# **CURRICULUM VITAE**

# Dr. Koramala Naveen Kumar

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# **Educational Qualifications**

ACADEMICS	UNIVERSITY/BOARD	YEAR	PERCENTAGE (%)
POSTDOCTORAL FELLOW	TONGMYONG UNIVERSITY, SOUTH KOREA	2017	
Assistant Professor	YEUNGNAM UNIVERSITY, SOUTH KOREA	2016	
POSTDOCTORAL FELLOW	YEUNGNAM UNIVERSITY, SOUTH KOREA	2015	
Ph.D. (Full time)	Sri Venkateswara University, Tirupati, Andhra Pradesh, India.	2015	68.72
M. Phil. (Physics)	Sri Venkateswara University Tirupati, Andhra Pradesh, India.	2012	68.72
M.Sc. (Physics)	Sri Venkateswara University, Tirupati, Andhra Pradesh, India.	2009	69.21
B.Ed (Physics)	Sri Venkateswara University Tirupati, Andhra Pradesh, India.	2007	64.52
B.Sc. (Mathematics, Physics& Chemistry)	Sri Venkateswara University, Tirupati, Andhra Pradesh, India.	2005	58.11
Intermediate (Mathematics, Physics & Chemistry)	Board of Intermediate Education, Hyderabad, India.	2002	68.70
SSC	Secondary School Board Hyderabad, A.P., India.	2000	72.64
Naveen Kumar	knaveenpt	ny@gmail.com	Pa

## **Ph.D** details

#### **Ph.D Title:** Studies on Magnetic, Electrical and Energy Transfer BasedPhotoluminescence Properties of Certain Transition Metal and Rare Earth Ions Doped PEO+PVP Blended Polymer Films for Electrochemical and Display Device Applications

#### Abstract:

The thesis brings out the results concerning magnetic, electrical properties of certain transition metal (Cr<sup>3+</sup>, Mn<sup>2+</sup>, Fe<sup>3+</sup>, Co<sup>2+</sup>& Ni<sup>2+</sup>) ions and energy transfer based photoluminescence properties of certain rare earth ions (Tb<sup>3+</sup>+Eu<sup>3+</sup>), (Dy<sup>3+</sup>+Sm<sup>3+</sup>), (Tb<sup>3+</sup>+Sm<sup>3+</sup>) & (Sm<sup>3+</sup>+Eu<sup>3+</sup>) co-doped in PEO+PVP blended polymer films. From the obtained results, concerning structural (XRD, FTIR & Raman), thermal (TG-DTA), dielectric ( $\varepsilon'$ & tan $\delta$ ), ionic conducting properties, EPR and VSM analysis of these PEO+PVP polymer films have been considered here, to dope them with certain transition metal [Mn<sup>2+</sup>(3d<sup>5</sup>), Fe<sup>3+</sup>(3d<sup>5</sup>), Co<sup>2+</sup> (3d<sup>7</sup>), Cr<sup>3+</sup> (3d<sup>3</sup>) and Ni<sup>3+</sup>(3d<sup>8</sup>)] ions each separately to investigate their photoluminescence, and also their dielectric ( $\varepsilon'$ & tan $\delta$ ), ionic conductivities and magnetic properties. It has also been proposed to investigate a couple of transition metal and rare earth ion pair and also dual rare earth ions [Mn<sup>2+</sup>(3d<sup>5</sup>)+ Tb<sup>3+</sup>(4f<sup>8</sup>), Eu<sup>3+</sup> (4f<sup>6</sup>)] doped PEO+PVP polymer in understanding their energy transfer processes that enhance emission from such luminescent polymeric materials.

#### **Projects Involved**

Worked as a Project Fellow (JRF) under UGC-SAP-CAS program sanctioned to the department of Physics, S. V. University, Tirupati by University Grants Commission, New Delhi, India from March 2009 to March2014.

#### Skills acquired

- Ability to work independently as well as in a team with others
- Expertise in the preparation of syllabus for any other course in an academic field and Expertise in synthesizing the Polymer nano composites and nano materials in the research area.
- Good experimental skills in the preparation of polymer nano composites using both physical and chemical techniques viz.
  - Solution casting method
  - Solid State Reaction method
  - Sol-gel method
- Sound knowledge on the following characterization techniques

  - ✤ UV-Vis- NIR spectroscopy
  - SEM attached with EDS

  - Photoluminescence spectroscopy

  - 🏕 AFM
  - 🏕 EPR
  - ≁ VSM
  - ✤ Electrical and Dielectric

## ✤ Photoluminescence (PL)

- Adequate knowledge on the preparation of presentations, project proposals and reporting making.
- Expert in operating the Confocal Raman spectrometer. The Candidate operates the RamanSystemfor4yearsinthedepartmentofPhysics,S.V. University, Tiruapti.

The Candidate especially operates the instruments such as UV-Vis-NIR spectrophotometer, X-ray Diffractometer, SEM with EDS and also expertise knowledge in Fluorimeter.

## **Computer Knowledge**

- MS-Office, Adobe Photoshop
- Origin Pro 7.0 and PowderXsoftwares
- Programming Languages: C & C++, Oracle

## **Teaching Experience**

- Handled theory classes for M.Sc. Physics (Distance Education) at Sri Venkateswara University, Tirupati. (During 2010-2014)
- Handled theory classes for M. Sc Biotechnology to teach the BioPhysics at Sri PadmavathiMahila University, Tirupati (During 2011-15)

Handling theory and practical classes now for M.Sc chemistry students to teach the Nanomaterials chemistry at Yeungnam University, Gyeongsan, South Korea (**During 2016 - 2017**).

#### List of Research Projects involved

- 1. I have worked in UGC-SAP-CAS Programme in Department of Physics, Sri Venkateswara University, Tirupati during 05 Feb. 2010 to 30<sup>th</sup> April 2015. I have published **7** publications during this period.
- 2. I have worked as a <u>Postdoctoral Fellow</u> in Department of Chemistry, Yeugnanm University, Republic of Korea in the project of Yeungnam University Research Grant (No: 215A345015) under the supervision of Professor Misook Kang.
- **3.** I have worked as <u>Research Professor</u> in Department of Chemistry, Yeungnam University, Republic of Korea. During this period I was supported by the Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of the Science ICT & Future Planning (NRF-2015R1A1A3A04001268).
- 4. I have worked as a <u>Postdoctoral Fellow</u> in School of Information Engineering, Tongmyong University, Busan, 608-711, Republic of Korea. During this period I was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of the Science ICT & Future Planning (NRF- 2015R1A1A3A04001268) and National Research Foundation of Korea (NRF) grant funded by the Korea Government (MSIP) (No. 2015R1C1A2A01052256) and National Research Foundation of Korea (NRF- 2016M2B2A9A02945310) and National Research Foundation of Korea (NRF) funded by the Korea (NRF) funded by the Ministry of Education (2014R1A6A1031189).

#### References

#### 1. Professor Jong Su Kim

Semiconductor Nanodevice Research Lab. (SNRL) Department of Physics, **Yeungnam University**, 214-1 Dae-dong, Gyeongsan, 712-749, KOREA Tel; +82-53-810-2344 PCS; +82-10-7727-3968 (KOREA) e-mail; jongsukim@ynu.ac.kr http://physics.yu.ac.kr

#### 2. Professor Misook Kang

Department of Chemistry College Sciences, **Yeungnam University** Gyeongsan, Gyeongbuk – 38541 Republic of Korea Email: <u>mskang@ynu.ac.kr</u> Phone: +821067379695

#### 3. Professor Y.C. Ratnakaram

Board of Studies Chairman Department of Physics Sri Venkateswara University, Tirupati, A.P., INDIA Email:<u>ratnakaramsvu@gmail.com</u> Mobile: +91-9440751615

#### 4. Dr. J. Lakshmana Rao

Professor of Physics (Retd.) Department of Physics Sri Venkateswara University, Tirupati, A. P., INDIA Email:<u>jlrao46@yahoo.co.in</u> Phone: +91-9885251298

#### 5. Dr. Bipin Kumar Gupta

Scientist LMD Group Materials Physics and Engineering Division, CSIR-National Physical Laboratory, Dr K S Krishnan Road, New Delhi-110012, India Email: <u>bipinbhu@yahoo.com</u> Phone: +91 9891740533

#### 6. Dr. J. Hemalatha

Associate Professor Department of Physics National Institute of Technology (NIT) Trichy, Tamilnadu, INDIA. Email: <u>hemalatha@nitt.edu</u> Mobile: +91-431-2503608

## **Professional Qualifications**

Research Articles

**29** (International) **4** (National)

- Conference Proceedings **3** (International)
- Conference Presentations 08 (International) 5 (National)
- Workshops attended 02 (National)

As a Reviewer

✓ Reviewed Research Articles 15 (International) 0(National) Reviewed Research Articles Journals Names:

- **1. Dolton Transactions**
- 2. ElectrochimicaActa
- 3. Journal of Applied Polymer Science
- 4. Journal of Non-Crystalline Solids
- 5. Journal of King Saud University Science
- 6. Polymer Bulletin
- 7. Polymer Composites

#### As an Editor

1. SciFed Journal of Laser and Optics

#### Awards

Best Oral Presentation Award in "One Day National Conference on Recent Trends in Materials Science (RTMS-13)" on Structural, thermal, magnetic and electrical properties of Cr<sup>3+</sup>: PEO+PVP blended polymer films at M. Kumarasamy College of Engineering, Karur, Tamilnadu on Nov.7,2013.

**Best Oral Presentation Award** in International conference of Korean Society of Industrial Engineering and Chemistry on November 4-6, 2015 in JEJU, South Korea. The paper entitled "Photoluminescence properties of Er<sup>3+</sup>: PEO+PVP blended polymer composite films for photonic applications".

Best Oral Presentation Award in International conference of Korean Society of Industrial Engineering and Chemistry on October 26-28, 2016 in JEJU, South Korea. The paper entitled "Energy transfer based spectral properties of TiO<sub>2</sub> NPs impregnated co-doped Gd<sup>3+</sup>+Eu<sup>3+</sup>: PVA polymer nanocomposites for luminescent Applications".

#### **Positions lead**

1. Chairperson for evening session of the conference International conference of Korean Society of Industrial Engineering and Chemistry on November 4-6, 2015 in JEJU, South Kore

## Books

- "Transition Metal Ions doped Blended Polymer Composites for Multifunctional Applications", LAP LAMBERT Academic Publishing, Germany, ISBN: 978-3- 659-90749-4 (2016).
- 2. "Rare earth ions doped polymer composites for photonic applications" LAP LAMBERT Academic Publishing, Germany, ISBN: 978-3-330-02815-9 (2017).

## **International / National Journals**

- Bright Red Luminescence from co-doped Dy<sup>3+</sup>/Eu<sup>3+</sup>: CaLa<sub>2</sub>ZnO<sub>5</sub> Phosphors for Photonic Applications K. Naveen Kumar, Jong Su Kim, Jaesool Shim, Migyung Cho, Misook Kang Journal of Alloys and Compounds 721 (2017) 554-562; IF: 3.014
- Bright green emission from f-MWCNT embedded co-doped Bi<sup>3+</sup>+Tb<sup>3+</sup>: Polyvinyl alcohol polymer nanocomposites for photonic applications
   K. Naveen Kumar, R. Padma, Y.C. Ratnakaram and Misook Kang
   RSC Advances 7 (2017) 15084-15095; IF: 3.289
- 3. Energy Transfer (In<sup>3+</sup>→Eu<sup>3+</sup>) in Polyvinyl Alcohol polymer composites for Red Luminescent Applications
   K. Naveen Kumar, R. Padma and Misook Kang Optical Materials 70 (2017) 41-49; IF: 2.183
- Promising Red Emission from Functionalized Multi Walled Carbon Nanotubes embedded co-doped Bi<sup>3+</sup>+Eu<sup>3+</sup>: PVA Polymer nanocomposites for Photonic Applications
   K. Naveen Kumar, R. Padma, L. Vijayalakshmi, Jeghan Shrine Maria Nithya, Misook Kang Journal of Luminescence 182 (2017) 208-219; IF: 2.693
- Dazzling Red Emission from TiO<sub>2</sub> nanoparticles impregnated co-doped Gd<sup>3+</sup>+Eu<sup>3+</sup>: PVA polymer nanocomposites for Photonic Applications
   K. Naveen Kumar, R. Padma, L. Vijayalakshmi and Misook Kang Journal of Industrial and Engineering Chemistry 45 (2017) 349-359; IF: 4.179
- 6. Copper–constantan nanoparticles impregnated PEO + PVP: Li<sup>+</sup> blended solid polymer electrolyte films for lithium battery applications
  K. Naveen Kumar and Misook Kang
  Polymer Bulletin 74 (2017) 2545-2564; IF: 1.365
- Dazzling green emission from graphene oxide nanosheet-embedded co-doped Ce<sup>3+</sup> and Tb<sup>3+</sup>:PVA polymer nanocomposites for photonic applications
   K. Naveen Kumar, R. Padma, J.L. Rao and Misook Kang
   RSC Advances 6 (2016) 54525-54538;IF: 3.289
- 8. Energy transfer based Photoluminescence properties of co-doped (Er<sup>3+</sup>+Pr<sup>3+</sup>): PEO+PVP blended polymer composites for Photonic applications
   K. Naveen Kumar, Misook Kang, G. Bhaskar Kumar and Y. C. Ratnakaram Optical Materials 54 (2016) 6-13; IF: 2.183
- 9. Improved electrical properties of Fe nanofiller impregnated PEO + PVP: Li<sup>+</sup> blended polymer electrolytes for lithium battery applications
  K. Naveen Kumar and Misook Kang
  Applied Physics A 122:698 (2016) 1-14; IF: 1.444
- 10. Enhanced Electrical Properties of Polyethylene oxide (PEO) + Polyvinylpyrrolidone (PVP): Li<sup>+</sup> Blended Polymer Electrolyte Films with the addition of Ag nanofiller.
  K. Naveen Kumar, Misook Kang, K. Sivaiah, M. Ravi and Y.C. Ratnakaram Ionics 21 (2015) 1-11;IF:2.119

**11.** Energy Transfer Based Photoluminescence Properties of (Sm<sup>3+</sup>+Eu<sup>3+</sup>): PEO+PVP Polymer

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Films for Red Luminescent display device applications **K. Naveen Kumar**, L. Vijayalakshmi and Y.C. Ratnakaram **Optical Materials 45 (2015) 148-155; IF:2.183** 

- 12. Energy Transfer Based Photoluminescence spectra of (Tb<sup>3+</sup>+Sm<sup>3+</sup>):PEO+PVP polymer nano- composites with Ag nanoparticles.
  K. Naveen Kumar, B. Chandra Babu and S.Buddhudu
  Journal of Luminescence 161 (2015) 456 464; IF:2.693
- 13. Structural, thermal and optical properties of Tb<sup>3+</sup>, Eu<sup>3+</sup> and co-doped (Tb<sup>3+</sup>+Eu<sup>3+</sup>): PEO+PVP polymer films,
  K. Naveen Kumar, K. Sivaiah and S.Buddhudu
  Journal of Luminescence 147 (2014) 316-323; IF:2.693
- 14. Studies on optical, magnetic and electrical properties of multifunctional Cr<sup>3+</sup>: PEO+PVP Polymer Composites
  K. Naveen Kumar, J.L. Rao and Y.C. Ratnakaram
  Journal of Molecular Structure 1100 (2015) 546-554; IF:1.780
- 15. Synthesis and analysis of Fe<sup>3+</sup>, Co<sup>2+</sup> & Ni<sup>2+</sup>: PEO+PVP blended polymer composite films for multifunctional polymer applications
  K. Naveen Kumar, M. Vasudeva Reddy, L. Vijayalakshmi and Y.C.Ratnakaram
  Bulletin of Materials Science 925 (2015) 1-9; IF:0.895
- 16. Energy transfer based photoluminescence spectra of Dy<sup>3+</sup>, Sm<sup>3+</sup>: PEO+PVP polymer films, K. Naveen Kumar, B H Rudramadevi and S.Buddhudu, Indian Journal of Pure & Applied Physics 52 (2014) 588-596; IF:0.739
- 17. Enhancement of up-conversion emission and emerging cool white light emission in co-doped Yb<sup>3+</sup>/ Er<sup>3+</sup>: Li<sub>2</sub>O-LiF-B<sub>2</sub>O<sub>3</sub>-ZnO glasses for photonic applications
   L. Vijayalakshmi, K. Naveen Kumar, Pyung Hwang, Gagandeep Kaur Ceramics International (Article in Press); IF:2.758
- Effect of EMIMBF<sub>4</sub> ionic liquid addition on the structure and ionic conductivity of LiBF<sub>4</sub>complexed PVdF-HFP polymer electrolyte films.
  Jiwu Tang, Ravi Muchakayala, Shenhua Song, Meng Wang, K. Naveen Kumar
  Polymer Testing 50 (2016) 247-254; IF:2.350
- 19. Thermal, Magnetic and Electrical Properties of Multiferroic GdMnO<sub>3</sub> Nano Particles by a Co-PrecipitationMethod;
  B. Jaya Prakash, K. Naveen Kumar and S. Buddhudu
  Ferroelectrics Letters Section 39 (2012)104-116. IF:0.600
- 20. Synthesis, Structural and Dielectric Properties of Co<sup>2+</sup>, Ni<sup>2+</sup> and Cu<sup>2+</sup>: ZnSiO<sub>4</sub> Nanoceramics by a Sol-Gel Method;
  B. Chandra Babu, K. Naveen Kumar, B. H. Rudramadevi and S. Buddhudu Ferroelectrics Letters Section 41 (2014)28-43. IF:0.600
- 21. Chromium doped ZnS nanoparticles: Chemical, structural, luminescence and magnetic studies;
   B. Poornaprakash, K. Naveen Kumar, U. Chalapathi, MaddakaReddeppa, P.T. Poojitha, Si-Hyun Park

- 22. Energy Transfer Based Photoluminescence Spectra of co-doped (Dy<sup>3+</sup>+Sm<sup>3+</sup>): Li<sub>2</sub>O-LiF-B<sub>2</sub>O<sub>3</sub>-ZnO Glasses for Orange Emission
  L. Vijayalakshmi, K. Naveen Kumar, and R.P. Vijayalskhmi
  Optical Materials 57 (2016) 125-133; IF: 2.183
- 23. Enhanced Photoluminescence of Mn<sup>2+</sup>+Tb<sup>3+</sup> ions doped PEO+PVP blended polymer films, K. Naveen Kumar and S. Buddhudu, Proc. Indian Natn. Sci. Acad. 80 (2) (2014) 345-354 (ISSN:0370-0046).
- 24. Studies on structural, thermal, optical and electrical properties of PEO+PVP polymer films with and without Li<sup>+</sup> andAg<sup>+</sup>
  K. Naveen Kumar, S. Uthanna and S. Buddhudu
  International Journal of Physics 5 (2) (2012)159-172.
- 25. Enhanced ionic conductivity of PMMA: Li<sup>+</sup> Polymer films due to adding of Ag NanoFillers K. Naveen Kumar and S. Buddhudu
  Journal of NanoScience and Nano Technology 2 (1) (2014)38-40.
- 26. Analysis of optical absorption and EPR spectra of Mn<sup>2+</sup>: PEO+PVP polymer films K. Naveen Kumar and S. Buddhudu Asian Journal of Physics 24 (1) (2015)195-202.
- 27. Synthesis and characterization of Sm<sup>3+</sup>: PEO+PVP Polymer film;
  K. Naveen Kumar and S. Buddhudu
  AIP Conf. Proc. 1536, 899 : (2013); doi:10.1063/1.4810519.
- 28. Magnetic Properties of Mn<sup>2+</sup>: PEO+PVP Polymer films;
  K. Naveen Kumar, K. Sivaiah and S. Buddhudu
  AIP Conf. Proc. 1591, 893 (2014); doi:10.1063/1.4872793
- 29. Enhanced Photoluminescence spectra of Sm<sup>3+</sup> co-doped with Tb<sup>3+</sup> in PEO+PVP blended polymer films
  K. Naveen Kumar and S. Buddhudu
  AIP Conf. Proc. 1665, 080037 (2015); doi:10.1063/1.4917941
- Dy<sup>3+</sup> doped Lithium Sodium Bismuth Borate Glasses for Yellow Luminescent Photonic Applications M. Parandamaiah, K. Naveen Kumar, S. Babu, S. Venkatramana Reddy, Y.C.Ratnakaram International Journal of Engineering Research and Applications 5 (8) (2015)126-131.
- 31. Spectroscopic properties of Eu<sup>3+</sup> doped lithium sodium bismuth borate glasses for red luminescent optical devices
   M. Parandamaiah, K. Naveen Kumar, S. Venkatramana Reddy, Y.C.Ratnakaram
   *Research Inventy: International Journal of Engineering And Science 5 (9) (2015) 16-22.*
- 32. Structural and Optical Properties of Li<sup>+</sup>: PVP & Ag<sup>+</sup>: PVP Polymer Films; KothapalleSivaiah, Koramala Naveen Kumar, V. Naresh, SrinivasaBuddhudu Materials Sciences and Applications 2 (2011)1688-1696.
- 33. Photoluminescence Analysis of Certain Rare Earth Ions Doped (Pr<sup>3+</sup>, Nd<sup>3+</sup>, Dy<sup>3+</sup> and Er<sup>3+</sup>): Li<sub>2</sub>O-LiF-B<sub>2</sub>O<sub>3</sub>-ZnO Glasses for Photonic Applications.
  M. Vijayalakshmi, K. Naveen Kumar, Misook Kang and R. P. Vijayalakshmi Science Spectrum 1 (2) (2016) 197-202. (ISSN: 2455-5053).

**34.** Enhanced Red luminescence from co-doped Bi<sup>3+</sup>/Eu<sup>3+</sup>: CaLa<sub>2</sub>ZnO<sub>5</sub> nanophosphor spheres for photonic applications

K. Naveen Kumar, Jong Su Kim, Jaesool Shim, Migyung Cho Physica Status Solidi (Rapid Research Letters) (Under Review), IF: 2.437

#### International & National Conferences / Seminars / Workshops attended

#### **Oral Presentations:**

 Energy transfer based spectral properties of TiO<sub>2</sub> NPs impregnated co-doped Gd<sup>3+</sup>+Eu<sup>3+</sup>: PVA polymer nanocomposites for luminescent Applications;
 K. Naveen Kumar, L. Vijayalakshmi, Misook Kang; International Conference of Korean Society of Industrial Engineering and Chemistry, Fall meeting

2016 on October 26-28, 2016 in JEJU, South Korea.

- Emission analysis of Tb<sup>3+</sup>: PEO+PVP Blended Polymerfilms;
   K. Naveen Kumar, S. Uthanna, K. Sivaiah and S.Buddhudu; Third International Multi component Polymer Conference (IMPC-2012); MahatmaGandhi University, Kerala, INDIA on 23-25 Mar.2012.
- **3.** Structural, thermal, magnetic and electrical properties of Cr<sup>3+</sup>: PEO+PVP blended polymer films;

K. Naveen Kumar, S. Buddhudu;

One Day National Conference on Recent Trends in Materials Science (RTMS-13); M. Kumarasamy College of Engineering, Karur, Tamilnadu on Nov. 7,2013.

**4.** Enhancement of Ionic Conductivity of PMMA: Li<sup>+</sup> Polymer films due to the addition of Ag Nano fillers;

**K. Naveen Kumar** and S. Buddhudu ; International Conferene on Nano Electronic Science & Technology (ICNEST-2014); Sri Vasavi College, Erode, Tamilnadu, INDIA on Feb. 14-15, 2014.

Photoluminescence Properties of Er<sup>3+</sup>: PEO+PVP blended polymer composite films for photonic applications
 K. Naveen Kumar, Byeong Sub Kwak and Misook Kang
 International conference of Korea Society of Industrial Engineering and Chemistry, IEU

International conference of Korea Society of Industrial Engineering and Chemistry, JEJU, South Korea, on November 4-6, 2015.

6. Photoluminescence Analysis of Certain Rare Earth Ions Doped (Pr<sup>3+</sup>, Nd<sup>3+</sup>, Dy<sup>3+</sup> and Er<sup>3+</sup>): Li<sub>2</sub>O–LiF–B<sub>2</sub>O<sub>3</sub>–ZnO Glasses for Photonic Applications;
L. Vijayalakshmi, K. Naveen Kumar, Misook Kang and R. P. Vijayalakshmi; Andhra Pradesh Science Congress (APSC-2015), Sri Venkateswara University, Tirupati on January 27-29, 2016.

#### **Poster Presentations:**

7. Studies on electrical and conductivity properties of PEO+PVP: Li<sup>+</sup> & PEO+PVP: Ag<sup>+</sup> Polymer films;
K. Naveen Kumar, S. Uthanna, K. Sivaiah and S. Buddhudu;

**K. Naveen Kumar**, S. Otnanna, K. Sivalan and S. Buddhudu; International Conference on Thin Films & Applications (ICTFA-2012): Sastra University, Thanjavur, INDIA on 15-17 Mar.2012.

8. Synthesis and Characterization of Sm<sup>3+</sup>: PEO+PVP Polymer Films;
 K. Naveen Kumar and S. Buddhudu

International Conference on Recent Trends in Applied Physics & Material Science(RAM-2013); Govt. College of Engg. & Tech., Bikaner, INDIA on February 01-02,2013.

- 9. Synthesis and Characterization of Dy<sup>3+</sup>: PEO+PVP Polymer films;
   K. Naveen Kumar and S. Buddhudu;
   4<sup>th</sup>International Conference on Recent Advances in Composite Materials (ICRACM-13); International Centre, Goa, INDIA on February 18-21,2013
- Magnetic Properties of Mn<sup>2+</sup>: PEO+PVP PolymerFilms;
   K. Naveen Kumar, K. Sivaiah and S. Buddhudu;

58<sup>th</sup>DAE Solid State Physics Symposium (DAE-SSPS); Thapar University, Punjab, INDIA on Dec.17-21,2013.

- Synthesis and Characterization of PMMA Polymer Electrolytes;
   K. Naveen Kumar, K. Sivaiah and S. Buddhudu;
   One Day National Seminar on Nanomaterials and Nanotechnology (NSNNT-2013); Govt. Degree & PG College, Puttur, INDIA on 2<sup>nd</sup>Oct.2013.
- 12. Magnetic, electrical and optical properties of Fe<sup>3+</sup>, Co<sup>2+</sup> & Ni<sup>2+</sup>: PEO+PVP blended polymer films;
  K. Naveen Kumar, B. Jaya Prakash and S. Buddhudu;

101<sup>st</sup>Indian Science Congress; University of Jammu, Jammu, INDIA on Feb. 3-7,2014.

13. Enhanced Photoluminescence properties of (Sm<sup>3+</sup>+Eu<sup>3+</sup>): PEO+PVP polymer films via energy transfer from Sm<sup>3+</sup> to Eu<sup>3+</sup>;
K. Naveen Kumar, Y. C. Ratnakaram and S.Buddhudu

DAE-BRNS National Laser Symposium (NLS-23), Dept. of Physics, Sri VenkateswaraUnivesity, Tirupati- 517 502 on December 3-6,2014.

**14.** Enhanced Photoluminescence spectra of Sm<sup>3+</sup>co-doped with Tb<sup>3+</sup>in PEO+PVP blended polymerfilm;

K. Naveen Kumar and S.Buddhudu

59<sup>th</sup>DAE-Solid State Physics Symposium, VIT University, Vellore-632014, Tamil Nadu on December16-20.

**15.** Spectral Properties of co-doped (Dy<sup>3+</sup>+Sm<sup>3+</sup>): Li<sub>2</sub>O+LiF+B<sub>2</sub>O<sub>3</sub>+ZnO Glasses for Photonic Applications;

L. Vijayalakshmi, K. Naveen Kumar and R. P. Vijayalakshmi

National Conference on Emerging Trends of Advanced Functional Materials (NCAFM-2015), KL University, Vaddeswaram, Guntur on September 03-04,2015.

16. Enhanced electrical properties of PEO+PVP: Li<sup>+</sup> blended polymer films by adding with Fe nano filler for Solid Polymer electrolytic applications
K. Naveen Kumar, Misook Kang, K. Sivaiah, L. Vijayalakshmi K. Sai Manogna, Sk. SabeehTabsum, V. Kalarani;
International Conference of Nanomaterials and Nanotechnology (NANO-15), K.S.R. Group of

Institutions, KSR Kalvinagar, Thiruchengode, Nammakal, Tamilnadu on December 7-10, 2015.

17. Electrical properties of Cu<sup>2+</sup> doped PEO+PVP blended polymer composites for solid polymer electrolyte applications

K. Sai Manogna, **K. Naveen Kumar**, Misook Kang, Y.C. Ratnakaram, J.L. Rao, V. Kalarani; Andhra Pradesh Science congress (APSC-2015), Sri Venkateswara University, Tirupati on January 27-29, 2016.

# **Personal Details**

Name	: Dr. Koramala Naveen Kumar		
Ivaille	: DI. Koramaia Naveen Kumar		
Father's Name	: K. Penchalaiah		
Date of Birth	: 09/07/1985		
Gender	: Male		
Marital Status	: Unmarried		
Nationality	: Indian		
Languages Known	: Telugu, Hindi and English		
Email	: knaveenphy@gmail.com, drknk666@gmail.com		
Website	: https://knaveenphy.wixsite.com/mysite		
Declaration			

I hereby solemnly affirm that all the above details provided are true to the best of my knowledge.

**DATE**:14-06-2017 **PLACE:** Gyeongsan

(K. NaveenKumar)