

Dielectrophoresis

**The behaviour of neutral matter in
nonuniform electric fields**

H. A. POHL

Dielectrophoresis is the translational motion of neutral matter caused by polarization effects in a nonuniform electrical field. This phenomenon should be distinguished from electrophoresis where motion is caused by the response to free charge on a body in an electric field (uniform or nonuniform). Dielectrophoresis is now widely used for mineral, colloidal and, in particular, cellular biological studies. This book is unique in that it is the first text to consolidate all the current knowledge and applications of this technique. Numerous applications of the technique are discussed, but the biological applications covered are by far the most exciting aspect of this book. There are other potential applications for this technique which the author has not been able to include in this volume. It should thus provide stimulating reading for imaginative research workers in the physical, medical and biological sciences, and for graduate students in the same field.

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