Tomislav Rovis

Samuel Latham Mitchill Professor
Department of Chemistry
Columbia University
New York, NY 10027

Phone: (212) 854-4162
E-mail: tr2504@columbia.edu

Personal

Place and Date of Birth	Zagreb, Croatia, July 2, 1968
Nationality	Canadian/U.S.

Academic Positions and Education

2020-present	Samuel Latham Mitchill Professor Department of Chemistry, Columbia University, New York, NY
2020-2022	Chair Department of Chemistry, Columbia University, New York, NY
2016-2020	Professor Department of Chemistry, Columbia University, New York, NY
2016-2018	Adjunct Professor Department of Chemistry, Colorado State University, Fort Collins, CO
2013	Chair, Organometallic Chemistry Directed Towards Organic Synthesis (OMCOS 17) July 28-August 1, 2013 - Fort Collins, CO
2012-2018	Permanent Member, Synthetic and Biological Chemistry B Study Section, NIH (SBC-B)
2012-2024	Associate Editor for the Americas, *Synlett*
2010-2015	Member, Editorial Board, *Organic Reactions*
2010-present	Member, Editorial Board, *electronic Encyclopedia of Reagents for Organic Synthesis*
2024-present	Associate Editor, *Journal of the American Chemical Society*
2008-2016	John K. Stille Chair Department of Chemistry, Colorado State University, Fort Collins, CO
2008-2016	Professor Department of Chemistry, Colorado State University, Fort Collins, CO
2005-2008	Associate Professor Department of Chemistry, Colorado State University, Fort Collins, CO
2000-2005	Assistant Professor Department of Chemistry, Colorado State University, Fort Collins, CO
1998-2000	NSERC Post-Doctoral Research Fellow Harvard University, Cambridge, Massachusetts *with* Prof. David A. Evans
1993-1998	Ph.D. Organic Chemistry University of Toronto, Toronto, Ontario *with* Prof. Mark Lautens

1986-1990 B.Sc. Human Biology
University of Toronto, Toronto, Ontario

Awards and Honors

2020	Thomson Reuters Highly Cited Researcher
2019	Thomson Reuters Highly Cited Researcher
2018	Thomson Reuters Highly Cited Researcher
2016	Alexander von Humboldt Foundation Fellowship
2016	Research Excellence Award (OVPR – CSU)
2015	Thomson Reuters Highly Cited Researcher
2014	Arthur C. Cope Scholar Award
2014	Japan Society for the Promotion of Science Fellowship
2013	ISHC Katritzky Junior Award in Heterocyclic Chemistry
2013	Fellow of the American Association for the Advancement of Science
2010	Roche Excellence in Chemistry Award
2008-2016	John K. Stille Chair in Chemistry
2007-2012	Herman Frasch Foundation Grantee
2005-2007	Monfort Professor
2005	Alfred P. Sloan Fellow
2005	Boehringer-Ingelheim Research Award
2004	Amgen Young Investigator
2004	Johnson & Johnson Focused Giving Grantee
2004	Eli Lilly Grantee
2003	NSF CAREER Awardee
2003	GlaxoSmithKline Scholar
2000-2004	Merck Research Laboratories Unrestricted Grant Recipient

Publications

1995

"Nickel-Catalyzed Hydroalumination of Oxabicyclic Alkenes. Ligand Effects on the Regio- and Enantioselectivity." M. Lautens*, P. Chiu, S. Ma, T. Rovis, *J. Am. Chem. Soc.* **1995**, *117*, 532.

1997

"A General Strategy Toward the Tetrahydronaphthalene Skeleton. An Expedient Total Synthesis of Sertraline." M. Lautens* and T. Rovis, *J. Org. Chem.* **1997**, *62*, 5246.

"A New Route to the Enantioselective Synthesis of Cycloheptenols. Temperature Effects in the Asymmetric Reductive Ring Opening of [3.2.1] Oxabicycloalkenes." M. Lautens* and T. Rovis, *J. Am. Chem. Soc.* **1997**, *119*, 11090.

1998

"Scope of the Nickel Catalyzed Asymmetric Reductive Ring Opening Reaction. Synthesis of Enantiomerically Enriched Cyclohexenols." M. Lautens* and T. Rovis, *Tetrahedron* **1998**, *54*, 1107.

"Metal Catalyzed Hydrometalations and their Applications in Synthesis." M. Lautens*, T. Rovis, N. D. Smith, D. Ostrovsky, *Pure & Appl. Chem.* **1998**,*70*, 1059.

1999

"Enantioselective Hydroalumination." M. Lautens* and T. Rovis, *Comprehensive Asymmetric Catalysis* ed. by E. N. Jacobsen, A. Pfaltz, H. Yamamoto. **1999**, 337.

"Selective Functionalization of 1,2-Dihydronaphthalenols Leads to a Concise, Stereoselective Synthesis of Sertraline." M. Lautens* and T. Rovis, *Tetrahedron* **1999**, *55*, 8967.

"C_2-Symmetric Cu(II) Complexes as Chiral Lewis Acids. Catalytic Enantioselective Michael Addition of Silylketene Acetals to Alkylidene Malonates." D. A. Evans*, T. Rovis, M. C. Kozlowski, J. S. Tedrow, *J. Am. Chem. Soc.* **1999**, *121*, 1994.

"Chiral Copper(II) Complexes as Lewis Acids for Catalyzed Cycloaddition, Carbonyl Addition, and Conjugate Addition Reactions." D. A. Evans*, T. Rovis, J. S. Johnson, *Pure & Appl. Chem.* **1999**, *71*, 1407.

2000

"Rhodium Catalyzed Asymmetric Alcoholysis and Aminolysis of Oxabenzonorbornadiene: A New Enantioselective Carbon-Heteroatom Bond Forming Process." M. Lautens*, K. Fagnou, T. Rovis, *J. Am. Chem. Soc.* **2000**, *122*, 5650.

"Enantioselective Mukaiyama Michael Reactions of Alkylidene Malonates. C_2-Symmetric Bis(oxazoline) Copper (II) Complexes in the Synthesis of Chiral, Differentiated Glutarate Esters." D. A. Evans*, T. Rovis, M. C. Kozlowski, C. W. Downey, J. S. Tedrow, *J. Am. Chem. Soc.* **2000**, *122*, 9134.

2001

"Mechanistic and Structural Investigations in Asymmetric Cu(I) and Cu(II) Catalyzed Reactions." T. Rovis* and D. A. Evans, *Prog. Inorg. Chem.* **2001**, *50*, 1.

"Rhodium-Catalysed Asymmetric Ring Opening of Oxabicyclic Alkenes with Heteroatom Nucleophiles." M. Lautens*, K. Fagnou, M. Taylor, T. Rovis. *J. Organomet. Chem.* **2001**, *624*, 259.

"Highly Enantioselective Syntheses of Homopropargylic Alcohols and Dihydrofurans Catalyzed by a Bis(oxazolinyl)pyridine – Scandium Triflate Complex." D. A. Evans*, Z. K. Sweeney, T. Rovis, J. S. Tedrow, *J. Am. Chem. Soc.* **2001**, *123*, 12095.

2002

"A Mild and Efficient Catalytic Alkylative Monofunctionalization of Cyclic Anhydrides." E. A. Bercot and T. Rovis*. *J. Am. Chem. Soc.* **2002**, *124*, 174.

"Stereoretentive O-to-C Rearrangement of Vinyl Acetals. Solvent Cage Effects as a Stereocontrol Element." Y. Zhang, N. T. Reynolds, K. Manju and T. Rovis*. *J. Am. Chem. Soc.* **2002**, *124*, 9720.

"A Highly Enantioselective Catalytic Intramolecular Stetter Reaction." M. S. Kerr, J. Read de Alaniz and T. Rovis*. *J. Am. Chem. Soc.* **2002**, *124*, 10298.

2003

"Decarbonylative Cross-coupling of Cyclic Anhydrides: Introducing Stereochemistry at an sp^3-Carbon in the Cross-coupling Event." E. M. O'Brien, E. A. Bercot and T. Rovis*. *J. Am. Chem. Soc.* **2003**, *125*, 10498.

"Metal and Non-metal Catalysts for Carbon-carbon Bond-Forming Reactions Leading to Desymmetrized 1,4-dicarbonyl Compounds." T. Rovis, *Chemtracts: Org.* **2003**, *16*, 542.

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"Effect of the Michael Acceptor in the Asymmetric Intramolecular Stetter Reaction." M. S. Kerr and T. Rovis*. *Synlett* **2003**, 1934-1936.

2004

"The Use of Acid Fluorides Increases the Scope of the Reductive Acylation of Esters." Y. Zhang and T. Rovis*. *Org. Lett.* **2004**, *6*, 1877-1879.

"Enantioselective Synthesis of Quaternary Stereocenters via a Catalytic Enantioselective Stetter Reaction." M. S. Kerr and T. Rovis*. *J. Am. Chem. Soc.* **2004**, *126*, 8876-8877.

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2005

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2006

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"Enantioselective Rhodium-Catalyzed [2 + 2 + 2] Cycloaddition of Alkenyl Isocyanates and Terminal Alkynes: Application to the Total Synthesis of (+)-Lasubine II." R. T. Yu and T. Rovis*. *J. Am. Chem. Soc.* **2006**, *128*, 12370-12371.

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2007

"Ligand Dependent Catalytic Cycle and Role of Styrene in Nickel-Catalyzed Anhydride Cross-Coupling: Evidence for Turnover Limiting Reductive Elimination." J. B. Johnson, E. A. Bercot, J. M. Rowley, G. W. Coates and T. Rovis*. *J. Am. Chem. Soc.* **2007**, *129*, 2718-2725.

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2008

"More than Bystanders: The Effect of Olefins on Transition Metal-Catalyzed Cross-Coupling Reactions." J. B. Johnson, T. Rovis*. *Angew. Chem. Int. Edit.* **2008**, *47*, 840-871. (Review)

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"A Rapid Total Synthesis of (+/-)-Sylvone." C. G. Nasveschuk and T. Rovis*. *Synlett*, **2008**, 126-128.

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"The [1, 3] O to C Rearrangement: Opportunities for Stereoselective Synthesis." C. G. Nasveschuk and T. Rovis*. *Org. Biomol. Chem.* **2008**, *6*, 240 - 254. (Review)

"Development of Chiral Bicyclic Triazolium Salt Organic Catalysts: The Importance of the N-Aryl Substituent." T. Rovis. *Chem. Lett.* **2008**, 2-7. (Review)

"Towards the Total Synthesis of FD-838: Modular Enantioselective Assembly of the Core." A. Orellana and T. Rovis*. *Chem. Commun.* **2008**, 730-732.

"Enantioselective Synthesis of Indolizidines Bearing Quaternary Substituted Stereocenters via Rhodium-Catalyzed [2+2+2] Cycloaddition of Alkenyl Isocyanates and Terminal Alkynes." E. E. Lee and T. Rovis*. *Org. Lett.* **2008**, *10*, 1231-1234. (PMCID: **PMC2747361**)

"Asymmetric Synthesis of Bicyclic Amidines via Rhodium-Catalyzed [2 + 2 + 2] Cycloaddition of Carbodiimides." R. T. Yu and T. Rovis*. *J. Am. Chem. Soc.* **2008**, *130*, 3262-3263. (PMCID: **PMC2917183**)

"Catalytic Asymmetric Stetter Reaction Onto Vinylphosphine Oxides and Vinylphosphonates." S. C. Cullen and T. Rovis*. *Org. Lett.* **2008**, *10*, 3141-3144. (PMCID: **PMC2746454**)

"Scope of the Asymmetric Intramolecular Stetter Reaction Catalyzed by Chiral Nucleophilic Triazolinylidene Carbenes." J. Read de Alaniz, M. S. Kerr, J. L. Moore, T. Rovis*. *J. Org. Chem.* **2008**, *73*, 2033-2040. (PMCID: **PMC4222522**)

"Catalytic Asymmetric Intermolecular Stetter Reaction of Glyoxamides with Alkylidenemalonates." Q. Liu, S. Perreault, T. Rovis*. *J. Am. Chem. Soc.* **2008**, *130*, 14066-14067. (PMCID: **PMC2684863**)

"2-Phenyl-6,10b-dihydro-4*H*,5a*H*-5-oxa-3,10c-diaza-2-azonia-cyclopenta[*c*]fluorine tetrafluoroborate; 2-Pentafluorophenyl-6,10b-dihydro-4*H*,5a*H*-5-oxa-3,10c-diaza-2-azoniacyclopenta[*c*]fluorene tetrafluoroborate; 6,7-Dihydro-2-phenyl-5-(phenylmethyl)-5H-pyrrolo[2,1-c]-1,2,4-triazolium chloride." S. P. Lathrop, H. U. Vora, T. Rovis*. *Electronic Encyclopedia of Reagents for Organic Synthesis*, **2008**.

"Nucleophilic Carbene Catalyzed Synthesis of 1,2 Amino Alcohols Via Azidation of Epoxy Aldehydes." H. U. Vora, J. R. Moncecchi, O. Epstein, T. Rovis*. *J. Org. Chem.* **2008**, *73*, 9727-9731. (PMCID: **PMC4222516**)

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2009

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"Regioselective rhodium-catalyzed intermolecular [2+2+2] cycloaddition of alkynes and isocyanates to form pyridones." K. M. Oberg, E. E. Lee, T. Rovis*. *Tetrahedron* **2009**, *65*, 5056-5061. (PMCID: **PMC3172821**)

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"Predictable and Regioselective Insertion of Internal Unsymmetrical Alkynes in Rhodium-Catalyzed Cycloadditions with Alkenyl Isocyanates" R. Keller Friedman and T. Rovis*. *J. Am. Chem. Soc.* **2009**, *131*, 10775-10782. (PMCID: **PMC2737069**)

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