacific EPR/ESR Symposium (APES`04), Indian Institute of Sciences, Bangalore (India) November 22-25, 2004.**
27. National Conference on Novel Materials and Technologies (NCNMT-2006), S.V. University, Tirupati, February 17-18, 2006.
28. National Symposium on Electron Magnetic Resonance Spectroscopy (NSEMERS), Pondicherry University, Pondicherry March 24-25, 2006.
29. National Seminar on Advances in Amorphous Materials (NAAM 2007) Acharya Nagarjuna University PG Centre, Nuzvid, Febraury1-3, 2007.
30. Seminar on advances in materials science, P.B. Siddhartha College of Arts & Sciences, Vijayawada, February, 10, 2007.
31. 57<sup>th</sup> Orientation programme, Academic Staff College, Sri Venkateswara University, Tirupati, June 11<sup>th</sup> to July 7<sup>th</sup>, 2007.
32. Training-cum-Orientation Programme for TePP Outreach Centres, SIDBI Innovation & Incubation Centre, Indian Institute of Technology, Kanpur, July 30-31, 2007.
33. Technology Delivery Center Exhibition (TePP, DSIR, New Delhi) Audisankara College of Engineering & Technology, Gudur, Dec. 14-15, 2007.
34. 95<sup>th</sup> Indian Science Congress Bharat Expo, Andhra University, Visakhapatnam, January 3-7, 2008.
35. National Seminar on Natural Calamities- Role of Scientists and Administrators, Y.N.College, Narsapur, February 2, 2008.
36. TUC- coordinators meet and 85<sup>th</sup> TePP screening committee meeting, Techno Park, Trivandrum, February 4-5, 2008.
37. Workshop on Herbal Cosmetics, Tepp Outreach Centre, Acharya Nagarjuna University, Nagarjuna Nagar, Feb. 13-14, 2008.
38. **First International Workshop on frontiers of Atmospheric Physics and Technology, Yogi Vemana University, Kadapa (India) February 20-22, 2008.**
39. TUC-Coordiators meet and 88<sup>th</sup> TePP screening committee meeting, Institute of Technology -Banaras Hindu University, Varanasi, Aug.22-23, 2008.
40. Seminar on Nano-Technology, Nalanda Degree College, Vijayawada, Sept.11, 2008.
41. Five day Training Programme for TePP Phase I Innovators, S.P.Jain Institute of Management and Research (SPJIMR), Mumbai, Sept. 2-6, 2008.
42. **13<sup>th</sup> International Human Genome meeting (HGM 2008) Hyderabad International Conventional Hall, Hyderabad, Sept. 27<sup>th</sup>- 30<sup>th</sup> 2008.**
43. AP Science Congress 2008, Osmania University, Hyderabad, Nov 14-16, 2008.
44. Seminar on Preparation of Transition Metal doped ZnO nano materials at TJPS Degree College, Guntur, A.P on Feb.18, 2009.
45. Sensitization Camp on Technopreneur Promotion Programme (TePP), TePP Outreach Centre, Acharya Nagarjuna University, Nagarjuna Nagar, March 9-10, 2009.
46. **International Seminar on Science and Technology of Glass Materials, Acharya Nagarjuna University, Nagarjuna Nagar, A.P., India, March.16-19, 2009.**
47. Seminar on Advanced Materials preparation and characterization, Sir C.R. Reddy College, Eluru, A.P. India, June 26<sup>th</sup> 2009.

48. 13<sup>th</sup> Refresher course in Physics, UGC-Academic Staff College, Osmania University, Hyderabad, 8<sup>th</sup> – 29<sup>th</sup>, July 2009.
49. National Conference on Advances in Nano Materials Devices and Technologies (NCANDT -2009), S.V. Degree College, Kadapa, India, July 11-12, 2009.
50. National Seminar on Recent Trends in Multifunctional Oxide Materials, Osmania University, Hyderabad, July 17-18, 2009.
51. National Conference on Emerging Materials, (NCEM-2009), NBKR Science & Arts College, Vidyanagar, July 18-19, 2009.
52. National Seminar on Recent Trends in Emerging Frontiers of Physical Sciences, Sindri College, Sindri, Nov., 02-03, 2009.
53. Guest Lecturer in X-rays and Molecular Physics, UG-& PG College Vidya Kendram Vidyasamstalu Dec. 8, 2009.
54. National Seminar on Nano Materials and their Applications, D.A.R. College, Nuzvid, Dec., 10-11, 2009.
55. National Seminar on insight into Nano Materials, Andhra Loyola College, Vijayawada, Jan. 5-6, 2010.
56. National Conference on Materials for Energy Storage and Conversion (NCMESC-2010), S.V. University, Tirupati, Jan. 23-24, 2010.
57. Delhi
58. Refresher course on Introduction to Nanomaterials: Synthesis, Characterization and their Applications: Jawaharlal Nehru Technological University-Hyderabad, Hyderabad, Sep 13-Oct 4, 2010.
59. National Seminar on Emerging Trends in Material Science-An Application to Amorphous, Nano & Liquid Crystals, Sir C.R. Reddy (A) College, Eluru, 30 Oct, 2010.
60. AP Science Congress , Jawaharlal Nehru Technological University, Hyderabad, 18-20 Nov, 2010
61. National seminar on Recent Advances in Physics, P.R. Govt. College, Kakinada 5-6, Jan 2011.
62. XV National Seminar on crystal Growth, PSN College of Engineering & Technology, Tirunelveli, 23-25, Feb. 2011.
62. National Seminar on Development and sustainability of earth resources and Environment (DSERE 2011) Adikavi Nannaya University, Rajahmundry, 12-13, March 2011
63. Multifunctional Nanomaterials and Nanocomposites (NCMNN2011) Bharathiar University, Coimbatore, March 24-25, 2011
64. National Symposium on Renaissance in Chemistry (NSRC–2011) Pondicherry University, Puducherry, March 30, 2011.
65. Workshop on Scope of Sciences and Maths in Engineering, Gudlavalleru Engineering College, Gudlavalleru, A.P. August 11-13, 2011.
66. National workshop on Nano Science and Technology for device applications (NSTDA -2011), K.L.University, October 31, 2011.
67. Andhra Pradesh Akademi of Sciences Young Scientists Convention- 2011, Acharya Nagarjuna University, Guntur, October 27-28, 2011
68. Andhra Pradesh Science Congress (APSC-2011) at GITAM University, Visakhapatnam during 14-16<sup>th</sup> November, 2011
69. National conference on Advanced Research concepts in Physics during 24-25<sup>th</sup>

- November, 2011 at Gov. College (A), Rajahmundry
70. National Conference on Latest Trends in Emerging Materials during 20-21<sup>st</sup> January, 2012 at JNTU College of Engineering, Kukatpally, Hyderabad
  71. National Conference on Recent Trends in Advanced Materials during 27-28<sup>th</sup> January, 2012 at Sir CR Reddy Autonomous College, Eluru
  72. Workshop on Soft Materials, J.M.J. College for Women, Tenali, Guntur (Dt), A.P. on 24-25<sup>th</sup> January, 2012.
  73. National Seminar on Advanced Materials for Device Applications on, SSN College, 25<sup>th</sup> January, 2012.
  74. National seminar on new frontiers in scientific research (NFSC), Andhra Loyola College, Vijayawada, Feb, 27<sup>th</sup>, 2012.
  75. National Seminar on Nano Science and Technology, D.R.W. College, Gudur, Mar. 2, 2012
  76. PHYSI FEST-2K12, A one day national workshop on Emerging Trends in Physics, Guntur Engineering College, Guntur (Dt.) A.P. March 3<sup>rd</sup>, 2012.
  77. National Seminar on Applications of Nanotechnology in Energy Capture, Transform & Storage PBR Visvodaya Institute of Technology & Science, Kavali, Aug. 3-4, 2012.
  78. Andhra Pradesh Science Congress (APSC-2012) at Acharya Nagarjuna University, Guntur during 14-16<sup>th</sup> November, 2012.
  79. National Conference on Advances in Material Science and Technologies during 19-21 November, 2012 at Kakatiya University, Warangal.
  80. National Seminar on Multifunctional materials during 6-7 March, 2013 at Andhra Loyola College (Autonomous), Vijayawada.
  81. National Conference on Nanotechnology and Allied Industries, Bapatla Engineering College, Bapatla during 7-8<sup>th</sup> March, 2014.
  81. National Conference on Physics and Chemistry of Solids during 12-13 April, 2013 at SR & BGNR Govt. Arts & Science College, Khammam.
  82. National Seminar on modern trends in chemical sciences (MTCS 2013), 20-21<sup>st</sup> December, 2013 at Acharya Nagarjuna University, Guntur.
  83. International Seminar on Glasses and other Functional Materials, Acharya Nagarjuna University, Guntur, India, during 11-13<sup>th</sup> Dec-2014.
  84. 6<sup>th</sup> Indian Youth Science Congress, Acharya Nagarjuna University, Nagarjuna Nagar-522510 during 19<sup>th</sup>-21<sup>st</sup> Jan 2015.
  85. National Conference On Recent Trends In Materials Science, Department of Physics, S.V. Degree College, Kadapa during 1<sup>st</sup> – 2<sup>nd</sup> March 2015.
  86. Fourth International Conference on natural polymers and biomaterials, Mahatma Gandhi University, Kottayam, Kerala, India during 10-12<sup>th</sup> April 2015.
  87. National seminar Shaping the future with Nano Sciences (SFNS), Department of Chemistry, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 19-20<sup>th</sup> August 2015.
  88. Recent Developments in Nanotechnology & Nano Science (RDNN), Department of Physics, V.K.V. Government Degree College, Kothapeta, A.P., during 31<sup>st</sup> August and 1<sup>st</sup> Sept. 2015.
  89. National seminar on Trends and Applications of Liquid Crystals (NSLC-2015) at Andhra Christian (A.C.) College, Guntur, A.P. on 10<sup>th</sup> & 11<sup>th</sup> September 2015.
  90. Guest Lecturer in JKC college, Guntur 23<sup>rd</sup>, September 2015.



91. National Seminar on Need and Role of Nano Sciences in the Present Era, Department of Physics, P.B. Siddhartha College of Arts & Science, Vijayawada, A.P., during 7-8<sup>th</sup> October 2015
92. IUCA Program, Dept. of Physics, Acharya Nagarjuna University, Nagarjuna Nagar, A.P. during 9<sup>th</sup> Oct. 2015.
93. Two week Faculty Programme on Big Data Analysis, in the dept. of Commerce & Management Studies, Acharya Nagarjuna University, Nagarjuna Nagar, A.P. during 20<sup>th</sup> May to 2<sup>nd</sup> June 2016.

**Citations of Dr. R.V.S.S.N.Ravikumar, Assistant Professor, Department of Physics,  
Acharya Nagarjuna University, Nagarjuna Nagar**

**ANNEXURE II**

S.No.	Times Cited	Cited Work	Year	Volume	Page
01	13	APPL MAG RES	2008	33	185
02	18	APPL MAG RES	2011	40	339
03	11	APPL MAG RES	2011	41	69
04	1	APPL MAG RES	2012	42	403
05	3	APPL MAG RES	2015	46	1
06	11	ASIAN J PHYS	1999	8	223
07	2	BULL ELECTRO CHEM	1998	14	344
08	3	CRYST RES TECHNOL	1995	30	1121
09	24	CLIN CHIM ACTA	2004	340	207
10	11	CRYST RES TECHNOL	1999	34	911
11	24	CRYST RES TECHNOL	2000	35	1203
12	5	CRYST RES TECHNOL	2001	36	1429
13	7	CRYST RES TECHNOL	2002	37	1127
14	6	CRYST RES TECHNOL	2004	39	448
15	4	ELECT ADV MAT RAP COM	2008	2	433
16	5	EUR PHYS J APPL PHYS	2014	65	10403
17	11	FERROELECTRICS	1995	166	55
18	8	FERROELECTRICS	1996	175	175
19	6	FERROELECTRICS	1996	189	139
20	3	FERROELECTRICS	1998	216	27
21	9	FERROELECTRICS	2002	274	127
22	27	GLASS TECHNOL	2002	43	32
23	1	ICANEET PROCEEDINGS	2013		181
24	18	INDIAN J CHEM A	1999	38	590
25	5	INDIAN J ENG MATERS	2000	7	459
26	1	INDIAN J LEPROSY	1995	68	247
27	7	INDIAN J PHY A	2001	75	429
28	8	INDIAN J PHY	2014	88	683
29	1	INDIAN J PHY	2016	90	359
30	4	INDIAN J PURE AP PHY	1997	35	71
31	5	INORG CHEM COMMUN	2011	14	1048
32	2	INT J MOD PHY PROCEEDINGS	2013	22	346
33	5	INT J PHARM PHARM SCI	2012	4	336
34	4	IOP CON SERIES MAT SCI ENG	2009	2	012058
35	14	J ALLOY COMPD	1999	287	84
36	42	J ALLOY COMPD	2002	337	272
37	46	J ALLOY COMPD	2004	364	176
38	4	J ALLOY COMPD	2009	470	12
39	5	J ALLOY COMPD	2015	628	39
40	1	J ELCTR MAT	2015		
41	8	J INOR ORG POL MAT	2013	23	350

42	7	J LUMIN	2012	132	2325
43	7	J LUMIN	2014	145	324
44	5	J LUMIN	2015	159	119
45	41	J PHYS CHEM SOLIDS	2003	64	261
46	12	J PHYS CHEM SOLIDS	2003	64	1139
47	44	J PHYS CHEM SOLIDS	2003	64	2433
48	3	J PHYS CHEM SOLIDS	2007	68	305
49	8	J PHYS CHEM SOLIDS	2009	70	1363
50	19	J MAG MAG MAT	2014	355	76
51	9	J MAG MAG MAT	2014	372	79
52	2	J MAT SCI MAT ELCTR	2015	26	6667
53	10	J MAT SCI TECH	2009	25	531
54	22	J MOL STRUC	2005	740	169
55	12	J MOL STRUC	2007	839	2
56	13	J MOL STRUC	2011	1006	344
57	4	J MOL STRUC	2012	1012	17
58	7	J MOL STRUC	2013	1034	57
59	3	J MOL STRUC	2013	1048	64
60	16	J MOL STRUC	2014	1063	178
61	2	J MOL STRUC	2014	1076	461
62	1	J MOL STRUC	2015	1081	254
63	1	J MOL STRUC	2015	1081	311
64	2	J MOL STRUC	2015	1096	129
65	6	J MOL STRUC MAT ELCTR	2014	25	4179
66	2	J MOL STRUC MAT ELCTR	2015	26	6667
67	10	J NON CRY SOLIDS	2013	365	6
68	25	J NON CRY SOLIDS	2011	357	3373
69	2	J NON OXY GLASS	2013	5	39
70	1	J OPTOELCTR BIOMED MAT	2013	5	57
71	4	LUMINESCENCE	2014	29	1123
72	36	MAT CHEM PHYS	2005	93	455
73	6	MAT CHEM PHYS	2007	103	5
74	17	MAT RES BULL	2011	46	2222
75	1	MAT RES BULL	2012	47	
76	3	MAT RES BULL	2014	61	183
77	2	MAT SCI ENG B	2015	101	72
78	12	MAT RES BULL	2012	47	2646
79	4	NEUES JB MINER MONAT	2001	2001	261
80	3	NEUES JB MINER MONAT	2002	2002	138
81	15	OPT MATER	2003	22	215
82	24	OPT MATER	2007	29	1321
83	5	OPT MATER	2014	36	1329
84	4	OPT ELE ADV MAT RAP COM	2008	2	433
85	4	OPT ELE ADV MAT RAP COM	2009	3	954
86	1	OPT ELE ADV MAT RAP COM	2010	4	215
87	1	OPT ELE ADV MAT RAP COM	2013	7	43
88	22	PHYS B CON MAT	2003	334	398

89	22	PHYS B CON MAT	2011	406	2132
90	4	PHYS B CON MAT	2011	406	3295
91	1	PHYS B CON MAT	2014	433	7
92	2	PHYS CHEM GLASS EUR J GLASS SCI TECHNOL PT B	2010	51	281
93	15	PHYS CHEM GLASS	2002	43	173
94	3	PHYS CHEM GLASS	2010	51	117
95	18	PHYS SCRIPTA	1997	55	637
96	3	PHYS SCRIPTA	1998	58	345
97	9	PHYS SCRIPTA	2002	66	391
98	13	PHYS SCRIPTA	2006	74	549
99	9	PHYS SCRIPTA	2007	76	253
100	7	PHYS SCRIPTA	2011	84	025602
101	9	PHYS SCRIPTA	2012	86	035708
102	6	RADIAT EFF DEFECT S	1998	143	263
103	3	RADIAT EFF DEFECT S	2004	159	87
104	14	RADIAT EFF DEFECT S	2004	159	141
105	3	RADIAT EFF DEFECT S	2005	160	109
106	15	RADIAT EFF DEFECT S	2006	161	177
107	6	RADIAT EFF DEFECT S	2007	162	11
108	1	RADIAT EFF DEFECT S	2012	167	163
109	1	RSC ADVANCES	2015	5	86675
110	4	SOLID STATE COMMUN	1994	92	815
111	24	SOLID STATE COMMUN	2003	126	251
112	7	SOLID STATE COMMUN	2010	150	1479
113	7	SPECTROCHIM ACTA A	2001	57	1283
114	25	SPECTROCHIM ACTA A	2001	57	2781
115	19	SPECTROCHIM ACTA A	2001	57	2789
116	14	SPECTROCHIM ACTA A	2003	59	2115
117	5	SPECTROCHIM ACTA A	2003	59	3321
118	45	SPECTROCHIM ACTA A	2006	64	939
119	19	SPECTROCHIM ACTA A	2011	79	1116
120	8	SPECTROCHIM ACTA A	2012	85	160
121	7	SPECTROCHIM ACTA A	2012	98	100
122	8	SPECTROCHIM ACTA A	2013	101	140
123	16	SPECTROCHIM ACTA A	2013	109	90
124	10	SPECTROCHIM ACTA A	2014	121	544
125	5	SPECTROCHIM ACTA A	2015	139	86
126	3	SPECTROCHIM ACTA A	2015	142	279

Total 1245 (Upto 01<sup>st</sup> July 2016 Scopus/google data)

**List of Ph.D., awarded under the guidance of Dr. R.V.S.S.N.Ravikumar**

<b>S.No.</b>	<b>Name of the student</b>	<b>Title</b>	<b>Date &amp;Year</b>
1.	Ch.Rama Krishna (09.06.2008-30.06.2011) (Full time-UGC Project)	Synthesis and spectroscopic investigations transition metal ions doped chlorocadmiumphosphate Cd(HPO <sub>4</sub> )Cl·[H <sub>3</sub> N(CH <sub>2</sub> ) <sub>6</sub> NH <sub>3</sub> ] <sub>0.5</sub> nanocrystals.	23.02.2012
2.	U.S.Udayachandran Thampy (05.06.2008-08.07.2011) (Full time-RGNF)	Synthesis and characterization of transition metal ions doped ZnO nanopowders.	01.03.2012
3.	T.Raghavendra Rao (05.06.2008-12.09.2011) (Part time/FDP-UGC)	Physical and spectral investigations on transition metal ions doped mixed alkali zinc borate glasses.	18.08.2012
4.	Ch.Venkata Reddy (09.11.2009-12.11.2011) (Full Time)	Characterization of transition metal ions doped β-BaB <sub>2</sub> O <sub>4</sub> nanocrystalline powders.	28.08.2012
5.	D.V. Sathish (09-04-2010-19.10.2012) (FDP-UGC)	Room temperature synthesis and characterization of Transition metal ions doped ZnCdO nanopowders	05.07.2013
6.	L.V. Krishna Rao (14.08.2009-31.12.2011) (FDP-UGC)	Spectral studies of transition metal ions doped CdO nanopowders.	07.12.2013
7.	V. Pushpa Manjari (09.11.2009-28.11.2013) (Full Time-ANU-URF)	Investigations on transition metal ions doped NaCaAlPO <sub>4</sub> F <sub>3</sub> nanophosphors	06.06.2014
8.	T. Aswani (09.11.2009-28.12.2013) (Full Time)	Effect of on transition metal ions Doped CdO nanopowder synthesized by ultrasonication at room temperature	06.06.2014
9.	G. Ramasundari (09.11.2009-28.01.2014) (Full Time)	An observation of mixed alkali effect on Ti <sup>3+</sup> , Cr <sup>3+</sup> , Fe <sup>3+</sup> , Mo <sup>5+</sup> doped alkali zinc borate glasses	08.09.2014
10.	B. Babu (09.11.2009-27.11.2013) (Full Time- ANU-URF)	Sonochemical assisted synthesis and spectroscopic characterization of transition metal ions doped ZnO nanopowders	11.09.2014

**List of Ph.D., awarded under the guidance of Dr. R.V.S.S.N.Ravikumar**

<b>S.No.</b>	<b>Name of the student</b>	<b>Title</b>	<b>Date &amp;Year</b>
11.	G S.C. Bose (12.11.2009-09.03.2015) (UGC-FDP & Part Time)	Spectroscopic studies of natural minerals Tennantite, Chalcopyrite, Rhodochrosite and Vanadyl, Cobalt ions doped Viitaniemiite	28.07.2015
12.	G. Thirumala Rao (04.05.2012 – 04.05.2015) (Full Time-Gate-UGCBSR)	Influence of transition metal ions doping on structural, optical and magnetic properties of ZnO-CdS composite nanopowders	23.12.2015
13.	R. Joyce Stella (02.05.2012 -29-05-2015) (Full Time- Gate-UGC-BSR)	Effect of divalent & trivalent transition metal ion dopants on CdO/ZnS nanocomposite	23.12.2015
14.	B. Jaya Raja (25.06.2012 -31.07.2015) (Full Time-ANU-URF)	Spectral investigations on transition metal ions doped $\text{Li}_2\text{CaAl}_4(\text{PO}_4)_4\text{F}_4$ nanophosphors	30.04.2016
15.	M. Rajesh Yadav (02.06.2012- 15.10.2015) (Full Time-UGC-BSR)	Investigations on $\text{VO}^{2+}$ , $\text{Mn}^{2+}$ , $\text{Fe}^{3+}$ and $\text{Cu}^{2+}$ Doped Calcium Borophosphate Nanophosphors	23.05.2016
16.	B. Sailaja (21.06.2012- 27.07.2015) (Part Time)	Spectroscopic investigations on trivalent rare earth ions doped zinc alkali borate glasses	<b>Submitted</b>

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**List of M.Phil. awarded under the guidance of Dr. R.V.S.S.N.Ravikumar**

<b>S.No</b>	<b>Name of the student</b>	<b>Title</b>	<b>Date &amp; Year</b>
1.	Ch. Lakshmi Nagasudha (09.06.2008-31.12.2009) (Full Time)	Preparation and spectral characterization of LiCoO <sub>2</sub> nano battery material	07.07.2010
2.	R.Nagaraja (09.06.2008-22.06.2010) (Part Time)	Preparation and characterization of Co(II) ions doped zinc oxide nanopowder	25.11.2010
3.	B. Sekhar (10.06.2008-09.06.2010) (Full Time)	Synthesis and characterization of Ni(II) ion doped chlorocadmiumphosphate Cd(HPO <sub>4</sub> )Cl·[H <sub>3</sub> N(CH <sub>2</sub> ) <sub>6</sub> NH <sub>3</sub> ] <sub>0.5</sub> crystals.	24.12.2010
4.	P. Rekha Rani (05.06.2008-04.06.2010) (Part Time)	Spectroscopic investigations on Mn(II) ion doped MB <sub>4</sub> O <sub>7</sub> (M= Zn, Cd) glasses	11.02.2011
5.	E. Naga Jyothi (30.06.2012-28.07.2014) (Part Time)	An Observation of Room Temperature Ferromagnetism in Mn <sup>2+</sup> Doped ZnO Nanopowder	06.02.2015

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**List Research Scholars working under Dr. R.V.S.S.N. Ravikumar, Assistant Professor,  
Department of Physics, Acharya Nagarjuna University College of Sciences, Nagarjuna  
Nagar-522510**

<b>S.No.</b>	<b>Name of the Research Scholar</b>	<b>Date of Registration (FT/PT)</b>	<b>Part-I M. Phil., Pre Ph.D., Y/N</b>	<b>Any Remarks</b>
1.	R. Nagaraja	25.11.2010 (PT)	Ph.D.,	Joined with M.Phil.
2.	B. Sekhar	24.12.2010 (FT)	Ph.D.,	Joined with M.Phil.
3.	P. Rekha Rani	11.02.2011 (PT)	Ph.D.,	Joined with M.Phil.
4.	J. Madhavi	22.09.2012 (FT)	Ph.D.,	*JEST
5.	M. Avinash	08.04.2013 (FT)	Ph.D.,	CSIR-JRF
6.	P.K.K. Kumar	24.03.2014 (PT)	Ph.D.,	Joined with M.Phil.
7.	V. Khidhirbrahmendra	26.03.2014 (FT)	Ph.D.,	*GATE
8.	Sk. Johny Basha	26.03.2014 (FT)	Ph.D.,	--
9.	N. Sitamahalakshmi	26.03.2014 (PT)	M.Phil,	--
10.	E. Naga Jyothi	12.02.2015 (PT)	Ph.D	Joined with M. Phil.
11.	P. Swathi	22.04.2016 (PT)	Ph.D	Guide Change (Goud)
12.	T. Rajya Lakshmi	23.05.2016 (FT)	Ph.D	--



**Projects: Dr. R.V.S.S.N.Ravikumar**

	<b>Title</b>	<b>Amount Rs.</b>	<b>Agency</b>	<b>Status</b>
Principal Investigator	Spectroscopic investigations on mixed alkali effect in alkali zinc borate glasses (2009-2013)	10,35,871/-	UGC, New Delhi	completed
Co-Investigator	Influence of transition metal ions on bio-mimetic materials: Amino-acid crystals (2009-2013)	2,43,000/-	UGC, New Delhi	completed
Assistant Coordinator	UGC-DRS Phase –III (2009-14)	40,00,000/-	UGC-DRS New Delhi	ongoing
Assistant Coordinator	DST-FIST (2014-2017)	1,18,50,000/-	UGC DST-FIST	ongoing
Principal Investigator	Development of Innovative Eco-sustainable Intelligent Bio -nanocomposite Food Packaging Products (2016- 2019)	1,23,92,000	MHRD (DIC) JNTUK	ongoing
Total		Rs. 2,95,20,871/-		