Scaled distance.

## **5. CONCLUSION**

Total of the ten open cut coal mines of Jharia coalfields were selected under this study. Total of 325 blast data was considered during the study. It has been observed that random forest method provided predicted values of PPV which was closer than the ANN predicted values to the actual values obtained at mine site. Therefore we can conclude that Random forest method is better for prediction of PPV values. Further the prediction model using random forest method at 95% confidence level has been proposed which will be very handy and useful for mining engineers of all open cut mines of Jharia Coalfield. It will be very convenient to design the blast for controlling the blast induced ground vibration for greenfield projects too.

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