Fuzzy Logic Approach in Fatigue of the Laminated Composites used for Manufacturing of Electrical Equipments’ Components

Daniela Popescu, Denisa Rusinaru and Cristian Bratu
University of Craiova/Faculty of Electrical Engineering, Craiova, Romania, dpopescu@elth.ucv.ro

Abstract—Fuzzy logic is a convenient method for expressing vague categories of information and provides the tools for performing logic operations with these information by using of fuzzy sets. In this work, the fuzzy system was developed for analyzing fatigue aspects of the laminated composites used in manufacturing of insulating components of the new generation electrical equipments. Using experimental data as model validation, a fuzzy model was developed for a glass tissue laminated composite. Compare with other methodologies, more information is found in this kind of results, having also a relatively wide applicability.