

## **HEAT TRANSFER OF AN AXIALLY SYMMETRICAL JET MIXING COMPRESSIBLE DUSTY FLUID**

**D. K. DASH\* AND CHAND RAM\*\***

\*Professor in Mathematics, Christian College of Engineering & Technology  
Kailash Nagar, Bhilai, 490026, C.G., India.

\*\*Asst. Professor in Mathematics, Shri Shankaracharya Engineering College,  
Junwani, Bhilai, 490020, C.G., India.

### **Abstract**

The heat transfer of an axially symmetrical jet mixing compressible dusty fluid has been studied. Assuming the velocity and temperature in the jet to differ only slightly from that of the surrounding stream, a perturbation method has been employed to linearize the basic differential equations. The linearized boundary layer equations have been solved by using Hankel and Laplace transform technique. Numerical computations have been made to discuss the profiles of perturbed fluid phase temperature and perturbed particle phase temperature.

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