



Cubic function approximation:

PSO parameters	Sigmoid activation function	Hyperbolic Tangent activation function	Linear activation function
Swarm size	100	100	100
Informants	10	15	6
Epsilon	0.2	0.2	0.2
Alpha range	0.92	0.89	0.9
Position range	-0.1 to 0.09	-0.01 to 0.09	-0.01 to 0.09
Velocity range	0.05 to 0.25	0.05 to 0.25	0.05 to 0.25
Cognitive component	1	1	1
Social component	3	2.7	3
Hidden Layer nodes	8	8	8
Least MSE (approx)	0.0083	0.1	0.14

Figure 3