



## Correction: Terahertz spectroscopy of the helium endofullerene He@C<sub>60</sub>

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 Correction for 'Terahertz spectroscopy of the helium endofullerene He@C<sub>60</sub>' by Tanzeeha Jafari *et al.*,  
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Eqn (12) in the published version of this manuscript contained some errors. The equation should have read as:

$$\langle l_f \parallel T_k \parallel l_i \rangle = (-1)^{l_f} \sqrt{\frac{(2l_f + 1)(2k + 1)(2l_i + 1)}{4\pi}} \begin{pmatrix} l_f & k & l_i \\ 0 & 0 & 0 \end{pmatrix}$$

In addition, the published version of this manuscript contains missing information in some of the sentences. The corrected sentences are listed as follows:

### 1. Introduction:

 Page 9944, left column, 1st paragraph – 'The incarceration of large noble gas atoms results in the structural and electronic distortion of C<sub>60</sub> which has been examined by IR and Raman,<sup>34</sup> NMR,<sup>37</sup> X-ray<sup>38</sup> and electronic spectroscopy.<sup>39</sup>'

 Page 9944, left column, 2nd paragraph – 'It was spotted by mass spectrometry when the <sup>4</sup>He atom was incorporated in C<sub>60</sub> as the highly accelerated C<sub>60</sub><sup>+</sup> ions struck with helium gas<sup>9</sup> and later found in fullerenes produced by arc discharge in the He gas.<sup>6</sup>'

### 2. Theory:

 Page 9944, left column, 1st paragraph – 'Also, we ignore the effect of the translational motion of C<sub>60</sub> in the crystal lattice and its molecular vibrations.'
 Page 9945, right column, 1st paragraph – 'Factor  $(\eta^2 + 2)/3$  is the enhancement of radiation electric field at the molecule embedded in dielectric<sup>47</sup> and  $\eta$  is the index of refraction (for C<sub>60</sub>  $\eta = 2$ , ref. 48).'

### 3. Discussion:

 Page 9947, left column, 2nd paragraph – 'Although the anharmonic contributions to the H<sub>2</sub> potential have been determined experimentally,<sup>15,22,23</sup> a more detailed comparison with He is not meaningful as firstly, H<sub>2</sub> has translation–rotation coupling terms in the potential and secondly, it misses the V<sub>6</sub> term in the potential fit.'
 Page 9947, right column, Fig. 3 caption – 'The anharmonic terms in the potential, V<sub>4</sub> and V<sub>6</sub>, split the energy levels with different  $l$  and each energy level has the unique  $l$  value within the spherical symmetry, on the right.'
 Page 9947, right column, 1st paragraph – 'In general, the interaction of neutral A with C<sub>60</sub> can be separated into repulsive interaction and electrostatic interaction expanded in induction and dispersion terms.<sup>33</sup> Since He has no electric dipole nor quadrupole moment the induction terms are zero.'
 Page 9947, right column, 2nd paragraph – 'To further validate the potential parameters of He@C<sub>60</sub> obtained from the fit of single high temperature spectra we compare the temperature dependence of line intensities of measured and calculated spectra, Fig. 4.'
 Page 9948, left column, 1st paragraph – 'The dipole moment of He is induced by the displacement from the C<sub>60</sub> cage center.'  
 The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

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