EXPERIMENTAL STUDY OF PHYSICAL PROPERTIES OF MAGNETIC FLUID IN TERMS OF SIZE DISTRIBUTION PARAMETERS BY SAMPLE MEAN MONTE CARLO METHOD

JITENDRA BINWAL

Mody Institute of Technology & Science,
(Deemed University u/s 3 of the U.G.C. Act, 1956)
Faculty of Engineering & Technology,
Department of Science & Humanities,
Lakshmangarh-332311,
District: Sikar, Rajasthan, India.

Abstract

Viscosity of magnetic fluid and magnetization law for magnetic fluid are obtained in terms of size distribution parameters. Using the asymptotic values of Langevin function for small and large values of its argument, it is shown that the best possible values of size distribution parameters for a given sample of magnetic fluid may be calculated from the experimentally determined values of magnetization at different values of applied magnetic field.