



CV - Ruggero CURCI

Ruggero Curci is serving as Professor Adjunct (Physical Organic Chemistry) at the Chemistry Department, Brown University since 1996 to present.

Since 1975, he is also Professor of Chemistry (Organic Chemistry Chair) at the Department of Chemistry of University of Bar, Italy.

After earning his doctorate degree (*magna cum laude*) in Chemistry in 1961 at University of Bari, and a stint in the Italian Army (1961-1962), he undertook teaching and research at University of Bari where he was appointed Assistant Professor in 1964. In 1968 Dr. Curci moved to the University of Padova where he earned the "Libera Docenza" (a post equivalent to that of Associate Professor with tenure) in 1970.

In the year 1975, he was appointed Full Professor and was called to the Chair of Organic Chemistry of University of Palermo, Italy. In 1977 he then returned to University of Bari as a Full Professor (Organic Chemistry). In 1988 he served as Director, CNR (Italian Research Council) Center "MISO" (Innovative Methods in Organic Synthesis).

Actively engaged in collaborative research, Prof. Curci spent several long and short periods at Brown University. To quote a few, he was at Brown first as a NATO-Fellow and Visiting Assistant Professor (1966-1967), then Fulbright Fellow and Vtg. Associate Professor (Summer 1972), and again as Visiting Professor in 1996-1997.

In 1978, for a period of two months, he was Visiting Professor at University of Puerto Rico. During the last decades he was invited lecturer at several US Universities (UCLA, University of Chicago, University of Indiana, UMSL, etc.)

Since 1968, prof. Curci is a member of the American Chemical Society and of the Italian Chemical Society. He is the author of over 100 research articles on major scientific journals, mostly on peroxide reaction mechanisms, which represent his main research interests. His current research interests include: the chemistry of dioxiranes and catalytic oxygen-transfer processes.

In the year 2000 he was awarded by the SCI (Italian Chemical Society, Rome) the gold medal "A. Mangini" in recognition of his contributions in the field of Peroxide Reaction Mechanisms and Dioxirane Chemistry.

LIST OF PUBLICATION (Since 1996)

- 119 "A Novel Approach to the Efficient Oxygenation of Hydrocarbons Under Mild Conditions. Superior Oxo Transfer Selectivity Using Dioxiranes ",
Curci, R.; D'Accolti, L.; Fusco, C. *Acc. Chem. Res.* **2006**, 39, 1-9.
118. "Direct Functionalization of C-H Bonds by Methyl(trifluoromethyl)dioxirane"
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117. "Direct Functionalization of C-H Bonds by Dimethyldioxirane"
Curci, R.; D'Accolti, L.; Fusco, C. in *Encyclopedia of Reagents for Organic Synthesis (EROS)*; L. A. Paquette, Ed.; John Wiley & Sons, Ltd.; New York **2004**. *In press*
116. "Concerning the Efficient Conversion of Epoxy Alcohols into Epoxy Ketones Using Dioxiranes"
D'Accolti, L.; Fusco, C.; Annese, C.; Rella, M. R.; Turteltaub, J. S.; Williard, P. G.; Curci, R. *J. Org. Chem.* **2004**, 69, 8510-8513.
115. "Selective oxidation of acetylenic 1,4-diols with Dioxiranes in comparison with the Methyltrioxorhenium-Hydrogen Peroxide oxidant"
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114. "Oxyfunctionalization of Non-Natural Targets By Dioxiranes. 5. Selective Oxidation of Hydrocarbons Bearing Cyclopropyl Moieties"
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113. "The Fenton Reaction Revisited for the Oxidative Degradation of 2,4-Dichlorophenol"
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111. "Dioxiranes as Green Chemistry Reagents"
Detomaso, A.; Lovecchio, G.; Rella. M. R.; Curci, R. in *Green Chemistry in Italy, Iteruniversity Consortium "Chemistry for Environment"*; Albini, A.; Tundo, P., Ed.s.; Spinea, Venice (Italy); *Green Chemistry Series* **2002**, 4, 117-123.
110. "Chemo- and regioselective oxidation of adamantyl derivatives by dioxiranes"
D'Accolti, L.; Kang, P.; Khan, S.; Curci, R.; Foote, C. S. *Tetrahedron Lett.* **2002**, 43, 4649-4652.
109. "Oxyfunctionalization of Non-Natural Targets by Dioxiranes. 4. Efficient Oxidation of Binor S using Methyl(trifluoromethyl)dioxirane"
D'Accolti, L.; Fusco, C.; Lucchini, V.; Carpenter, G. B.; Curci, R. *J. Org. Chem.* **2001**, 66, 9063-9066.
108. "On the Hydroxylation of Bicyclo[2.1.0]pentane using Dioxiranes"
Curci, R.; D'Accolti, L.; Fusco, C. *Tetrahedron Lett.* **2001**, 42, 7087-7090.
107. "Oxidation of Natural Targets by Dioxiranes. 4. A Novel Approach to the Synthesis of N-Hydroxyamino Acids Using Dioxiranes"
Detomaso, A.; Curci, R. *Tetrahedron Lett.* **2001**, 42, 755-758.
106. "Synthesis and Reactivity of Manganese Tricarbonyl Complexes of the Centropolyindanes 10-Methyltribenzoquinacene and Fenestrindane"
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105. "Oxyfunctionalization of Non-Natural Targets by Dioxiranes. 3. Efficient Oxidation of Buckminsterfullerene C₆₀ with Methyl-(trifluoromethyl)dioxirane"
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104. "Chemo- and Diastereoselectivities in the Oxidation of Cyclopentenols with Dimethyldioxirane and Methyl(trifluoro-methyl)dioxirane"
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103. "Dioxirane Epoxidations of 1,1-Disubstituted Ethylenes. Probing for Radical Pathways by Computations and Experiments"
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102. "High-yield Synthesis of Nitriles by Oxidation of Aldehyde N,N-dimethylhydrazones with Dimethyldioxirane"
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101. "On the Reaction of Aminoxyls with Dioxiranes"
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97. "Oxyfunctionalization of Non-Natural Targets by Dioxiranes. 2. Selective Bridgehead Dihydroxylation of Fenestrindane"
Fusco, C.; Fiorentino, M.; Dinoi, A.; Curci, R.; Krause, R. A.; Kuck, D. *J. Org. Chem.* **1996**, *61*, 8681-8684.
96. "Oxidation of Natural Targets by Dioxiranes. 4. High Stereo- and Regioselective Conversion of Vitamin D₂ to Its (all-*R*) Tetraepoxide and C-25 Hydroxy Derivative"
Curci, R.; Detomaso, A.; Lattanzio, M. E.; Carpenter, G. B. *J. Am. Chem. Soc.* **1996**, *118*, 11089-11092.
95. "On the Triggering of Free Radical Reactivity of Dimethyldioxirane"
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