

CURRICULUM VITAE

Personal

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Date of birth: September 2nd, 1978
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Education

2004–2009 Ph.D., Department of Organic Chemistry, Faculty of Chemistry,
University of Barcelona (Spain)
(Advisor: Prof. Jaume Vilarrasa)
2002–2003 M. Sc. Org. Chemistry, Faculty of Chemistry, University of Barcelona (Spain)
(Advisors: Assoc. Prof. Jaume Farrás and Prof. Jaume Vilarrasa)
1996–2002 B.A. Chemistry, Faculty of Chemistry, University of Barcelona

Research and Professional Experience

2022- Postdoctoral Fellow
Graduate School of Pharmaceutical Sciences, Kyoto University (Japan)
(Advisor: Prof. Keiji Maruoka)
2018–2022 SRA, Postdoctoral Fellow
Graduate School of Sciences and Engineering, Tokyo Institute of Technology
(Advisors: Prof. Nobuharu Iwasawa and Asst. Prof. Naoyuki Toriumi)
2015–2017 Sabbatical period (*Work out at the family business*)
2010–2014 Postdoctoral Fellow (University-Industry project)
Research Center for Materials Science, Nagoya University (Japan)
(Advisors: Prof. Susumu Saito and Asst. Prof. Hiroshi Naka)
2009–2010 Postdoctoral Fellow
Dept. of Organic Chemistry, University of Barcelona (Spain)
(Advisor: Prof. Jaume Vilarrasa)

Professional Societies and Activities

The Chemical Society of Japan (CSJ; 2019-)

List of Publications (2022/04/01 Updated)

Peer-Reviewed

(11) Rhodium-catalyzed *meta*-Selective C-H Carboxylation Reaction of 1,1-Diarylethylenes via Hydrorhodation-Rhodium Migration. T. Saito, Caner, J.; Toriumi, N.; Iwasawa, N. *Angew. Chem. Int. Ed.*, **2021**, In press DOI: 10.1002/anie.202109470.

(10) Mechanistic Studies into Visible Light-Driven Carboxylation of Aryl Halides/Triflates by the Combined Use of Palladium and Photoredox Catalyst. Shimomaki, K.; Nakajima, T.; Caner, J.; Toriumi, N.; Iwasawa, N. *Bull. Chem. Soc. Jpn.*, **2021**, In press. DOI: 10.1246/bcsj.20210151.

(9) Palladium-Catalyzed Visible-light-Driven Carboxylation of Aryl and Alkenyl Triflates by Using Photoredox Catalysts. Shimomaki, K.; Nakajima, T.; Caner, J.; Toriumi, N.; Iwasawa, N. *Org. Lett.*, **2019**, 21(12), 4486-4489. DOI: 10.1021/acs.orglett.9b01340.

(8) Photocatalytic Transfer hydrogenolysis of Allylic Alcohols on Pd/TiO₂: A Shortcut to (S)-(+)-Lavundalol. Takada, Y.; Caner, J.; Selvam, K.; Naka, H.; Saito, S. *Chem. Eur. J.*, **2017**, 23, 18025-18032. DOI: 10.1002/chem.201704099.

(7) *N*-Methylation of Amines with Methanol at Room Temperature. Tsarev, V. N.; Morioka,.; Caner, J.; Wang, Q.; Ushimaru, R.; Kudo, A.; Naka, H.; Saito, S. *Org. Lett.*, **2015**, 17(10), 2530-2533. DOI: 10.1021/acs.orglett.5b01063.

Highlighted and selected for CHEMINFORM (Amines): DOI: 10.1002/chin.201538062.

(6) Synthesis of propylene from renewable allyl alcohol by photocatalytic transfer hydrogenolysis. Caner, J.; Liu, Z.; Takada, Y.; Kudo, A.; Naka, H.; Saito, S. *Catal. Sci. Technol.*, **2014**, 4, 4093-4098. DOI: 10.1039/c4cy00329b.

(5) Redox-Selective Generation of Aldehydes and H₂ from Alcohols under Visible Light. Liu, Z.; Caner, J.; Kudo, A.; Naka, H.; Saito, S. *Chem. Eur. J.*, **2013**, 19(29), 9452-9452. DOI: 10.1002/chem.201301347.

Highlighted and selected for SYNFACTS (Current Synthetic Organic Chemistry): DOI: 10.1055/s-0033-1339730.

(4) Nucleophile-Catalyzed Additions to Activated Triple Bonds. Protection of Lactams, Imides, and nucleosides with MocVinyl and Related Groups. Mola, L.; Font, J.; Bosch, L.; Caner, J.; Costa, A. M.; Exebarria-Jardi, G.; Pineda, O., de Vicente, D.; Vilarrasa, J. *J. Org. Chem.*, **2013**, 78(12), 5832-5842. DOI: 10.1021/jo4006409.

Highlighted and selected for CHEMINFORM (Protection): DOI: 10.1002/chin.201226209.

(3) Pd-Catalyzed Amidation of 2,6-Dihalopurine Nucleosides. Replacement of Iodine at 0 °C. Bosch L.; Cialicu, I.; Caner, J.; Ariza, X.; Costa, A. M.; Terrazas, M.; Vilarrasa, J. *Tetrahedron Letters*, **2012**, 53(11), 1358-1362. DOI: 10.1016/j.tetlet.2012.01.012. Highlighted and selected for CHEMINFORM (Nucleic Acids): DOI: 10.1002/chin.201226209.

(2) ¹⁵N Double-Labeled Guanosine from Inosine through Ring-Opening-Ring-Closing and One-Pot Pd-Catalyzed C-O and C-N Cross-Coupling Reactions. Caner, J.; Vilarrasa J. *J. Org. Chem.*, **2010**, 75 (14), 4880. DOI: 10.1021/jo100808w.

(1) Easy Access to Configurationally Controlled C-Glyco-furanoside-Based Building Blocks by Means of Formyl C-Glycofuranosides. Vera-Ayoso, Y.; Borrachero, P.; Cabrera-Escribano, F.; Gómez-Guillén, M.; Caner, J.; Farràs, J. *Synlett*, **2010**, 271. DOI: 10.1055/s-0029-1218552.

Invited publications

(1) Photocatalytic hydrogenolysis of allylic alcohols for rapid access to platform chemicals and fine chemicals. Takada, Y.; Caner, J.; Naka, H.; Saito, S. *Pure Appl. Chem.*, **2018**,90(1), 167-174. DOI:10.1515/pac-2017-0501. (Invited conference paper)

Book Chapter

(1) Caner, J. and Iwasawa N. (2020). Transition-Metal-Catalyzed C-H Carboxylation. In CO₂ as a Building Block in Organic Synthesis, S. Das (Ed.). DOI: 10.1002/9783527821952.ch3.

Patents

(3) 3級アミン又は3級アミン誘導体の製造方法. Jpn. Kokai Tokyo Koho (2015), JP 2015074642 A 20150420. Inventors: Noyori, R.; Saito, S.; Naka, H.; Tsarev, V.N.; Caner, J. Applicant: Nagoya University; N° JP2013-213167; Appl. Date: 2013.10.10.

(2) 有機化合物の製造方法. Jpn. Kokai Tokyo Koho (2015), JP 2015059098 A 20150330. Inventors: Noyori, R.; Saito, S.; Naka, H.; Caner, J.; Liu, Z. Applicant: Nagoya University; N° JP2013-193470; Appl. Date: 2013.09.18

(1) カルボニル化合物の製造方法. Jpn. Kokai Tokyo Koho (2014), JP 2014037396 A 20140227. Inventors: Noyori, R.; Saito, S.; Naka, H.; Liu, Z.; Caner, J.; Kudo, A. Applicant: Nagoya University; N° JP2012-181888; Appl. Date: 2012.08.20.