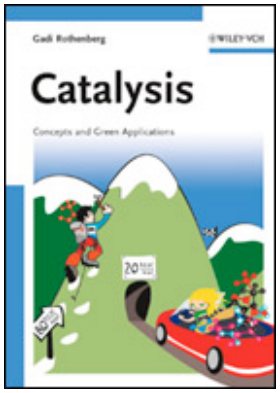
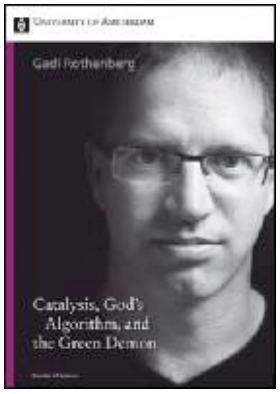
Gadi Rothenberg – Publications

Books:



Catalysis: concepts and green applications; G. Rothenberg, Wiley-VCH, Weinheim, 2008, ISBN 978-3-527-31824-7.

http://www.catalysisbook.org



Catalysis, God's Algorithm, and the Green Demon; G. Rothenberg, Amsterdam University Press, 2009, ISBN 978-90-5629-589-9.

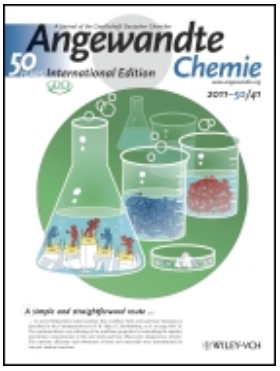
Articles in peer-reviewed international journals:

120. Selective auto-oxidation of ethanol over titania-supported molybdenum oxide catalysts: Structure and reactivity. C. Caro, N.R. Shiju, K. Thirunavukkarasu, M. Anil Kumar and G. Rothenberg, Adv. Synth. Catal., **2012**, *in press*.

119. Transferable basis sets of numerical atomic orbitals. M.J. Louwerse and G. Rothenberg, *Phys. Rev. B*, **2012**, 85, 035108.

118. Novel and effective copper-aluminum propane dehydrogenation catayst. J. Schäferhans, S. Gómez-Quero, D.V. Andreeva and G. Rothenberg, *Chem. Eur. J.,* **2011**, 17, 12254–12256.

117. A facile building-block syntesis of multifunctional lanthanide MOFs. S. Tanase, M.C. Mittelmeijer-Hazeleger, G. Rothenberg, C. Mathonière, V. Jubera, J.M.M. Smits and R. de Gelder, *J. Mater. Chem.,* **2011**, 21, 15544–15551.



115. Mesoporous silica with site-isolated amine and phosphotungstic acid groups: A solid catalyst with tunable antagonistic functions for one-pot tandem reactions. N.R. Shiju, A.H. Alberts, S. Khalid, D.R. Brown and G. Rothenberg, *Angew. Chem. Int. Ed.,* **2011**, 50, 9615 –9619. **Featured on the issue cover**.

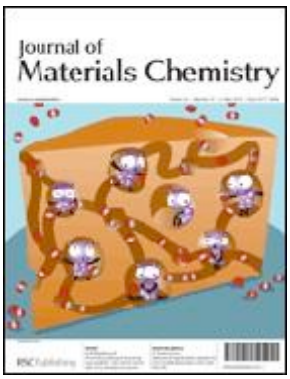
115. Reductive dealkylation of anisole and phenetole: towards practical lignin conversion. Z. Strassberger, S. Tanase and G. Rothenberg, *Eur. J. Org. Chem.*, **2011**, 5246–5249.

114. Bimetallic catalysts for the Fischer-Tropsch reaction. V.R. Calderone, N.R. Shiju, D. Curulla-Ferré and G. Rothenberg, *Green Chem.,* **2011**, 13, 1950–1959. **Featured on the issue cover**.

113. Kinetics and mechanism of plasmid DNA penetration through nanopores. E. Arkhangelsky, Y. Sefi, B. Hajaj, G. Rothenberg and V. Gitis, *J. Membr. Sci.,* **2011**, 371, 45–51.

112. Finding furfural hydrogenation catalysts via predictive modeling. Z. Strassberger, M. Mooijman, E. Ruijter, A.H. Alberts, A.G. Maldonado, R.V.A. Orru and G. Rothenberg, *Adv. Synth. Catal.,* **2010**, 352, 2201–2210.

111. Preventing sintering of Au and Ag nanoparticles in silica-based hybrid gels using phenyl spacer groups. N.M. Wichner, J. Beckers, G. Rothenberg and H. Koller, *J. Mater. Chem.*, **2010**, 20, 3840–3847. **Featured on the issue cover**.



110. Understanding catalytic biomass conversion through data mining. E.J. Ras, G. Rothenberg and B. McKay, *Top. Catal.,* **2010**, 53, 1202–1208.

109. Glycerol valorization: dehydration to acrolein over supported niobia catalysts. N.R. Shiju, G. Rothenberg and D.R. Brown, *Top. Catal.,* **2010**, 53, 1217–1223.

108. Sustainable selective oxidations using ceria-based materials. J. Beckers and G. Rothenberg, *Green Chem.*, **2010**, 12, 939–948.

107. Practical issues in catalytic and hydrothermal biomass conversion: concentration effects on reaction pathways. Z.W. Srokol and G. Rothenberg, *Top. Catal.,* **2010**, 53, 1258–1263.

106. Hydrocarbon oxidation with H_2O_2, catalyzed by iron complexes with a polydentate pyridine-based ligand. S. Tanase, J. Reedijk, R. Hage and G. Rothenberg, *Top. Catal.,* **2010**, 53, 1039–1044.

105. Interrelation of chemistry and process design in biodiesel manufacturing by heterogeneous catalysis. A.C. Dimian, Z.W. Srokol and G. Rothenberg, *Top. Catal.,* **2010**, 53, 1197–1201.

104. Predictive modeling in homogeneous catalysis: A tutorial. A.G. Maldonado and G. Rothenberg, *Chem. Soc. Rev.,* **2010**, 39, 1891-1902.

103. Catalysis: The best of both worlds. G. Rothenberg, *Nature Chemistry,* **2010**, 2, 9–10.

102. A facile route to ruthenium-carbene complexes and their application in furfural hydrogenation. Z. Strassberger, M. Mooijman, E. Ruijter, A.H. Alberts, C. de Graaff, R.V.A. Orru and G. Rothenberg, *Appl. Organomet. Chem.*, **2010**, 24, 142-146.

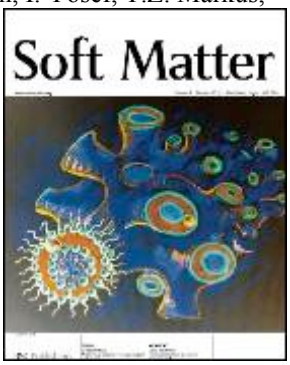
101. Selective hydrogenation of 5-ethoxymethylfurfural over alumina-supported heterogeneous catalysts. E.J. Ras, S. Maisuls, P. Haesakkers, G.J. Gruter and G. Rothenberg, *Adv. Synth. Catal.*, **2009**, 351, 3175–3185.

100. Lead-containing solid "oxygen reservoirs" for selective hydrogen combustion. J. Beckers and G. Rothenberg, *Green Chem.,* **2009**, 11, 1550–1554.

99. $Ce_{0.90}Bi_{0.10}O_2$: A Selective and Stable Catalyst for Clean Hydrogen Combustion. J. Beckers, A.F. Lee and G. Rothenberg, *Adv. Synth. Catal.*, **2009**, 351, 1557–1566.

98. $Ce_{0.95}Cr_{0.05}O_2$ and $Ce_{0.97}Cu_{0.03}O_2$: Active, selective and stable catalysts for selective hydrogen combustion. J. Beckers and G. Rothenberg, *Dalton Trans.*, **2009**, 5673–5682.

97. Chiral imprinting of palladium with cinchona alkaloids. L. Durán Pachón, I. Yosef, T.Z. Markus, R. Naaman, D. Avnir and G. Rothenberg, *Nature Chemistry*, **2009**, 1, 160–164; **Featured in *Chemistry World*, in *C_2W*, in *Chemistry & Industry* and in *C&EN***.



96. Marrying gas power and hydrogen energy: A catalytic system for combining methane conversion and hydrogen generation. J. Beckers, C. Gaudillere, D. Farrusseng and G. Rothenberg, *Green Chem.*, **2009**, 11, 921–925. **Featured in *New Scientist***.

95. Stable 'soap and water' sponges doped with metal nanoparticles. A. V. Gaikwad, P. Verschuren, T. van der Loop, G. Rothenberg and E. Eiser, *Soft Matter*, **2009**, 5, 1994–1999. **Featured on the issue cover**.

94. Pd-catalysed telomerisation of isoprene with glycerol and polyethyleneglycol: A facile route to new terpene derivatives. A. Gordillo, L. Durán Pachón, E. de Jesus and G. Rothenberg, *Adv. Synth. Catal.*, **2009**, 351, 325–330.

93. Backbone diversity analysis in catalyst design. A.G. Maldonado, J.A. Hageman, S. Mastroianni and G. Rothenberg, *Adv. Synth. Catal.*, **2009**, 351, 387–396.

92. A simple 'building-block' route to Palladium-phosphino-carbene complexes via intermolecular addition of functionalised phosphines to isocyanides. M.R. Eberhard, B. van Vliet, L. Durán Páchon, G. Rothenberg, G. Eastham, H. Kooijman, A.L. Spek and C.J. Elsevier, *Eur. J. Inorg. Chem.*, **2009**, 1313–1316.

91. Selective Hydrogen Oxidation Catalysts via Genetic Algorithms. J. Beckers, F. Clerc, J.H. Blank and G. Rothenberg, *Adv. Synth. Catal.*, **2008**, 350, 2237–2249.

90. Redox properties of doped and supported copper-ceria catalysts. J. Beckers, J.H. Blank and G. Rothenberg, *Dalton Trans.*, **2008**, 6573–6578.

89. Optimising an artificial neural network for predicting the melting point of ionic liquids. J.S. Torrecilla, F. Rodríguez, J.L. Bravo, G. Rothenberg, K.R. Seddon, and I. López-Martin, *Phys. Chem. Chem. Phys.*, **2008**, 10, 5826–5831.

88. Cat-in-a-cup: Facile separation of large homogeneous catalysts. A.V. Gaikwad, V. Boffa, J.E. ten Elshof and G. Rothenberg, *Angew. Chem. Int. Ed.*, **2008**, 47, 5407–5410.

87. Data mining in catalysis: Separating knowledge from garbage. G. Rothenberg, *Catalysis Today*, **2008**, 137, 2–10.

86. Selective hydrogen oxidation in presence of C_3-hydrocarbons using perovskite oxygen reservoirs. J. Beckers, R. Drost, I. van Zandvoort, P. F. Collignon and G. Rothenberg, *ChemPhysChem*, **2008**, 9, 1062–1068.

85. Transition-Metal Nanoparticles: Synthesis, stability, and the leaching issue. L. Durán Pachón and G. Rothenberg, *Appl. Organomet. Chem.*, **2008**, 22, 288–299.

84. Matter of age: Growing anisotropic gold nanocrystals in organic media. A. V. Gaikwad, P. Verschuren, S. Kinge, G. Rothenberg and E. Eiser, *Phys. Chem. Chem. Phys.*, **2008**, 10, 951–956.

83. Desulfurisation of oils using ionic liquids: selection of cationic and anionic components to enhance extraction efficiency. J. D. Holbrey, I. Lopez-Martin, G. Rothenberg, K. R. Seddon, G. Silveroc and X. Zheng, *Green Chem.*, **2008**, 10, 87–92.

82. Biodiesel by catalytic reactive distillation powered by metal oxides. A. A. Kiss, A. C. Dimian and G. Rothenberg, *Energy & Fuels*, **2008**, 22, 598–604.

81. Estimating kinetic parameters of complex catalytic reactions using a curve resolution based method. S. C. Cruz, G. Rothenberg, J. A. Westerhuis and A. K. Smilde, *Chemom. Intell. Lab. Syst.*, **2008**, 91, 101–109.

80. Insights in Sonogashira cross-coupling via high-throughput kinetics and descriptor modelling. M. an der Heiden, H. Plenio, E. Burello, H. C. J. Hoefsloot, S. Immel and G. Rothenberg, *Chem. Eur. J.*, **2008**, 14, 2857–2866.

79. Redox kinetics of ceria-based mixed oxides in selective hydrogen combustion. J. H. Blank, J. Beckers, P. F. Collignon and G. Rothenberg, *ChemPhysChem*, **2007**, 8, 2490–2497.

78. Ion-leaching and atom-leaching mechanisms from palladium nanoparticles in cross-coupling reactions.A. V. Gaikwad, A. Holuigue, M. B. Thathagar, J. E. ten Elshof and G. Rothenberg, *Chem. Eur. J.*, **2007**, 13, 6908–6913.

77. Understanding ligand diversity. J. A. Westerhuis, J. A. Hageman, H. -W. Frühauf and G. Rothenberg, *Chim. Oggi - Chemistry Today*, **2007**, 25, 28–32.

76. Anion and cation effects on imidazolium salt melting points: A descriptor modelling study. I. López-Martin, E. Burello, P. N. Davey, K. R. Seddon and G. Rothenberg, *ChemPhysChem,* **2007**, 8, 690–695.

75. A "green route" to propene via selective hydrogen oxidation. J. H. Blank, J. Beckers, P. F. Collignon, F. Clerc and G. Rothenberg, *Chem. Eur. J.*, **2007**, 13, 5121–5128.

74. *In silico* design in homogeneous catalysis using descriptor modelling. E. Burello and G. Rothenberg, *Int. J. Mol. Sci.,* **2006**, 7, 375–404.

73. Electroreductive palladium-catalysed Ullmann reactions in ionic liquids: Principle, scope and mechanism. L. Durán Pachón, C. J. Elsevier and G. Rothenberg, *Adv. Synth. Catal.*, **2006**, 348, 1705–1710.

72. A simple method for measuring the size of metal nanoclusters in solution. A. V. Gaikwad P. Verschuren, E. Eiser and G. Rothenberg, *J. Phys. Chem. B,* **2006**, 110, 17437–17443.

71. *In situ* UV-visible study of Pd nanocluster formation in solution. A. V. Gaikwad and G. Rothenberg, *Phys. Chem. Chem. Phys.,* **2006**, 3669–3675.

70. The heterogeneous advantage: Biodiesel by catalytic reactive distillation. A. A. Kiss, F. Omota, A. C. Dimian and G. Rothenberg, *Top. Catal.*, **2006**, 40, 141–150.

69. 'Green catalysts' for enhanced biodiesel technology. A. A. Kiss, G. Rothenberg and A. C. Dimian, Chemical Industries (CRC Press), **2006**, (*Catal. Org. React.*) 115, 405–414.

68. Electroreductive Pd-catalysed Ullmann reactions in ionic liquids. L. Durán Pachón and G. Rothenberg, Chemical Industries (CRC Press), **2006**, (*Catal. Org. React.*) 115, 501–505.

67. Pd nanoclusters in C–C coupling reactions: Proof of leaching. M. B. Thathagar, J. E. ten Elshof and G. Rothenberg, *Angew. Chem. Int. Ed.,* **2006**, 45, 2886–2890. **Featured as a 'hot paper'**.

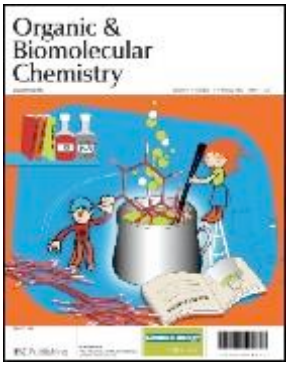
66. How to find the best homogeneous catalyst. G. Rothenberg, J. A. Hageman, F. Clerc, H.-W. Frühauf and J. A. Westerhuis, Chemical Industries (CRC Press), **2006**, (*Catal. Org. React.*) 115, 261–270.

65. Design and assembly of virtual homogeneous catalyst libraries – towards in silico catalyst optimisation. J. A. Hageman, J. A. Westerhuis, H.-W. Frühauf and G. Rothenberg, *Adv. Synth. Catal.,* **2006**, 348, 361–369.

64. Solid acid catalysts for biodiesel production – towards sustainable energy. A. A. Kiss, A. C. Dimian and G. Rothenberg, *Adv. Synth. Catal.,* **2006**, 348, 75–81.

63. Palladium-coated nickel nanoclusters: New Hiyama cross-coupling catalysts. L. Durán Pachón, M. B. Thathagar, F. Hartl and G. Rothenberg, *Phys. Chem. Chem. Phys.,* **2006**, 8, 151–157. **Featured as a 'hot article'**.

62. One-pot Pd/C catalyzed 'domino' HALEX and Sonogashira reactions: A Ligand-free and Cu-free alternative. M. B. Thathagar and G. Rothenberg, *Org. Biomol. Chem.,* **2006**, 4, 111–115. **Featured on the issue cover**.



61. Clean diesel power via microwave susceptible oxidation catalysts. J. Beckers, L. M. van der Zande and G. Rothenberg, *ChemPhysChem,* **2006**, 7, 747–755.

60. Topological mapping of bidentate ligands: A fast approach for screening homogeneous catalysts. E. Burello and G. Rothenberg, *Adv. Synth. Catal.*, **2005**, 347, 1969–1977.

59. Pd Nanoclusters in Sonogashira cross-coupling: A true catalytic species? M. B. Thathagar, P. J. Kooyman, R. Boerleidera, E. Jansen, C. J. Elsevier and G. Rothenberg, *Adv. Synth. Catal.*, **2005**, 347, 1965–1968.

58. Two-step catalytic oxidative dehydrogenation of propane. E. A. de Graaf, G. Zwanenburg, G. Rothenberg and A. Bliek, *Org. Process Res. Dev.*, **2005**, 9, 397–403.

57. Palladium nanoclusters in microcapsule membranes: From synthetic shells to synthetic cells. D. H. Turkenburg, A. A. Antipov, M. B. Thathagar, G. Rothenberg, G. B. Sukhorukov and E. Eiser, *Phys. Chem. Chem. Phys.*, **2005**, 7, 2237–2240.

56. Ligand descriptor analysis in nickel-catalysed hydrocyanation: A combined experimental and theoretical study. E. Burello, P. Marion, J.-C. Galland, A. Chamard and G. Rothenberg, *Adv. Synth. Catal.*, **2005**, 347, 803–810.

55. Click chemistry: Copper clusters catalyse the cycloaddition of azides with terminal alkynes. L. Durán Pachón, J. H. van Maarseveen and G. Rothenberg, *Adv. Synth. Catal.*, **2005**, 347, 811–815.

54. Tackling calibration problems of spectroscopic analysis in high-throughput experimentation. S. C. Cruz, G. Rothenberg, J. A. Westerhuis and A. K. Smilde, *Anal. Chem.,* **2005**, 77, 2227–2234.

53. New device and method for flux-proportional sampling of mobile solutes in soil and groundwater. H. de Jonge and G. Rothenberg, *Environ. Sci. Technol.*, **2005**, 39, 274–282.

52. 'Hot spot' hydrocarbon oxidation catalysed by doped perovskites – towards cleaner diesel power. J. Beckers and G. Rothenberg, *ChemPhysChem,* **2005**, 6, 223–225.

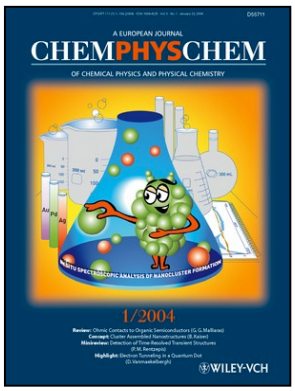
51. $Pt_{0.02}Sn_{0.003}Mg_{0.06}$ on γ-alumina: A stable catalyst for oxidative dehydrogenation of ethane. E. A. de Graaf, G. Rothenberg, P. J. Kooyman, A. Andreini and A. Bliek, *Appl. Catal. A: Gen.,* **2005**, 278, 187–194.

50. Nanocluster-based cross-coupling catalysts: A high-throughput approach. M. B. Thathagar, J. Beckers and G. Rothenberg, Chemical Industries (CRC Press), **2005**, 104 (*Catal. Org. React.*) 211–215.

49. Design and parallel synthesis of new oxidative dehydrogenation catalysts. G. Rothenberg, E. A. de Graaf and A. Bliek, Chemical Industries (CRC Press), **2005**, 104 (*Catal. Org. React.*) 201–210.

48. Microwave regeneration of diesel soot filters. L. M. van der Zande, Y. Zhang-Steenwinkel, G. Rothenberg and A. Bliek, *NATO Sci. Ser., II: Math. Phys. Chem.*, **2004**, 173, 247–251.

47. *In situ* spectroscopic analysis of nanocluster formation. J. Wang, H. F. M. Boelens, M. B. Thathagar and G. Rothenberg, *ChemPhysChem,* **2004**, 5, 93–98. **Featured on the issue cover**.



46. Detailed mechanistic studies using *in situ* spectroscopic analysis: A look at little-known regions of the Heck reaction. G. Rothenberg, S. C. Cruz, G. P. F. van Strijdonck and H. C. J. Hoefsloot, *Adv. Synth. Catal.,* **2004**, 346, 467–473.

45. Palladium-free and ligand-free Sonogashira cross-coupling. M. B. Thathagar, J. Beckers and G. Rothenberg, *Green Chem.*, **2004**, 6, 215–218.

44. Selective CO oxidation in the presence of hydrogen: Fast parallel screening and mechanistic studies on ceria-based catalysts. D. Tibiletti, E. A. de Graaf, S. P. Teh, G. Rothenberg, D. Farrusseng and C. Mirodatos, *J. Catal.,* **2004**, 225, 489–497.

43. Model selection and optimal sampling in high-throughput experimentation. J. A. Westerhuis, H. F. M. Boelens, D. Iron and G. Rothenberg, *Anal. Chem.*, **2004**, 76, 3171–3178.

42. Self-assembly of a hexagonal phase of wormlike micelles containing metal nanoclusters. F. Bouchama, M. B. Thathagar, G. Rothenberg, D. H. Turkenburg and E. Eiser, *Langmuir,* **2004**, 20, 477–483.

41. Combinatorial explosion in homogeneous catalysis: Screening 60,000 cross-coupling reactions. E. Burello, D. Farrusseng and G. Rothenberg, *Adv. Synth. Catal.,* **2004**, 346, 1845–1854.

40. Kinetic studies of cascade reactions in high-throughput systems. D. Iron, H. F. M. Boelens, J. A. Westerhuis and G. Rothenberg, *Anal. Chem.,* **2003**, 75, 6701–6707.

39. Optimal Heck cross-coupling catalysis: A pseudo-pharmaceutical approach. E. Burello and G. Rothenberg, *Adv. Synth. Catal.,* **2003**, 345, 1334–1340.

38. Monitoring the future of chemical reactions. G. Rothenberg, H. F. M. Boelens, D. Iron and J. A. Westerhuis, *Chim. Oggi.,* **2003**, 21, 80–83.

37. Optimal on-line sampling of parallel reactions: General concept and a specific spectroscopic example. G. Rothenberg, H. F. M. Boelens, D. Iron and J. A. Westerhuis, *Catalysis Today,* **2003**, 81, 359–367.

36. Combinatorial design of copper-based mixed nanoclusters: New catalysts for Suzuki cross-couping. M. B. Thathagar, J. Beckers and G. Rothenberg, *Adv. Synth. Catal.,* **2003**, 345, 979–985.

35. Kinetic and mechanistic studies on the Heck Reaction using on-line spectroscopy. S. C. Cruz, P. J. Aarnouste, G. Rothenberg, J. A. Westerhuis, A. K. Smilde and A. Bliek, *Phys. Chem. Chem. Phys.,* **2003**, 5, 4455–4460.

34. Tracking chemical kinetics in high-throughput systems. H. F. M. Boelens, D. Iron, J. A. Westerhuis and G. Rothenberg, *Chem. Eur. J.,* **2003**, 9, 3876–3881.

33. Palladium-catalysed coupling of haloaryls in a solid/liquid system using alcohols as reducing agents: kinetics and process development. D. Gitis, S. Mukhopadhyay, G. Rothenberg and Y. Sasson, *Org. Process Res. Dev.,* **2003**, 7, 109–114.

32. Trapping metal nanoclusters in 'soap and water' soft crystals. E. Eiser, F. Bouchama, M. B. Thathagar and G. Rothenberg, *ChemPhysChem,* **2003**, 4, 526–528.

31. Solvent-free synthesis of solid 'oxygen reservoirs' for clean hydrogen oxidation. G. Rothenberg, E. A. de Graaf and A. Bliek, *Angew. Chem. Int. Ed.,* **2003**, 42, 3365–3368. **Wiley-VCH press release**.

30. Copper-catalysed Suzuki cross-coupling using mixed nanocluster catalysts. M. B. Thathagar, J. Beckers and G. Rothenberg, *J. Am. Chem. Soc.,* **2002**, 124, 11858–11859. **Featured in *Science* as Editor's Choice**, see *Science*, **2002**, 297, 2171.

29. Design and parallel synthesis of novel selective hydrogen oxidation catalysts and their application in alkane dehydrogenation. L. M. van der Zande, E. A. de Graaf and G. Rothenberg, *Adv. Synth. Catal.,* **2002**, 344, 884–889.

28. Competing bromination and oxidation pathways in acid bromate solutions: An experimental and theoretical study. G. Rothenberg, R. M. H. Beadnall, J. E. McGrady and J. H. Clark, *J. Chem. Soc., Perkin Trans. 2,* **2002**, 630–635.

27. Heterogeneous palladium-catalysed Heck reaction of aryl chlorides and styrene in water under mild conditions. S. Mukhopadhyay, G. Rothenberg, A. Joshi, M. Baidossi and Y. Sasson, *Adv. Synth. Catal.,* **2002**, 344, 348–354.

26. Assessing the removal of inorganic colloids and *Cryptosporidium parvum* from drinking water. V. Gitis, R. C. Haught, R. M. Clark and G. Rothenberg, *J. Environ. Monit.,* **2002**, 4, 244–248.

25. Understanding solid/solid organic reactions. G. Rothenberg, A. P. Downie, C. L. Raston and J. L. Scott, *J. Am. Chem. Soc.,* **2001**, 123, 8701–8708.

24. Palladium-catalysed oxidation of alcohols to carbonyl compounds with 1,2-dichloroethane as the primary oxidant: A theoretical study. G. Rothenberg, S. Humbel and J. Muzart, *J. Chem. Soc., Perkin Trans. 2,* **2001**, 1998–2004.

23. One-way extraction of a chemical potential through a liquid membrane: Concept demonstration and applications. Z. Lavie, G. Rothenberg and Y. Sasson, *Ind. Eng. Chem. Res.,* **2001**, 40, 6045–6050.

22. Supported phase-transfer catalysts as selective agents in biphenyl synthesis from haloaryls. S. Mukhopadhyay, G. Rothenberg, N. Qafisheh and Y. Sasson, *Tetrahedron Lett.,* **2001**, 42, 6117–6119.

21. Air oxidation of benzene to biphenyl – a dual catalytic approach. S. Mukhopadhyay, G. Rothenberg, G. Lando, K. Agbaria, M. Kazanci and Y. Sasson, *Adv. Synth. Catal.,* **2001**, 343, 455–459.

20. Tuning the selectivity of heterogeneous catalysts: A trimetallic approach to reductive coupling of chloroarenes in water. S. Mukhopadhyay, G. Rothenberg and Y. Sasson, *Adv. Synth. Catal.,* **2001**, 343, 274–278.

19. On Oxyhalogenation, acids, and non-mimics of bromoperoxidase enzymes. G. Rothenberg and J. H. Clark, *Green Chem.,* **2000**, 2, 248–251.

18. Vanadium-catalysed oxidative bromination using dilute mineral acids and hydrogen peroxide: an option for recycling waste acid streams. G. Rothenberg and J. H. Clark, *Org. Process Res. Dev.,* **2000**, 4, 270–274.

17. Comparative study of phenol alkylation mechanisms using homogeneous and silica-supported boron trifluoride catalysts. K. Wilson, D. J. Adams, G. Rothenberg and J. H. Clark, *J. Mol. Catal.,* **2000**, 159, 309–314.

16. Tandem one-pot palladium-catalysed oxidative and reductive coupling of benzene and chlorobenzene. S. Mukhopadhyay, G. Rothenberg, D. Gitis and Y. Sasson, *J. Org. Chem.,* **2000**, 65, 3107–3110.

15. Novel synthesis of alkali and quaternary onium hydroxides *via* liquid anion exchange: An alternative concept for manufacture of KOH and other hydroxide salts. G. Rothenberg, H. Wiener, Z. Lavie and Y. Sasson, *Chem. Commun.,* **2000**, 1293–1294.

14. Regiospecific cross-coupling of haloaryls and pyridine to 2-phenylpyridine using water, zinc, and catalytic palladium on carbon. S. Mukhopadhyay, G. Rothenberg, D. Gitis, M. Baidossi, D. E. Ponde and Y. Sasson, *J. Chem. Soc., Perkin Trans. 2,* **2000**, 1809–1812.

13. On the mechanism of palladium-catalysed coupling of haloaryls to biaryls in water with zinc. S. Mukhopadhyay, G. Rothenberg, D. Gitis and Y. Sasson, *Org. Lett.,* **2000**, 2, 211–214.

12. Solid-solid palladium-catalysed water reduction with zinc: Mechanisms of hydrogen generation and direct hydrogen transfer reactions. S. Mukhopadhyay, G. Rothenberg, H. Wiener and Y. Sasson, *New J. Chem.,* **2000**, 25, 305–308.

11. Application of pertubation theory to free-radical benzylic and allylic oxidation of unconjugated π-systems. G. Rothenberg and Y. Sasson, *Tetrahedron,* **1999**, 55, 561–568.

10. *In situ* generation and synthetic applications of anhydrous hydrogen fluoride in a solid-liquid biphasic system. G. Rothenberg, M. Royz, O. Arrad and Y. Sasson, *J. Chem. Soc., Perkin Trans. 1,* **1999**, 1491–1494.

9. Unusual phase transfer mechanism of the ruthenium-catalysed oxidation of alcohols with hydrogen peroxide. G. Rothenberg, G. Barak and Y. Sasson, *Tetrahedron,* **1999**, 55, 6301–6310.

8. Palladium-catalysed aryl-aryl coupling in water using molecular hydrogen: Kinetics and process optimisation of a solid-liquid-gas system. S. Mukhopadhyay, G. Rothenberg, H. Wiener and Y. Sasson, *Tetrahedron,* **1999**, 55, 14763–14768.

7. Kinetics and mechanism of heterogeneous palladium-catalysed coupling reactions of chloroaryls in water. S. Mukhopadhyay, G. Rothenberg, D. Gitis, H. Wiener and Y. Sasson, *J. Chem. Soc., Perkin Trans. 2,* **1999**, 2481–2484.

6. Copper-catalysed homolytic and heterolytic benzylic and allylic oxidation using *tert*-butyl hydroperoxide. G. Rothenberg, L. Feldberg, H. Wiener and Y. Sasson, *J. Chem. Soc., Perkin Trans. 2,* **1998**, 2429–2434.

5. Cyclic *vs.* acyclic allylic hydrogen abstraction: an entropy motivated process? G. Rothenberg and Y. Sasson, *Tetrahedron,* **1998**, 54, 5417–5422.

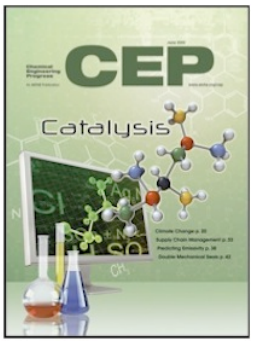
4. Comparative autoxidation of 3-carene and alpha-pinene: factors governing regioselective hydrogen abstraction reactions. G. Rothenberg, Y. Yatziv and Y. Sasson, *Tetrahedron,* **1998**, 54, 593–598.

3. Pyridines as bifunctional co-catalysts in the CrO_3-catalyzed oxygenation of olefins by *tert*-butyl hydroperoxide. G. Rothenberg, H. Wiener and Y. Sasson, *J. Mol. Catal.,* **1998**, 136, 253–262.

2. A new simple method for the synthesis of cyclobutyl cyanide. S. Cohen, G. Rothenberg and Y. Sasson, *Tetrahedron Lett.,* **1998**, 39, 3093–3094.

1. Extending the haloform reaction to non-methyl ketones: oxidative cleavage of cycloalkanones to dicarboxylic acids using sodium hypochlorite under phase transfer catalysis conditions. G. Rothenberg and Y. Sasson, *Tetrahedron,* **1996**, 52, 13641–13648.

News articles about prof. Rothenberg and his research



Resin renaissance. S. Gopal, *Planet Earth Magazine*, June 2011, pp. 34-35.

Resins Process Promises Plenty of Pluses. *Chemical Processing Magazine*, April 2011.

Volledig afbreekbare en recyclebare kunsthars. *Chemie Magazine*, **23.02.2011** (in Dutch).

Eindelijk is er oplosplastic. J. Salomons, *Trouw*, **16.02.2011** (in Dutch, main feature article).

Nieuw 'groen' plastic uit Amsterdams lab. H. Ikink, *Spits,* **28.01.2011** (in Dutch).

Synthetic resins created to be environmentally friendly. A. Czyzewski, *The Engineer,* **21.01.2011**.

Biodegradable alternative to PU. C. Flavell-While, *tce News*, **18.01.2011**.

Chiraal Metaal. A. Dijkgraaf, *C2W*, **16.05.2009** (in Dutch).

Gold might become tasty. A. Turley, *Chemistry & Industry*, **10.05.2009**.

Imparting chirality to metals. M. Jacoby, *C&EN*, **2009**, 87, 10.

Existing gas power plants could pump out hydrogen. C. Barras, *New Scientist*, **12.05.2009**.

Chiral metals shape up for catalysis. H. Birch, *Chemistry World*, **20.04.2009**.

Rijden op liters oud frituur en slachvet. J. Zandhuis, *Het Parool*, **14.02.2009** (in Dutch).

The Educated Chemist: Publish or be damned. S. Houlton, *Chemistry World*, **2008** (August issue).

Interview with Gadi Rothenberg in Chemisch Weekblad. *C2W,* **19.04.2008** (in Dutch).

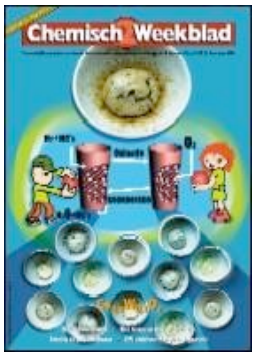
Organic Chemistry: Mayr Awarded / Catalysis: Basset and Rothenberg Honored. *Angew. Chem. Int. Ed.,* **2006**, 45, 3902.

Israeli scientist receives Bayer environment prize. *Galileo, May 2006*, p.20 (in Hebrew).

Recepients of catalysis awards announced. *Chem. Eng. News, 01/05/2006*.

Water Environment is prized by Bayer. G. F. Pedersen (Bayer Norden press release, 14/03/2006).

Vidi laureaat ontvangt Bayer CropScience Innovation Award 2006. NWO announcement, avilable on http://www.nwo.nl/nwohome.nsf/pages/NWOA_6MYHFL (in Dutch).



Former Marie Curie Fellows awarded Bayer Cropscience Innovation Award 2006. EC mobility headlines, available on http://europa.eu.int/comm/research/fp6/mariecurie-actions/news/headlines_en.html

HIMS chemist Gadi Rothenberg wins Paul Rylander Award. *Nuffic* newsletter on international markets for higher education (03/2006), http://www.nuffic.nl/positionering/epos/0306/the_netherlands/news/nednewsgeneral13.html

Making catalysts from Palladium-coated nickel nanoclusters. PCCP 'hot paper' feature, http://www.rsc.org/Publishing/Journals/CP/News/Rothenberg.asp

Nieuwe Bimetallische Nanokatalysatoren, *Chemisch Weekblad,* **2005**, 21, 11 (in Dutch).

Sponge squeezes out more propylene, *Chemical Processing*, **2005**, 68, 11.

A Recipe for Success. T. Vrijenhoek, *Science's Nextwave,* 10/06/2004.

European Commission announces Marie Curie Excellence Award 2004 (21/11/2004) available on http://europa.eu.int/comm/research/fp6/mariecurie-actions/news/headline31_en.html

Israeli researcher receives Marie Curie Award. G. F. Cashman, *The Jerusalem Post*, 23/11/2004, p.17.

Should we give them a medal? S. Bigelman, *Koteret magazine,* (February 2005, in Hebrew).

Novel approach to propane dehydro. A. Wood, *Chem. Week,* **2003**, 165, 24.

Verbesserte Katalysatoren für die Synthese. R. Kurschat, *Neue Zürcher Zeitung,* 28/8/2003.

Doped catalyst is H selector. L. Wilcocks, *Chem. Brit.,* **2003**, 39, 14.

Tungsten makes it happen. Wiley-VCH press release 29/2003.

Tungsten also improves alkane dehydrogenation. *Chem. Eng. Prog.,* **2003**, 99, 18.

Cross-coupling with copper nanoparticles. G. Chin, *Science,* **2002**, 297, 2171.

Nanodeeltjes maken met een afwastruc. M. Persson, *de Volkskrant,* **2003**, (8 March, in Dutch).

Moving on to solids. D. Bradley, *The Alchemist,* **30.08.2001**.

Gadi Rothenberg – A profile interview. D. Bradley, *The Alchemist,* **03.12.2001**.

Carbon-carbon bond formation via palladium-catalyzed reductive coupling in air. J. A. Marshall, *CHEMTRACTS–Org. Chem.,* **2000**, 13, 265.

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