



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)
/ Publications of IISER Mohali (/jspui/handle/123456789/4)
/ Research Articles (/jspui/handle/123456789/9)

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/3446>

Title:	A Bottleable Imidazole-Based Radical as a Single Electron Transfer Reagent
Authors:	Adhikari, D. (/jspui/browse?type=author&value=Adhikari%2C+D.)
Keywords:	Electron Transfer Molecule tetracyanoethylene Catalytic reduction
Issue Date:	2020
Publisher:	American Chemical Society
Citation:	Journal of Organic Chemistry
Abstract:	Reduction of 1,3-bis(2,6-diisopropylphenyl)-2,4-diphenyl-1H-imidazol-3-ium chloride (1) resulted in the formation of the first structurally characterized imidazole-based radical 2. 2 was established as a single electron transfer reagent by treating it with an acceptor molecule tetracyanoethylene. Moreover, radical 2 was utilized as an organic electron donor in a number of organic transformations such as in activation of an aryl-halide bond, alkene hydrosilylation, and in catalytic reduction of CO ₂ to methoxyborane, all under ambient temperature and pressure.
URI:	https://pubs.acs.org/doi/10.1021/acs.joc.0c02465 (https://pubs.acs.org/doi/10.1021/acs.joc.0c02465) http://hdl.handle.net/123456789/3446 (http://hdl.handle.net/123456789/3446)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format	
Need to add pdf.odt (/jspui/bitstream/123456789/3446/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text	View/Open (/jspui/bitstream/123456789/3446/1/Need%20to%20add%20pdf.odt)

[Show full item record \(/jspui/handle/123456789/3446?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/3446/statistics\)](#)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.