- Short Communications
- Published: 29 August 2010

Regularities of electrolytic dissociation of oxalic acid homologues

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Russian Journal of Electrochemistry **volume 46**, pages952–956 (2010)Cite this article

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Abstract

Using a method proposed earlier by the authors, the degrees of dissociation in individual steps (including the "partial" degrees of dissociation in the second steps) and the concentrations of ionized and nonionized forms in dilute (0.1–10 mM) solutions are calculated for eight homologues of oxalic acids, namely, malonic, succinic, glutaric, adipic, pimelic, suberic, azelaic, and sebacic. Simple empirical equations general for this series were proposed for approximate calculating the first and the second degrees of dissociation and the pH in dilute solutions of these acids.

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Original Russian Text © R.K. Kvaratskheliya, E.R. Kvaratskheliya, 2010, published in Elektrokhimiya, 2010, Vol. 46, No. 8, pp. 1013–1017.

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Cite this article

Kvaratskhelia, R.K., Kvaratskhelia, E.R. Regularities of electrolytic dissociation of oxalic acid homologues. *Russ J Electrochem* **46**, 952–956 (2010).
https://doi.org/10.1134/S1023193510080148

Download citation

- Received15 April 2008
- Accepted09 December 2009
- Published29 August 2010
- Issue DateAugust 2010
- DOIhttps://doi.org/10.1134/S1023193510080148

Key words

- **saturated dicarboxylic acids**
- **degree of dissociation**
- **dissociation constant**
- **dissociation step**
- **hydrogen ions**

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