

## Additions and Corrections

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Bridged Heterocyclium Dicationic *closo*-Icosahedral Perfluoroborane, Borane, and Carborane Salts via Aqueous, Open-Air Benchtop Synthesis

Page 2714. The following corrections and changes are needed in the Supporting Information:

- Corresponding author e-mail address needs to be updated. The scott.shackelford@edwards.af.mil e-mail address is now inactive, and scottshack@roadrunner.com replaces it.
  - Table of Contents, Page 2, first salt listed under “**General Conventional Alkylation Procedure**,” [1,4-di-(4-amino-1,2,4-triazolium)-2-butyne-1N][Br]<sub>2</sub> (**1**), is incorrect; the “-1N” designation behind “butyne” should be removed and placed behind “triazolium” so that the salt name reads [1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne][Br]<sub>2</sub> (**1**).
  - Table of Contents, Page 2, last salt listed under “**General Conventional Alkylation Procedure**,” [*trans*-1,4-di-(1-methylimidazolum)-2-butene-3N][Br]<sub>2</sub> (**5**), is incorrect; the “-3N” designation behind “butene” should be removed and placed behind “imidazolium” so that the salt name reads, [*trans*-1,4-di-(1-methylimidazolum-3N)-2-butene][Br]<sub>2</sub> (**5**).
  - Table of Contents, Page 3, second salt entry, listed as [1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne-1N][*closo*-B<sub>12</sub>F<sub>12</sub>] (**18**), is incorrect; the “-1N” designation behind “butyne” should be removed so that the salt name reads, [1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne][*closo*-B<sub>12</sub>F<sub>12</sub>] (**18**).
  - Table of Contents, Page 3, the last salt name above the “**Melting Point Detailed Data**” entry, listed as [1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne-1N][*closo*-B<sub>12</sub>F<sub>12</sub>] (**18**), is incorrect; the “-1N” designation behind “butyne” should be removed so that the salt name reads, [1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne][*closo*-B<sub>12</sub>F<sub>12</sub>] (**18**).
- Page 5, first salt listed, [1,4-di-(4-amino-1,2,4-triazolium)-2-butyne-1N][Br]<sub>2</sub> (**1**), is incorrect; the “-1N” designation behind “butyne” should be removed and placed behind “triazolium” so that the salt name reads, [1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne][Br]<sub>2</sub> (**1**).
  - Page 6, last salt entry, [*trans*-1,4-di-(1-methylimidazolum)-2-butene-3N][Br]<sub>2</sub> (**5**), is incorrect; the “-3N” designation behind “butene” should be moved and placed behind “methylimidazolium” so that the salt name reads, [*trans*-1,4-di-(1-methylimidazolum-3N)-2-butene][Br]<sub>2</sub> (**5**).
  - Page 8, first salt entry, [1,4-di-(4-amino-1,2,4-triazolium)-2-butyne-1N][*closo*-B<sub>12</sub>H<sub>12</sub>] (**6**), is incorrect; the “-1N” designation behind “butyne” should be removed and placed behind “triazolium” so that the salt name reads, [1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne][*closo*-B<sub>12</sub>H<sub>12</sub>] (**6**).
  - Page 10, first line under the salt name, [*trans*-1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butene][*closo*-B<sub>12</sub>F<sub>12</sub>] (**16**), the reactant salt, 1,4-di-(4-amino-1,2,4-triazolium-1N)-*trans*-2-butene dibromide (**2**), for consistency, could be altered to read, *trans*-1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butene dibromide (**2**).
  - Page 10, second line under the salt name, [*trans*-1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butene][*closo*-B<sub>12</sub>F<sub>12</sub>] (**16**); the formula K<sub>2</sub>[B<sub>12</sub>H<sub>12</sub>] is incorrect and should be changed to read K<sub>2</sub>[B<sub>12</sub>F<sub>12</sub>];
  - Page 10, the last salt entry, [1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne-1N][*closo*-B<sub>12</sub>F<sub>12</sub>] (**18**); is incorrect; the “-1N” designation behind “butyne” should be removed so that the salt name reads [1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne][*closo*-B<sub>12</sub>F<sub>12</sub>] (**18**);
  - Page 11, first line, the formula K<sub>2</sub>[B<sub>12</sub>H<sub>12</sub>] is incorrect and should be changed to read K<sub>2</sub>[B<sub>12</sub>F<sub>12</sub>];
  - Page 11, first line under the last salt name at the bottom of the page, [*trans*-1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butene][*closo*-B<sub>12</sub>F<sub>12</sub>] (**16**); the reactant salt, 1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne dibromide (**2**), is incorrect; the term “butyne” should

be changed to “butene” so that this reactant salt name reads, 1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butene dibromide (**2**);

- (n) Page 11, second line under the last salt name at the bottom of the page, [**trans-1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butene**][**closo-B<sub>12</sub>F<sub>12</sub>**] (**16**):, the formula  $K_2[B_{12}H_{12}]$  is incorrect and should be changed to read  $K_2[B_{12}F_{12}]$ ;
- (o) Page 14, first line under the salt product name, [**trans-1,4-di-(1-amino-1,2,3-triazolium-3N)-2-butene**][**closo-B<sub>12</sub>F<sub>12</sub>**] (**17**):, 1,4-di-(1-amino-1,2,3-triazolium-3N)-2-butyne dibromide (**3**), is incorrect; the term “butyne” should be changed to “butene” so that this reactant salt name reads, 1,4-di-(1-amino-1,2,3-triazolium-3N)-2-butene dibromide (**3**);
- (p) Page 14, second line under the salt name, [**trans-1,4-di-(1-amino-1,2,3-triazolium-3N)-2-butene**][**closo-B<sub>12</sub>**

**F<sub>12</sub>**] (**17**):, the formula  $K_2[B_{12}H_{12}]$  is incorrect and should be changed to read  $K_2[B_{12}F_{12}]$ ;

- (q) Page 16, at the top of the page, first line under the product salt name, [**1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne**][**closo-B<sub>12</sub>F<sub>12</sub>**] (**18**):, 1,4-di-(1-amino-1,2,3-triazolium-3N)-2-butyne dibromide (**1**), is incorrect; the term “1,4-di-(1-amino-1,2,3-triazolium-3N)” should be changed to “1,4-di-(4-amino-1,2,4-triazolium-1N)” so that this reactant salt name reads, 1,4-di-(4-amino-1,2,4-triazolium-1N)-2-butyne dibromide (**1**).

**Supporting Information Available.** This material is available free of charge via the Internet at <http://pubs.acs.org>.

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