



Deposited via The University of Leeds.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/148689/>

Version: Accepted Version

---

**Article:**

Julrat, S, Chongcheawchamnan, M and Robertson, ID (2015) Corrigendum to "Characterisation of the dielectric properties of rubber latex from 0.5 to 33 GHz" [Biosyst Eng 125 (2014) 1–8]. *Biosystems Engineering*, 139. pp. 165-166. ISSN: 1537-5110

<https://doi.org/10.1016/j.biosystemseng.2015.09.001>

---

Copyright © 2014 IAgRE. Published by Elsevier Ltd. All rights reserved. Licensed under the Creative Commons Attribution-Non Commercial No Derivatives 4.0 International License (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

**Reuse**

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.

# Corrigendum to “Characterisation of the dielectric properties of rubber latex from 0.5 to 33 GHz”

Sakol Julrat<sup>1</sup>, Mitchai Chongcheawchamnan<sup>1</sup> and Ian D. Robertson<sup>2</sup>

<sup>1</sup>Department of Computer Engineering, Faculty of Engineering, Prince of Songkla University, 90112, Hatyai, Songkhla, Thailand

<sup>2</sup>Institute of Microwaves and Photonics, University of Leeds, Leeds LS2 9JT, UK

E-mail: mitchai@coe.psu.ac.th

The authors regret that the following amendments to the original publication are required:

Page5, column2, line 5. Equation (5). (Correct “ $\sigma/\omega\varepsilon_{0,space}$ ”). (The original equation, please refer to the published article):

$$\varepsilon^*(\omega, T, DRC) = \varepsilon_{\infty,d} + \frac{\Delta\varepsilon_1}{1+i\omega\tau_1''(T,DRC)} + \frac{\Delta\varepsilon_2}{1+i\omega\tau_2''(T,DRC)} - i \frac{\sigma_d}{\omega\varepsilon_{0,space}} \quad (5),$$

Page 5, column 2, line 8.

“ $\varepsilon_{0,d}$  is static permittivity”

Should read:

“ $\varepsilon_{0,space}$  is permittivity of free space ( $8.854 \times 10^{-12}$  F/m).”

Page 5, column 2, line 10.

“Next the nonlinear regression analysis was applied in Equation (5) to predict  $\sigma_d$ ,  $\varepsilon_{0,d}$ ,  $\varepsilon_{\infty,d}$ ,  $\Delta\varepsilon_1$  and  $\Delta\varepsilon_2$ . The initial value of  $\sigma_d$  was chosen to be small ( $0.5 \times 10^{12}$ )”

Should read:

“Next the nonlinear regression analysis was applied in Equation (5) to predict  $\sigma_d$ ,  $\varepsilon_{\infty,d}$ ,  $\Delta\varepsilon_1$  and  $\Delta\varepsilon_2$ . The initial value of  $\sigma_d$  was chosen to be small (0.3)”

Page5, column 2, line 14.

“The initial value of  $\varepsilon_{0,d}$  was set to be twice of  $\varepsilon_{\infty,d}$ .”

Should remove.

Page5, column 2, line 20.

“ $\varepsilon_{0,d} \in [8,16]$ ”

Should remove.

Page5, column 2, line 22.

“It is shown that  $\sigma_d$  changes only with temperature.  $\varepsilon_{\infty,d}$ ,  $\varepsilon_{0,d}$  and  $\Delta\varepsilon_1$  changes with DRC, and  $\Delta\varepsilon_2$  changes with DRC and temperature.”

Should read:

“It is shown that  $\sigma_d$  changes with temperature and DRC.  $\varepsilon_{\infty,d}$  and  $\Delta\varepsilon_1$  changes with DRC, and  $\Delta\varepsilon_2$  changes with DRC and temperature.”

Table 2. A correct version of table 2 follows (the original table, please refer to the published article):

Temp.(°C)	DRC (%)	Double relaxation model						R-square
		$\sigma_d$ ( S.m <sup>-1</sup> )	$\varepsilon_{\infty,d}$	$\Delta\varepsilon_1$	$\Delta\varepsilon_2$	$\tau_1''$ (ps)	$\tau_2''$ (ps)	
10	60.80	0.45	5.50	4.50	12.30	14.30	8.76	0.97
	45.05	0.40	5.60	4.90	22.50	12.40	8.88	0.96
	37.79	0.38	6.20	4.80	31.00	13.50	9.75	0.94
	23.25	0.35	6.40	5.60	38.50	13.20	10.40	0.98
15	60.80	0.45	5.50	4.50	12.00	12.50	8.28	0.97
	45.05	0.45	5.60	4.90	22.00	11.80	8.14	0.97
	37.79	0.43	6.20	4.80	29.80	11.10	8.90	0.97
	23.25	0.38	6.40	5.60	37.50	10.60	9.49	0.99
27	60.80	0.55	5.50	4.50	11.80	10.70	6.22	0.99
	45.05	0.55	5.50	4.90	21.10	9.63	6.33	0.98
	37.79	0.50	5.00	4.80	28.80	8.91	6.67	0.98
	23.25	0.45	4.50	5.20	36.00	8.78	7.01	0.99
40	60.80	0.65	6.50	4.50	11.00	8.51	4.64	0.99
	45.05	0.65	6.50	4.90	20.50	7.26	4.97	0.99
	37.79	0.60	6.00	4.80	27.30	6.68	5.26	0.99
	23.25	0.52	5.20	5.60	33.50	6.69	5.61	0.99

The authors would like to apologise for any inconvenience caused.