Fractals

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Abstract

0 Keywords & Preliminaries

Definition 0.1. An **'ideal' fractal** is a scale independent geometric object. Scale independent meaning that the scale on which the object is viewed does not affect the appearance. [1]

Definition 0.2. A **'real' fractal** is a physical object which resembles a fractal one over certain scales. However, the object size sets an upper limit on the scale at which the fractal properties are observed, and of course, the resolution sets, a less defined, lower bound. [1]

1 Background & Theory

This labs concerns the analysis of fractal growth under varying conditions. The fractals in this experiment were grown using zinc sulphate solutions. The fractals were grown in a thin plastic dish, with a plastic top. There is a conducting ring on the edge of the dish, and a thin stick of graphite in the centre, with a voltage applied across. Measurements were taken, with both voltage across the solution and molarity of the solution being varied.

2 Procedure

3 Results

4 Discussion

Appendix

References

[1] Junior sophister laboratory handbook: Fractals, Jul 2023.