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## **Preface**

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The entire work on Fuzzy Approach to Chokes and coils Designing has been presented in simplified form under following three chapters –

- I. World of fuzzy logic**
- II. Fuzzy Design Methodology**
- III. Summary and Conclusions**

The *chapter-I* takes brief account of philosophical development of Fuzzy Sets and Fuzzy Logic, and workers involved in the pioneering work in Fuzzy. It also surveys the relevant literature concerning the Fuzzy Sets in general sense and applications of Fuzzy Logic in particular to the area of design simulations on computer.

To dilute and resolve the drawbacks of past design practices, we did developed a (FIS) for designing a chokes and coils based on conventional design algorithms. However, the methodology remained founded heavily on mathematical models, and failed to accommodate and transcribe the human knowledge, intuition and experience in the design process.

We took up the investigation of new methodology of a chokes and coils designing to be founded on the promising concepts of Fuzzy Set Theory and Fuzzy Logic.

The *chapter-II* is devoted to fuzzy based design methodology Design methodology has been developed for the chokes and coils on the platform of Fuzzy Logic.

In *chapter-III* work is concluded with overall summary of research work along with the sample results.

References and database is given in the *appendix*.

