

Liril Dhirajkumar Silvi

- **Designation** : Assistant professor
- **Experience** : 1 Year 3 months
- **Educational Qualification**: PhD, IIT Roorkee
- **Specialization** : Thermal
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Research Area

Computational Fluid Dynamics, Heat and Mass Transfer with focus on boiling and condensation, Multiphase Flows-VOF, Biofuels in Internal Combustion Engine.

Journals Publication details

1. Silvi, L.D., Chandraker, D.K., Ghosh, S. and Das, A.K., Understanding dryout mechanism in Rod Bundles of Boiling Water Reactor, International Journal of Heat and Mass Transfer, 177, p. 121534, 2021.
2. Silvi, L.D., Chandraker, D.K., Ghosh, S. and Das, A.K., Dynamics of Disturbance Waves in an Adiabatic Coaxial Gas-Liquid Annular Flow, Multiphase Science and Technology, 2021.
3. Silvi, L.D., Chandraker, D.K., Ghosh, S. and Das, A.K., On-route to dryout through sequential interfacial dynamics in annular flow boiling around temperature and heat flux-controlled heater rod. Chemical Engineering Science, 229, p.116014, 2021.
4. Silvi, L.D., Saha, A., Chandraker, D.K., Ghosh, S. and Das, A.K., Numerical analysis of pre-dryout sequences through the route of interfacial evolution in annular gas-liquid two-phase flow with phase change. Chemical Engineering Science, 212, p.115356, 2020.

Conference Publication details

1. Rathaur, R., Silvi, L.D., Ghosh, S., Liquid coiling and axisymmetric jet on a solid surface, 48th National conference on Fluid Mechanics and Fluid Power (FMFP-2021), BITS Pilani, 27-29th December, 2021.
2. Silvi, L.D., Ghosh, S, Das, A.K., Chandraker, D.K., Prediction of dryout in vertical upward annular two phase flow boiling with numerical methodology, 72nd Annual Session of Indian Chemical Engineering Congress, Chemcon-2019, IIT Delhi 15-19th December, 2019.
3. Silvi, L.D., Ghosh, S., Das, A.K., Numerical study of Flow Boiling Situation in Annular Two-Phase Regime, 7th international and 45th National conference on Fluid Mechanics and Fluid Power (FMFP), IIT Bombay, India, 10-12th December, 2018.
4. Silvi, L.D., Ghosh, S, Das, A.K., Numerical study of disturbance wave characteristics in Annular flow, 71st Annual Session of Indian Chemical Engineering Congress, Chemcon-2018, Jalandhar, 27- 30st December, 2018

5. Gubrele, S., Singh, D., Silvi, L.D., Das, A. K., Hydraulic Jump after Impingement of Circular Jet on Vertical Solid Surface: An Experimental Investigation, Paper Number: FMFP2018-PN-129, 7th International and 45th National Conference on Fluid Mechanics and Fluid Power (FMFP), IIT Bombay, Maharashtra, India, December 10-12, 2018.
6. R. Rathore, Silvi, L.D., Ghosh S., Liquid draining from rectangular tank using openFoam :Numerical study, 71st Annual Session of Indian Chemical Engineering Congress, Chemcon-2018, NIT Jalandhar, 27- 30st December, 2018
7. Silvi, L.D., Balasubramanian, K., "Forced Conjugate Heat transfer Analysis of Air Cooled Engine under different Air Velocity and Varying Environmental Conditions." Proceeding of International Conference on civil, mechanical and environmental engineering and technologies – 2016. ISBN No.978-1-941505-4-7
8. Rathaur, R., Silvi, L.D., Ghosh, S., Study of the influence of liquid properties on the liquid rope coiling, 16th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT-2022, Amstredam, Netherlands, 8-10 August, 2022.

Fellowships Awarded:

1. Fellowship awarded to work as TCS Research Scholar to carry out PhD research work, sponsored by TCS Foundation, Mumbai. (Rs. 45,000 p.m.)
2. Fellowship awarded to work as JRF to carry out research for the project titled, "Development of numerical models for entrainment and deposition rates to predict dry-out in AHWR fuel bundle" sponsored by BRNS-DAE, Mumbai in Department of Chemical Engineering, IIT Roorkee. (Rs. 28,000 p.m.)
3. Fellowship awarded during M.Tech at NIT Warangal by MHRD, Government of India. (Rs. 12,400 p.m.)

Faculty Development Programme (FDP) completed

- "**NISHTHA - Faculty Capacity Building Program**" from 26 to 28 August 2022 organized at The Fern Sattva Resort, Polo Forrest by Gujarat Technological University.