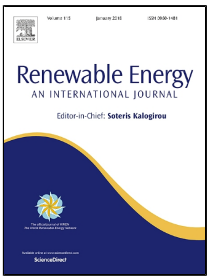
Accepted Manuscript



Short Term Wind Power Forecasting using Hybrid Variational Mode Decomposition and Multi-Kernel Regularized Pseudo Inverse Neural Network

Jyotirmayee Naik, Sujit Dash, P.K. Dash, Ranjeeta Bisoi

PII:	S0960-1481(17)31089-3
DOI:	10.1016/j.renene.2017.10.111
Reference:	RENE 9399
To appear in:	*Renewable Energy*
Received Date:	24 February 2017
Revised Date:	26 October 2017
Accepted Date:	31 October 2017

Please cite this article as: Jyotirmayee Naik, Sujit Dash, P.K. Dash, Ranjeeta Bisoi, Short Term Wind Power Forecasting using Hybrid Variational Mode Decomposition and Multi-Kernel Regularized Pseudo Inverse Neural Network, *Renewable Energy* (2017), doi: 10.1016/j.renene.2017.10.111

HIGHLIGHTS

1. A Multi- Kernel regularized Pseudo Inverse Neural Network is used for wind power forecasting.
2. Variational Mode decomposition is used to decompose the wind power signals.
3. Comparison with EMD based Multi- Kernel regularized Pseudo Inverse Neural Network is presented.
4. A novel Water Cycle algorithm is proposed to optimize multi-kernel parameters.
5. The algorithm execution time is reduced substantially by using randomly selected support vectors from the data.