

Publications

➤ Publications in International Journals

1. **Dutta T.**, Sinhamahapatra K. P., and Bandyopadhyay S. S. (2013), [CFD Analysis of Energy Separation in Ranque – Hilsch Vortex Tube at Cryogenic Temperature](#), *Journal of Fluids*, 2013, 1-14.
2. **Dutta T.**, Sinhamahapatra K. P., and Bandyopadhyay S. S. (2011), [Numerical investigation of gas species and energy separation in the Ranque – Hilsch vortex tube using real gas model](#), *International Journal of Refrigeration*, 34, 2118 - 2128.
3. **Dutta T.**, Sinhamahapatra K. P., and Bandyopadhyay S. S. (2010), [Comparison of different turbulence models in predicting the temperature separation in a Ranque – Hilsch vortex tube](#), *International Journal of Refrigeration*, 33, 783 - 792.
4. Banerjee S., Ghosal S., and **Dutta T.** (2008), [Development of a simple technique for improving the efficacy of fluid flow through the grinding zone](#), *Journal of Materials Processing Technology*, 197, 306–313.

➤ Conference Presentations/Publications

1. Kotpalliwar O., Singhal A., **Dutta T.**, Samanta A., [Efficiency Analysis of Organic Rankine Cycle](#), CHEMCON 2018, Chandigarh, India, December 2018 (Accepted).
2. **Dutta T.**, Sinhamahapatra K. P., [New Design of a Compact Mixing Chamber of Hot Blast Stove](#), AISTECH 2017, Nashville, Tennessee, USA, May 2017.
3. **Dutta T.**, Sinhamahapatra K. P., Bandyopadhyay S. S., [Experimental Investigation and CFD analysis of Energy Separation in a Ranque – Hilsch Vortex Tube with Regard to Cold Orifice Diameter](#), CHEMCON 2010, Chennai, India, December 2010.
4. **Dutta T.**, Sinhamahapatra K. P., Bandyopadhyay S. S., [Parametric Study of Energy Separation in Cryogenic Vortex Tube Using a CFD Model](#), CHEMCON 2008, Chandigarh, India, December 2008.
5. **Dutta, T.**, Sinhamahapatra K. P., Bandyopadhyay S.S., [CFD Analysis of Energy Separation in a Cryogenic Vortex Tube](#), Conference on Advances in Space Science and Technology, Kharagpur, India, January 2008.
6. **Dutta, T.**, Sandilya, P., Bandyopadhyay S.S., [CFD Analysis of the Flow Phenomena in a Cryogenic Vortex Tube](#), CHEMCON 2007, Kolkata, India, December 2007.
7. **Dutta, T.**, Sandilya, P., and Bandyopadhyay S.S., [CFD Analysis of Energy and Phase Separation in a Cryogenic Vortex Tube](#), International Conference of High Speed Transatmospheric Air & Space Transportation, Hyderabad, India, June 2007.
8. Ghosh, S., **Dutta, T.**, Sandilya, P., Bandyopadhyay S.S., [CFD Analysis of a Cryogenic Vortex Tube Air Separator](#), CHEMCON 2006, Ankleshwar, India, December 2006.
9. **Dutta, T.**, Ghosal, S., Banerjee, S., [Development of a Simple Technique for Enhancing the Fluid Flow Through the Grinding Zone](#), AIMTDR Conference 2004, Vellore, India, December 2004.