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Journal Publication

- **Abhishek Kundu**, Sudipta De(2015) High-resolution Euler simulation of a cylindrical blast wave in an enclosure. **Journal of Visualization** 18:733-738.
- **Abhishek Kundu**, Sudipta De(2016) Application of compact schemes in the CUSP framework for strong shock-vortex interaction. **Computers and Fluids** 126:192-204.
- **Abhishek Kundu**, Sudipta De, Murugan Thangadurai, C. L. Dora, Debopam Das(2016) Numerical visualization of shock tube-generated vortex-wall interaction using a fifth-order upwind scheme. **Journal of Visualization** 19:667-678.
- **Abhishek Kundu**, Sudipta De(2017) Navier-Stokes simulation of slipstream evolution in steady shock reflection. **Journal of Visualization** 20:515-518.
- **Abhishek Kundu**, Sudipta De(2017) Navier-Stokes simulation of shock-heavy bubble interaction: Comparison of upwind and WENO schemes. **Computers and Fluids** 157:131-145.
- **Abhishek Kundu** (2017) Numerical Simulation of compressible flow with shocks using the OUCS2 upwind compact scheme. **International Journal of Experimental Research and Review** 14:20-28.
- **Abhishek Kundu**, Sudipta De(2019) High resolution numerical simulation of shock accelerated Refrigerant-22 bubble. **Computers and Fluids** 193:104289.
- **Abhishek Kundu**(2021) Numerical simulation of a shock-helium bubble interaction. **Shock Waves** 31:19-30.
- **Abhishek Kundu**, Murugan Thangadurai, Gautam Biswas(2021) Investigation on shear layer instabilities and generation of vortices during shock wave and boundary layer interaction. **Computers and Fluids** 224:104966.

Conference Proceedings

- **Abhishek Kundu**, Sudipta De Numerical simulation of shock-bubble interaction using high order upwind schemes. Presented in **IUTAM Symposium on Advances in Computation, Modeling and Control of Transitional and Turbulent Flows**, Held on December 15-18, 2014 Goa, India.
- Murugan Thangadurai, Sudipta De, **Abhishek Kundu**, Inderpal Singh Sandhu, D R Saroha Interaction of a Shock Tube generated Blast Wave with Solid Obstacles. Presented in **11 th International High Energy Material Conference & Exhibits**, Held on November 23-25, 2017 Pune, India.
- **Abhishek Kundu**, Arnab Basu A class of third-order compact upwind schemes for compressible flow with shocks and vortices. Presented in **National Conference on Frontiers in Modern Physics**, Held on August 16-17, 2018 Adamas University, Kolkata, India.
- **Abhishek Kundu**, Sudipta De Numerical simulation of shock tube-generated vortex: Comparison of upwind and WENO scheme. Presented in **Fluid Mechanics and Fluid Power (FMFP) conference**, Held on December 10-12, 2018 IIT Bombay, Mumbai, India.
- Anton Shershnev, **Abhishek Kundu**, Alexey Kudryavtsev Murugan Thangadurai, Sudipta De Numerical simulation of viscous shock tube flow with shock-capturing and hybrid high-resolution schemes. Presented in **High Energy Processes in Condensed Matter**, Held on April 2-5, 2019 Novosibirsk, Russia.

- **Abhishek Kundu**, Murugan Thangadurai, Sudipta De Navier-Stokes simulation of shock tube generated blast wave interaction with a rectangular object at higher shock Mach number. Presented in **16th Asian Congress of Fluid Mechanics (ACFM)**, Held on December 13-17, 2019 Bengaluru, India.
- Ansab Khan, **Abhishek Kundu**, Akshoy Ranjan Paul Numerical simulation of interaction of blast wave generated from Cannon with wall at different pressure ratio. Proceedings of **International conference on Thermofluids**, pp 137-143, 2020.
- Kshitij Bajpai, **Abhishek Kundu** Effect of intermixing on thermal performance of converged-diverged microchannel heat sink used in high heat flux applications. Presented in **International conference on progressive research in Industrial & Mechanical Engineering**, Held on August 5-7, 2021 NIT Patna, India.