

Faculty Profile

Name: Dr. Ch. LEELA



Designation: Assistant Professor

Teaching areas: Optics, thermodynamics, mechanics, electro-magnetic theory, structure and properties of materials, fluid mechanics, optical fiber communications, research methodology, laser physics, atomic, molecular and nuclear physics, acoustics, non-linear optics, shock waves, numerical methods using MATLAB and introduction to Data Science and Artificial Intelligence.

Research interests: Experimental: Laser matter interaction, imaging of laser induced shock waves from materials and explosives, time and spatially resolved spectral studies, laser ablation propulsion, filamentation, acoustic and radiofrequency detection of shock waves.

Education:

- Ph.D. Physics, University of Hyderabad, India, 2015.
- M.Sc. Physics, JNTU, Hyderabad, India, 2006.
- B.Sc. Physics, Osmania University College for Women, Hyderabad, 2004.

Research Publications (Selected): (Total: 18)

1. Nagaraju Guthikonda, Elle Manikanta, *Leela Chelikani*, S. Sai Shiva, S. Sree Harsha, V. R. Ikkurthi and P. Prem Kiran, **Physics of Plasmas**, Vol. 27, Issue 2 (2020).
2. S. Sai Shiva, *Ch. Leela*, P. Prem Kiran, C. D. Sijoy, V. R. Ikkurthi and S Chaturvedi, **Physics of Plasmas**, Vol. 26, 072108 (2019).
3. S. Sai Shiva, *Ch. Leela*, P. Prem Kiran, C. D. Sijoy, V. R. Ikkurthi and S Chaturvedi, **Physics of Plasmas**, Vol. 24, 083110 (2017).
4. E. Manikanta, L. Vinoth Kumar, *Ch. Leela* and P. Prem Kiran, **Applied Optics**, Vol. 56, No.24 (2017).
5. S. Sai Shiva, *Ch. Leela*, P. Prem Kiran, C. D. Sijoy and Shashank Chaturvedi, **Physics of Plasmas**, Vol. 23, 053107 (2016).
6. E. Manikanta, L. Vinoth Kumar, P. Venkateshwarlu, *Ch. Leela* and P. Prem Kiran, **Applied Optics**, Vol. 55, No. 3 (2016).
7. *Ch. Leela*, P. Venkateshwarlu, Raja V. Singh, Pankaj Verma and P. Prem Kiran, **Optics Express**, Vol.22, No. S2 (2014).
8. L. Vinoth Kumar, E. Manikanta, *Ch. Leela* and P. Prem Kiran, **Appl. Phys. Lett.** 105, 064102 (2014).
9. *Ch. Leela*, S. Bagchi, V. R. Kumar, S.P. Tewari, and P. P. Kiran, **Laser and Particle Beams**, 31, 263 (2013).