Errata to “Energy Levels of Light Nuclei, A = 13 – 15” (Nuclear Physics A268 (1976) 1)

I. in Table 2 of the Introduction:

a. under $^{13}$C, in the $\delta$ column: omit the first value of $-(0.69 \pm 0.05)$, and under $^{13}$N in the $\delta$ column, omit the first 4 values of $-0.07 \pm 0.13$, $0.82^{+1.2}_{-0.6}$, $\geq 0.83 \pm 0.29$ and $-0.04 \pm 0.14$.

b. under $^{13}$C, change to these values:

\[
3.85 \to 3.09, \Gamma_\gamma = (0.5 \pm 0.2) \times 10^{-6}, \Gamma_\gamma / \Gamma_W = 1.3 \pm 0.3; \\
3.85 \to 3.68, E1, \Gamma_\gamma / \Gamma_W = (1.0 \pm 0.1) \times 10^{-2}.
\]

c. under $^{14}$C, change to these values:

\[
6.73 \to 6.09, E2, \Gamma_\gamma / \Gamma_W = 1.1 \pm 0.6; \\
7.01 \to 6.09, 2^+ \to 1^-, E1, \Gamma_\gamma / \Gamma_W = (2.3 \pm 1.2) \times 10^{-3}.
\]

d. under $^{14}$N, change to these values:

\[
6.44 \to 0, \Gamma_\gamma / \Gamma_W = (4.1 \pm 0.2) \times 10^{-2}.
\]

e. under $^{15}$C, change to these values:

\[
0.74 \to 0, \Gamma_\gamma / \Gamma_W = 0.44 \pm 0.01.
\]

f. under $^{15}$N, change to these values:

\[
7.30 \to 0, E1, \Gamma_\gamma / \Gamma_W = (1.6 \pm 0.6) \times 10^{-2}; \\
M2, \Gamma_\gamma / \Gamma_W = 0.4 \pm 0.2; \\
11.62 \to 0, \Gamma_\gamma / \Gamma_W = (2.7 \pm 0.1) \times 10^{-2}.
\]

I am greatly indebted to Prof. P.M. Endt for his careful study of this table and for pointing out errors to his colleague who is a neophyte, in particular regarding $\gamma$-ray strengths.

II. in Table 14.11, Energy levels of $^{14}$N:

<table>
<thead>
<tr>
<th>$E_x$ (MeV)</th>
<th>$J^\pi; T$</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.5</td>
<td>(2$^-$); 1</td>
</tr>
<tr>
<td>23.0</td>
<td>(0, 1, 2)$^-$; 1</td>
</tr>
</tbody>
</table>

These changes also have to be made in Figs. 7 and 9 [Energy level diagram for $^{14}$N, and the $A = 14$ isobar diagram.]

I am greatly indebted to Prof. H.T. Richards for his careful study of the evidence concerning the $J^\pi$ of these states and for suggesting the assignments shown above.
in Table 13.7, under the row of $\Gamma_{\gamma_2}$ (eV): add footnote e to the 2nd and 3rd columns. (Added on 07/14/2015)

in Table 13.8, under 2nd column, add footnote f to the value of 5.3. (Added on 07/14/2015)

in Table 13.16, under 1st column, add footnote e to the value of 15.8. (Added on 07/15/2015)

in $^{13}$C, reaction 72: change “The population of $^{73}$C$^*$(3.09, 3.85)…” to read as The population of $^{13}$C$^*$(3.09, 3.85)...

in Table 13.27: change BE68B to BE68T/1968BE2C under footnote A; footnote i is referred to the row of $E_{\text{res}} = 1.734 \pm 6$ (MeV ± keV) as best guess.

in $^{13}$N, reaction 20: change “(FU74A)” to “(FU75/1975FU01)”. (Added on 07/22/2015)

in $^{13}$N, reaction 28: change “…also $^{13}$N$^*$(2.37, 3.51 ± 3.55))” to read as …also $^{13}$N$^*$(2.37, 3.51 ± 3.55)); change NA76I to NA76/1976NA1P.

in $^{13}$N, reaction 36: change “…see reaction 74 in $^{13}$C.” to read as “…see reaction 75 in $^{13}$C.”

in $^{13}$N, reaction 42: change “See $^{16}$O in (AJ76).” to read as “See $^{16}$O in (AJ77).”

in $^{15}$O, reaction 3: change “See ((AJ75)).” to read as “See ((AJ74/1974AJ01)).” (Added on 07/22/2015)

in Table 14.4, footnote c: change “…shown in Table 14.1.” to read as “…shown in Table 14.3.” (Added on 09/08/2015)

in $^{14}$C, reaction 15: change $^{13}$C(n, t)$^{10}$B to $^{13}$C(n, t)$^{11}$B.

in $^{14}$N, Table 14.12: footnote c was not labeled anywhere in the table. (Added on 08/25/2015)

in $^{14}$N, Table 14.15: add footnote b to the 6th column title “Refs.”. (Added on 08/25/2015)

in $^{14}$N, reaction 14: change “…$^{12}$C in (AJ76)…” to read as $^{12}$C in (AJ75).

in $^{14}$N, reaction 16, first paragraph: change Table 14.6 to Table 14.16.

in $^{14}$N, reaction 23, change all PO75H to PO75F/1975PO10.

in $^{14}$N, reaction 38, last line: change See also $^{15}$O to See also $^{15}$N.
in $^{14}\text{N}$, reaction 45: change Table 12.27 to Table 14.27.

in $^{14}\text{N}$, reaction 48, second paragraph: change “...$^{18}\text{F}$ in (AJ71, AJ77) to $^{18}\text{F}$ in (AJ72, AJ78).”

in $^{14}\text{N}$, reaction 65, last paragraph: change $^{18}\text{F}$ in (AJ77) to $^{18}\text{F}$ in (AJ78).

in Table 15.4, add $^c$ for $E_x = 10.7019 \pm 0.3$ (MeV $\pm$ keV) in the first column. Note: This footnote is added by the best guess; see abstract of (KO76A/1976KO11). (Added on 10/13/2015)

in Table 15.13, $9.2 \pm 0.5$ in column (TH67L/1967TH05) should be at the same row with C $\rightarrow$ 9.155.