

**On the interrelation of dielectrophoresis, electrorotation, and electro-orientation: A study on chicken red blood cells.**

Lippert, S., Gimsa, J., 2001. In S. Grimnes, O. G. Martinsen, H. Bruvoll (Eds.): Proceedings of the XI international conference on electrical bio-impedance. 165–168, University Oslo, Oslo. ISBN 82-91853-05-3. XI international conference on electrical bio-impedance, 17.-21. June. Oslo, Norway.

**Abstract:** *To investigate the interrelations of electrorotation (ER), dielectrophoresis (DP) and electro-orientation (EO), we determined the behavior of chicken red blood cells in the frequency and conductivity ranges of 100 Hz - 150 MHz and 1 mS/m - 600 mS/m, respectively, These cells are a suitable model for a three-axial general ellipsoid with an axial ratio of 15.4  $\mu\text{m}$ : 8  $\mu\text{m}$ : 3.7  $\mu\text{m}$ . Our investigations show that the effects of DP, ER and EO are not independent and can be interpreted by the same model.*

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