Papers presented in International/National Conferences

1. Analysis of Resonance Raman Spectra of Nickel Octaethyl Porphyrin using Lie algebra

2. Fundamental Vibrational Spectra of Metalloporphyrins molecules: An algebraic approach

3. An algebraic approach to fundamental vibrational energy levels of Metalloporphyrins

4. A study of the vibrational spectra of Metalloporphyrins: An algebraic approach,

5. An algebraic approach to the study of the vibrational spectra of monofluoroacetylene (HCCF),

6. An algebraic approach to fundamental vibrational energy levels of AB4 molecules

7. IR and Raman study of macromolecules and nanoparticles,
8. An algebraic approach to the study of the vibrational spectra of monofluoroacetylene (HCCF) 

9. An algebraic approach to the vibrational spectra of Metalloporphyrins, 

10. An algebraic approach to the study vibrational Spectra of Bio-Molecules, 

11. An algebraic approach to the study of Nano-Bio molecules, 

12. An algebraic calculation of fundamental energy levels of Metalloporphyrin molecules 

13. An algebraic Calculation of fundamental energy levels of polyatomic molecules: An application to Metalloporphyrins 

14. Overtone stretching vibrations of Bio-molecules: An algebraic approach 

15. Lie algebraic approach to the stretching vibrational spectra of bent H2O molecule 
16. Study of vibrational spectra of deuterated acetylene (HCCD): an algebraic approach  
Seminar on “Recent progresses in Physical Sciences”, Karimganj College, Assam, Dec  
20-21, 2008.

17. Study of vibrational spectra of some linear tetratomic molecules: an algebraic approach  
96th Indian Science Congress, NEHU, Shilong, Jan 3-7, 2009.

18. Algebraic approach to fundamental stretching vibrational energy level of octahedral  
molecules  
96th Indian Science Congress, NEHU, Shilong, Jan 8-13, 2009.

19. An algebraic approach: Study of the stretching vibrations of Nano-Bio polyatomic  
molecules  
Symposium on Molecular Engineering of New Materials (NSMENM-09), during  
February 5-7, 2009, Loyola College, Vijayawada, Andhra Pradesh.

20. An algebraic approach to the study of the higher excited vibrational level clustering of  
Bio-molecules  
DAE-BRNS Symposium on Atomic, Molecular and Optical Physics Organized at Inter  
University Accelerator Centre, New Delhi, Feb 10-13, 2009.

21. Vibrational spectroscopy of the stretching vibrations in Metalloporphyrins: An algebraic  
approach  
DAE-BRNS Symposium on Atomic, Molecular and Optical Physics Organized at Inter  
University Accelerator Centre, New Delhi, Feb 10-13, 2009.

22. Study of vibrational spectra of OCS: an algebraic approach  
DAE-BRNS Symposium on Atomic, Molecular and Optical Physics Organized at Inter  
University Accelerator Centre, New Delhi, Feb 10-13, 2009.

23. An algebraic approach to the study of vibrational spectroscopy of Bio-molecules: An  
application to metalloporphyrins  
24. Fundamental Vibrational frequencies of Magnesium Octaethyl Porphyrin [Mg(OEP)]: An algebraic approach
   VI\textsuperscript{th} National Conference of the Physics Academy of the NORTH-EAST (PANE),
   Department of Physics, Tripura University, 3-4\textsuperscript{th} April, 2009.

25. Vibrational Spectra of CF4 by using algebraic approach
   VI\textsuperscript{th} National Conference of the Physics Academy of the NORTH-EAST (PANE),
   Department of Physics, Tripura University, 3-4\textsuperscript{th} April, 2009.

26. Application of the U(4) Vibron model in the study of the vibrational spectra of OCS
   VI\textsuperscript{th} National Conference of the Physics Academy of the NORTH-EAST (PANE),
   Department of Physics, Tripura University, 3-4\textsuperscript{th} April, 2009.

27. Vibrational spectra of H\textsubscript{2}O molecule using Lie algebra
   VI\textsuperscript{th} National Conference of the Physics Academy of the NORTH-EAST (PANE),
   Department of Physics, Tripura University, 3-4\textsuperscript{th} April, 2009.

28. Vibrational spectroscopy of Bio-Molecules: An algebraic approach
   VI\textsuperscript{th} National Conference of the Physics Academy of the NORTH-EAST (PANE),
   Department of Physics, Tripura University, 3-4\textsuperscript{th} April, 2009.

29. Theoretical analysis of vibrational spectra of Bio-molecules: An algebraic approach
   Srinivasa Rao Karumuri and Siva Ram Prasad
   National conference on Nanomaterials, Applications and Nanotechnology developments,
   Organized by Vardhaman Engineering college, Sept 5-6\textsuperscript{th}, 2009.(Accepted for Oral
   presentation)

31. Calculation of Vibrational spectra of Nickel & Copper Porphyrins by using Lie algebraic techniques

Srinivasa Rao Karumuri and Sri Hari Babu

32. Spectroscopic Studies on Distorted Structure Molecules by using Lie Algebraic Methods

Srinivasa Rao Karumuri and Sri Hari Babu

33. Participated on International MEMS Conference at Bangalore on Nov 4th -5th, 2011

34. Vibrational spectroscopy of nano-bio molecules by Lie algebraic method: An application to Metalloporphrins

Srinivasa Rao Karumuri

35. Design and analysis of thermal expansion in Micro-Electro-Mechanical-Systems

Srinivasa Rao Karumuri

36. Design and analysis of Electro osmotic micro mixer MEMS Device: application to medial field

Srinivasa Rao Karumuri

37. Synthesis, characterization, spectroscopic studies of ZnO nanoparticles

Srinivasa Rao Karumuri

38. Lie algebraic approach: study the vibrational spectra of nano-bio molecules-application to metalloporphrins

Srinivasa Rao Karumuri
14th International conference on Physical sciences with humanity at NIT Surat, December 22nd-24th, 2011.

39. Designing of Mast diagonal Mounting for Incessant Communication by COMSOL Multiphysics

Srinivasa Rao Karumuri and Y.Srinivas
A.P Science Congress organized by Acharya Nagarjuna University, 14-16\(^{th}\) Nov, 2012

40. **Mathematical calculation of vibrational energy levels of polyatomic molecules: An algebraic method**
   
   **Srinivasa Rao Karumuri and J. Vijaysekhar**
   A.P Science Congress organized by Acharya Nagarjuna University, 14-16\(^{th}\) Nov, 2012

41. **An algebraic method: Vibrational Spectroscopy of distorted structure molecules**
   National Conference on Applications of Mathematics in Engineering, Physical and Life Sciences organized by S V University, 7\(^{th}\)-9\(^{th}\) Dec, 2012.

42. **Design and simulation of Piezo actuated microgripper by COMSOL Multiphysics**
   **Srinivasa Rao Karumuri and Y.Srinivas**
   International Conference on Frontiers of Mechanical Engineering, Materials and Energy (ICFMEME 2012), Dec 20-21, 2012, Beijing, China; Paper ID: M1010

43. **Design and simulation of MEMS based piezoelectric shear actuated beam**
   **Srinivasa Rao Karumuri**
   International Conference on Frontiers of Mechanical Engineering, Materials and Energy (ICFMEME 2012), Dec 20-21, 2012, Beijing, China; Paper ID: M1063

44. **Preparation, characterization, spectroscopic studies of ZnO nanoparticles**
   **Srinivasa Rao Karumuri et.al**
   National Conference on Recent trends in Nanoscience and Technology for device applications, organized by department of Physics, KL University, April 4\(^{th}\) & 5\(^{th}\), 2013.

45. **Design and simulation of nuclear radiation based energy harvesting**
   **J.Suresh Babu and K.Srinivasa Rao**
   IEEE Sponsored International Conference on Smart Systems (ICSS) at JBIT, Dec 19\(^{th}\) & 20\(^{th}\), 2013, Hyderabad.

46. **Design and analysis of water hammer in a network of pipeline intersections**
   **T.Satynarayana and K.Srinivasa Rao**
   IEEE Sponsored International Conference on Smart Systems (ICSS) at JBIT, Dec 19\(^{th}\) & 20\(^{th}\), 2013, Hyderabad.

47. **Design and simulation of microactuator and micro needle of MEMS based blood sampling device**
   **K.Srinivasa Rao**
   IEEE Sponsored International Conference on Smart Systems (ICSS) at JBIT, Dec 19\(^{th}\) & 20\(^{th}\), 2013, Hyderabad.

48. **Design and Simulation of Piezoelectric Actuated Microgripper**
   **Srinivasa Rao Karumuri and K.Girija Sravani**
   IEEE Sponsored International Conference on Smart Systems (ICSS) at JBIT, Dec 19\(^{th}\) & 20\(^{th}\), 2013, Hyderabad.