Faculty Profile

Name: **Dr. Ch. LEELA**

Designation: Assistant Professor

Teaching areas: Optics, Thermodynamics, Mechanics and Electro-magnetic theory.

Research interests: Experimental: Laser matter interaction, imaging of laser induced shock waves from materials, 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, Jawaharlal Nehru Technological University, Hyderabad, India, 2006.
- B.Sc. Physics, Osmania University College for Women, Hyderabad, India 2004.

Professional experience: 4.7 years

1. Assistant Professor (Physics) (July 2016-Present), Faculty of Science and Technology, ICFAI-IFHE, Hyderabad, Telangana, India.
2. Teaching Assistant (Physics) (August 2015-July 2016), Mahindra École Centrale College of Engineering (In collaboration with École Centrale, Paris (now Centrale Supélec) and affiliated to JNTU, Hyderabad, Telangana, India.
3. Post Doctoral Fellow (November 2014-November 2015), University Of Hyderabad, Hyderabad, Telangana, India.
4. Project (June 2007-June 2009), Advanced Centre of Research in High Energy Materials, Hyderabad, Telangana, India.
5. Assistant Professor (Physics) (October 2006-May 2007), Younis Sultan College Of Engineering, Hyderabad, Telangana, India.

Research/Selected Publications:

1. S. Sai Shiva, ***Ch. Leela***, P. Prem Kiran, C. D. Sijoy and Shashank Chaturvedi "The effects of electron thermal radiation on laser ablative shock waves from aluminum plasma into ambient air," **Physics Of Plasmas**, Vol. 23, 053107 (2016).
2. E. Manikanta, L. Vinoth Kumar, P. Venkateshwarlu, ***Ch. Leela*** and P. Prem Kiran, "Effect of pulse duration on the acoustic frequency emissions during laser induced breakdown of atmospheric air," **Applied Optics,** Vol. 55, No. 3 (2016).
3. ***Ch. Leela***, P. Venkateshwarlu, Raja V. Singh, Pankaj Verma, and P. Prem Kiran, "Spatio-temporal dynamics behind the shock front from compacted nanopowders," **Optics Express**, Vol.22, No. S2 (2014).
4. L. Vinoth Kumar, E. Manikanta, ***Ch. Leela*** and P. Prem Kiran, "RF emissions from laser breakdown of target materials radio frequency emissions from laser induced breakdown of target materials," **Appl. Phys. Lett.** 105, 064102 (2014).
5. ***Ch. Leela***, S. Bagchi, V. R. Kumar, S.P. Tewari, and P. P. Kiran, "Dynamics of laser induced micro-shock waves and hot core plasma in quiescent air," **Laser and Particle Beams**, 31, 263 (2013).