CURRICULUM VITAE

Dr. Ramesh Bhausaheb Dateer
(Ramanujan Fellow-2017)

Personal Profile:

Awards From DST, Govt. of India

Ramanujan Fellowship-2017: (File No: File No: SB/S2/RJN-042/2017) Project Title: Development of New Molybdenum-Isonitrile Complex Catalyzed Processes and its Application in Basic Chemistry

Early Carrier Research Award-2018: (File No: ECR/2017/002207, https://www.serbonline.in/SERB/LoginPage) Project Title: A Novel Approach for the Synthesis of Privileged Structural Motifs of the Drug Molecules and Natural Products: The Transition Metal Catalyzed C□H Activation Strategies and It's Applications

Present address	Centre for Nano and Material Sciences Jain Global Campus, Jain University Jakkasandra Post, Kanakapura, Ramanagara-562112, Bangalore Rural Karnataka, India
Permanent address	: A/P-Ekrukhe, Tal-Rahata, Dist-Ahmednagar, State-Maharashtra (INDIA), Pin-413719, Mob: +919226136942
E-mail	**:** rameshd321@gmail.com
Mobile No:	**:** +919518598684
Date of birth	**:** August 12th, 1982
Nationality	**:** Indian
Sex & Marital Status	**:** Male & Married
Caste	: OBC

Academic profile:

Assistant Professor (Jun. 2017 to till date)

Catalysis and Organic Synthesis Group Centre for Nano and Material Sciences Jain University, Bangalore-562112, Karnataka, India

Group Homepage: https://cnms.jainuniversity.ac.in/Faculty-Ramesh-Dateer.htm

Group Strength: Phd = 2 (ongoing), MS =1 (ongoing) Total Impact Factor = 45.3, citation = >550, h-Index = 8

Postdoctoral Research Fellow (Oct. 2016 to May 2017)

Supervisor: Prof. Dr.
Olivier Baudoin University
of Basel, Switzerland
Research Area: "Transition Metal Catalyzed New Sp^3 C-H Activation Reactions "

Postdoctoral Research Fellow (August, 2014 to July 2016)
Supervisor: Prof. Dr. Sukbok Chang
Center for Catalytic Hydrocarbon Functionalization IBS, Department of Chemistry, #3116,E6-4, KAIST, 291, Daehalk-ro, Yuseong-gu, Daejeon, Republic of Korea, 305-701.
Research Area: "Transition Metal Catalyzed New Sp^2 C-H Activation Reactions "

Postdoctoral Research Fellow (March, 2013 to July 2014)
Supervisor: Prof. Dr. Rai-Shung Liu
Dean, College of Science,
Department of Chemistry, National
Tsing Hua University, Hsinchu,
Taiwan.
Research Area: "Transition Metal Catalyzed New Organic Transformations "

PhD. (Feb., 2009-March, 2013)

- **Dissertation Title: "Gold-catalyzed new organic transformations involving activation of C-C triplebond for the synthesis of N and O containing molecules"**

Supervisor: Prof. Rai-Shung Liu
Dean, College of Science,
Department of Chemistry, National
Tsing Hua University, Hsinchu,
Taiwan.

M.Sc. (2004-2006):
Organic chemistry (University
of Pune, India) Obtained **First**
class with Distinction
Dissertation work: "**Synthesis and characterization of some 'Biologically active fluorinated pyrazolyl compounds"**

B.Sc. (2001-2004):
Chemistry (University of
Pune, India) Obtained **First**
class with distinction,

Research Experience:
Research Associate (10.2006 to
02.2009). **Glenmark**

Pharmaceutical Ltd, Navi-
Mumbai Department of Medicinal
Chemistry
Experienced in Synthesis of New Chemical Entities (NCEs), SAR studies

Research Profile:

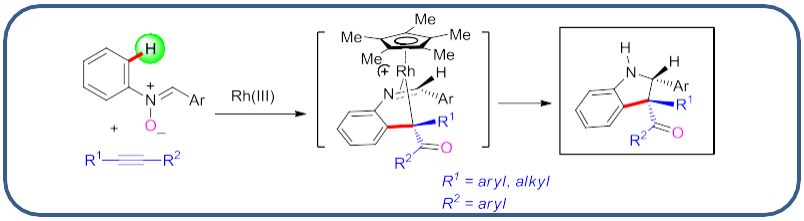
3rd Postdoctoral research (Oct. 2016 to May 2017): Adviser: Prof. Olivier Baudoin, University of Basel, Switzerland. Research area: C (Sp^3)-H functionalization.

2nd Postdoctoral research (August 2014 to July 2016):

Adviser: Prof. Sukbok Chang, Korea Advanced Institute of Science and Technology.(South Korea) Research area: C (Sp^2)-H functionalization.

Project 1

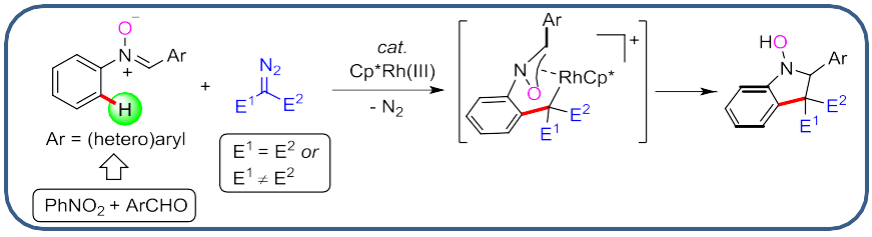
Selective Cyclization of Arylnitrones to Indolines under External Oxidant-Free Conditions: Dual Role of Rh(III) Catalyst in the C–H Activation and Oxygen Atom Transfer



J. Am. Chem. Soc. **2015** *137*, 4908 - 4911
[http://pubs.acs.org/doi/pdf/10.1021/jacs.5b01065]

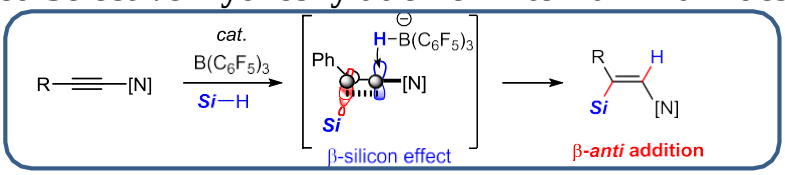
Project 2

Rh(III)-Catalyzed C–H Cyclization of Arylnitrones with Diazo Compounds: Access to *N*-Hydroxyindolines



Project 3	*Org. Lett.**2016,** 18, 68-71*[http://pubs.acs.org/doi/abs/10.1021/acs.orglett.5b03273]

Borane-Catalyzed Selective Hydrosilylation of Internal Ynamides Leading to □-



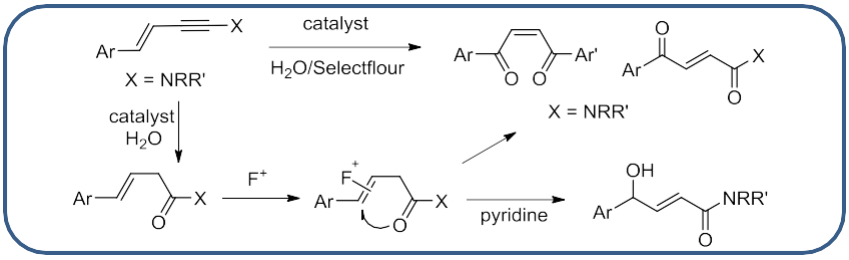
Silyl (*Z*)-enamides

Org. Lett. **2017**, *19*, 190
[http://pubs.acs.org/doi/abs/10.1021/acs.orglett.6b03485]

~~1st Postdoctoral research (March 2013 to July~~ 2014): Adviser: Prof. Rai-Shung Liu, National Tsing Hua University (Taiwan) Research area: Organic Synthesis and Catalysis.

Project 1

Zn(II)- and Au(I)-catalyzed Regioselective Hydrative



Oxidations of 3-En-1-ynes with Selectfluor.Realization of 1,4-Dioxo and 1,4-Oxohydroxy Functionalization's

Chem- A. Eur. J. **2014,** *20*, 1813-1817
[http://onlinelibrary.wiley.com/doi/10.1002/chem.201304322/pdf]

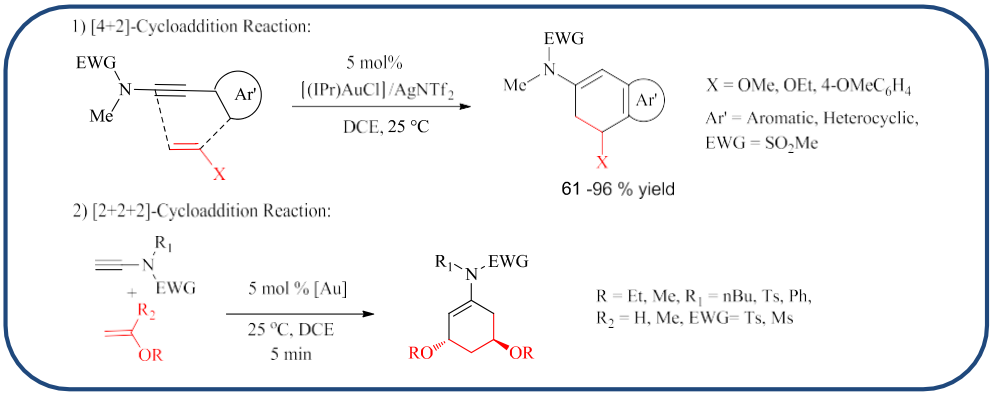
PhD Work: (Feb. 2009 to March 2013)

Supervisor: Prof. Dr. Rai-Shung Liu, National Tsing Hua University (Taiwan)

Dissertation Title: "Gold-catalyzed new organic transformations involving activation of C-C triple bond forthe synthesis of N and O containing molecules".

Chapter 1

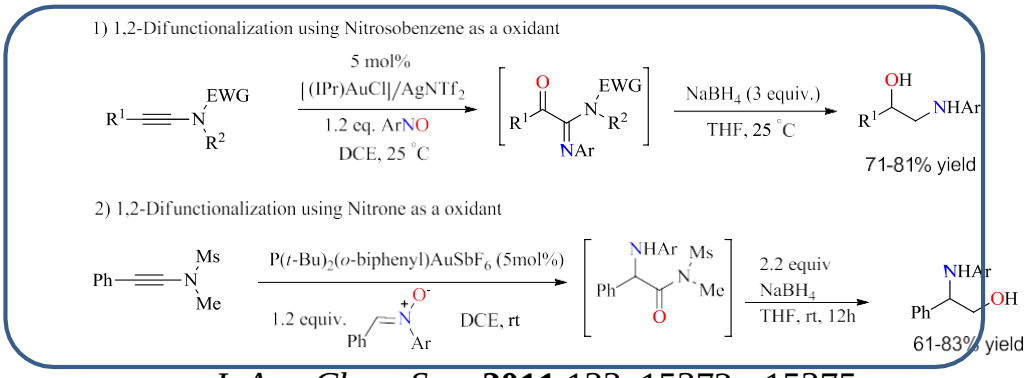
- **Gold-Catalyzed Intermolecular [4+2] and [2+2+2] Cycloadditions of Ynamides with Alkenes**



Angew Chem Int. Ed. **2012**, *51*, 113-117 .(Published as hot article)
[http://onlinelibrary.wiley.com/doi/10.1002/anie.201105921/pdf]

Chapter 2

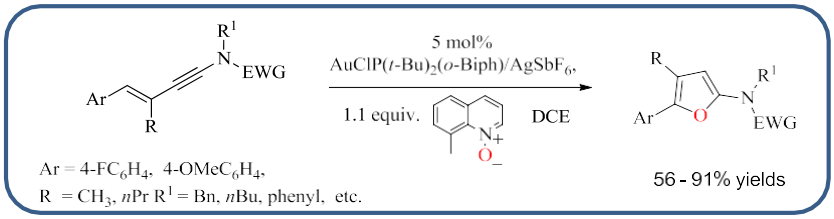
- **Gold-Catalyzed 1,2-Difunctionalizations of Aminoalkynes Using Only N-and O-Containing Oxidants**



J. Am. Chem Soc. **2011**,133, 15372 - 15375
[http://pubs.acs.org/doi/pdf/10.1021/ja208150d]

Chapter 3

- **Gold-catalyzed synthesis of substituted 2-aminofurans *via* formal [4+1]-cycloadditions on 3-en-1-ynamides**



Chem. Commun., **2012**, *48*, 7200-7202
[http://pubs.rsc.org/en/content/articlepdf/2012/cc/c2cc33030j?page=search]

Keywords: Gold catalysis, C-H Activation, Cycloaddition, Ynamides, Nitrone etc.

Fellowships:

- Post-doctoral Fellowship from Swiss National Foundation, Switzerland, Oct. 2016 to May 2017
- Post-doctoral Fellowship from Institute of Basic Science, Korea, August, 2014 to July 2016.
- Post-doctoral Fellowship from National Science Council, Taiwan, March, 2013 to July 2014.
- National Tsing Hua University PhD Scholarship for International students, Taiwan, Feb. 2009 to Feb. 2013.
- Outstanding International Research Student Fellowship by National Tsing Hua University, Feb. 2011 to Feb. 2012.

Awards

Awarded by prestigious '**Ramanujan Fellowship'** DST, SERB-Govt. of India 2018 Awarded by '**Early Carrier Research Award**' DST, SERB-Govt. of India 2018

Awarded by ' Outstanding International Research Student by National Tsing Hua University, Taiwan 2011.

Conferences Attained:

- Participated in International Conference on Organometallics and Catalysis (ICOC 2018), Goa, India
- International Conference of IUPAC-2015 under the title '45th World Chemistry Congress' Aug 9-14 at Bexco, Busan, South Korea.
- Participated in "2015 CCHF (IBS-KAIST)-ITBM (Nagoya University) Joint Symposium" at KAIST, South Korea 3rd Workshop of Center for Catalytic Hydrocarbon Functionalizations, Institute of Basic Science (IBS), South Korea 2014.
- 4th Workshop of Center for Catalytic Hydrocarbon Functionalizations, Institute of Basic Science (IBS), South Korea 2014
- Participated in Institute of Basic Science (IBS) Research Conference 2014 ' Linking Ideas, Expanding Knowledge'
- International Conference on 'Functional Organic Materials and Related Devices in 2012 - National Tsing Hua University (Taiwan).

Invited Talk:

- Delivered invited talk on "SET/NET Guidance for PG Students in Chemistry" at ASC College, Rahata, Pune University on January, 23rd – 24th, 2018
- Delivered invited talk on "Research Trends and Opportunities in Chemistry" at Tulajaram Chaturchand College, Baramati on Feb 2021
- Delivered Invited talk in National Webinar Organised by Department of Chemistry and IQAC on " Green Catalysis in Organic Synthesis" S.S.G.M College, Kopargaon, Pune University March 2021.
- Delivered invited talk in "International Conference on Chemistry, Environment and Energy (ICCEE-Feb.2019)" YC- College, Satara India
- Delivered Invited talk in "National e-Conference on Materials for Emerging Technologies (MET) – March 2021 at Solapur University

Research papers published during Independent Carrier: (06. 2017- till date)

[27] Catalyst- and Additive-Free Approach to Construct Benzo-oxazine, Benzo-oxazepine and Benzo-oxazocine: O-Atom Transfer, New C=O, C-N and C-O Bond Formation at Room Temperature Organic Letters 23, **2021**, 8189-81-93 (Link: https://pubs.acs.org/doi/abs/10.1021/acs.orglett.1c02895)

[26] Waste biomass-derived carbon-supported palladium-based catalyst for cross-coupling reactions and energy storage applications M. Kempasiddaiah, K. A Sree Raj, V. Kandathil, R. B. Dateer, B. S Sasidhar, C. V Yelamaggad, C. S. Rout, S. A. Patil *Applied Surface Science* **2021**, 151-156. (Link: https://www.sciencedirect.com/science/article/abs/pii/S0169433221022121)

[25] Biogenic Synthesis of Pd-Nanoparticles Using Areca Nut Husk Extract: A Greener Approach to Access α-keto imides and Stilbenes R. Hegde, A. Ghosh, A. Nizam, S.A. Patil, F. Peter, R. Dateer, A.H Jadhav ***New Journal of Chemistry*** **2021,** *45*, 16213-16222 (IF: 3.28) Link: https://pubs.rsc.org/en/content/articlelanding/2021/nj/d1nj02858h/unauth)

[24] Palladium-catalyzed denitrogenative cross-coupling of aryl halides with arylhydrazines under mild reaction conditions M. Kempasiddaiah, V. Kandathil, R.B. Dateer, B.S. Sasidhar, S.A. Patil, ***Transition Metal Chemistry*** **2021**, 46, 273-281(IF: 1.36) Link:

https://link.springer.com/article/10.1007/s11243-020-00443-3

[23] Sustainable Catalytic Process for Fructose Dehydration using Dicationic Ionic Liquid Assisted ZSM-5 Zeolite

D. Prasad, K.N. Patil, V.K. Manoorkar, R.B. Dateer, B. M. Nagaraja, A.H. Jadhav ***Materials and Manufacturing Processes***, **2021**, 1-8 (IF: 3.04) Link: https://www.tandfonline.com/doi/abs/10.1080/10426914.2021.1905828

[22] Efficient and recyclable palladium enriched magnetic nanocatalyst for reduction of toxic environmental pollutants M. Kempasiddaiah, V. Kandathil, R.B. Dateer, M. Baidya, S.A. Patil, S.A. Patil ***Journal of Environmental Sciences*** **2021** 101, 189-204. (IF: 5.56) Link: https://www.sciencedirect.com/science/article/abs/pii/S1001074220303545

[21] Green Pathways for Palladium Nanoparticles Synthesis: Application and Future Perspectives "Functionalized Nanomaterial's for catalytic application Arnab Ghosh, Rajeev V. Hegde , Sandeep S. Gholap, Siddappa A. Patil and **Ramesh B. Dateer*** *Book Chapter*, *Wiley Scrivener Publisher* ***2021,*** **ISBN:** 9781119809036 PP 303-328 ***(Link:*** https://doi.org/10.1002/9781119809036.ch11)

[20] Basicity controlled $MgCo_2O_4$ nanostructures as catalyst for viable fixation of CO_2 into epoxides at Atmospheric pressure. D. Prasad, K. N. Patil, **R. B. Dateer**, H. Kim, B. M. Nagaraja and A. H. Jadhav, *Chemical Engineering Journal*, **2021**, *405*, 126907. (IF: 10.65). Link: https://www.sciencedirect.com/science/article/abs/pii/S1385894720330357

[19] Regioselective Direct C2 Arylation of Indole, Benzothiophene and Benzofuran: Utilization of Reusable

Pd NPs and NHC-Pd@MNPs Catalyst for C–H Activation Reaction R. Hegde T. G. Ong R. Ambre A. H.Jadhav, S. A. Patil and **R. B. Dateer** ***Catalysis Letters*** **2021,** *151*, 1397–1405. (IF: 2.79) Link: https://link.springer.com/article/10.1007/s10562-020-03390-x

[18] Microwave-Epoxide-Assisted Hydrothermal Synthesis of the CuO/ZnO Heterojunction: a Highly Versatile Route to Develop H_2S Gas Sensors. D. Y. Nadargi, M. S. Tamboli, S. S. Patil, **R. B. Dateer**, I. S. Mulla, H. Choi and S. S. Suryavanshi, ***ACS omega,*** **2020**, *5*, 8587. (IF: 2.87). Link:

https://pubs.acs.org/doi/abs/10.1021/acsomega.9b04475

[17] Immobilizing biogenically synthesized palladium nanoparticles on cellulose support as a green and sustainable dip catalyst for cross-coupling reaction. M. Kempasiddaiah, V. Kandathil, **R. B. Dateer**, B. S. Sasidhar, S. A. Patil and S. A. Patil, ***Cellulose*, 2020**, *27*, 3335. (IF: 4.80). Link: https://link.springer.com/article/10.1007/s10570-020-03001-3

[16] Catalyst-Free Regioselective (3+2)-Cycloadditions of α, β-unsaturated *N*-arylnitrones with Alkenes to Access Functionalized Isoxazolidines: A DFT Study A. Ghosh, M. V. Mane, H. B. Rode, S. A. Patil, B. Sridhar and **R. B. Dateer***. ***Chemistry An Asian Journal* 2020,** *15*, 899-903. (I. F: 4.56)

Link: https://onlinelibrary.wiley.com/doi/10.1002/asia.201901754)

[15] Pd-Nanoparticles Catalyzed Denitrogenative Coupling of Aryl Halides with Arylhydrazines: Greener Approach for Biaryls Synthesis under Ligand-Free Condition R. V. Hegde, A. Ghosh, S. A. Patil and **R. B. Dateer*** ***Tetrahedron* 2019,** 75, 130777. (I.F = 2.69; Link: https://www.sciencedirect.com/science/article/abs/pii/S0040402019311731)

[14] A greener approach towards the development of graphene–Ag loaded ZnO nanocomposites for acetone sensing applications. D. Y. Nadargi, R. B Dateer, M. S. Tamboli, I. S. Mulla, S. S. Suryavanshi, ***RSC Advances, 9, 2019,*** 33602-33606 (I. F. 3.11, Link: https://pubs.rsc.org/en/content/articlelanding/2019/ra/c9ra06482f#!divAbstract)

[13] Transition metal-free functionalized hydration of alkynes: one-pot synthesis of fluorinated β-ketoimidates using Selectfluor" A. Ghosh, R. Hegde, V. B. Makane, B. Sridhar, H. B. Rode, S. A. Patil, and **R. B. Dateer*** ***Org. Biomol. Chem.* 2019, *17*,** 4440-4445. (I.F = 3.49, Link: https://sci-hub.tw/10.1039/c9ob00527g

[12] Magnetite tethered mesoionic carbene-palladium (II): An efficient and reusable nanomagnetic catalyst for Suzuki–Miyaura and Mizoroki–Heck cross–coupling reactions in aqueous medium. M. Kempasiddhaiah, V. Kandathil, R. B. Dateer, B. S. Sasidhar, S. A. Patil and S. A. Patil ***Applied Organometallic Chemistry* 2019** (DOI: 10.1002/aoc.4846) (I.F = 3.58, Link:

https://sci-hub.tw/https://doi.org/10.1002/aoc.4846

[11] Convenient and efficient Suzuki–Miyaura and Heck–Mizoroki cross–coupling reactions catalyzed by 1,3,4–trisubstituted–1,2,3–triazolium iodide and palladium salt systems. Shahini C. R., Gautam Achar, Srinivasa Budagumpi, **Ramesh B. Dateer**, Helge Müller–Bunz, Matthias Tacke & Siddappa A. Patil *Journal of Coordination Chemistry* ***2019,*** 72, 528-549. (DOI: 10.1080/00958972.2019.1571583) (I.F = 1.44 Link: https://sci-hub.tw/https://doi.org/10.1080/00958972.2019.1571583

[10] A new magnetically recyclable heterogeneous palladium(II) as a green catalyst for Suzuki-Miyaura cross- coupling and reduction of nitroarenes in aqueous medium at room temperature. Vishal Kandathil, Tuhin

S.Koley, K.Manjunatha, **Ramesh B. Dateer**, Rangappa S.Keri B. S.Sasidhar, Shivaputra A. Patil, Siddappa A. Patil *Inorganica Chimica Acta* **2018**, *478*, 195-210. (I.F = 2.26 Link: https://sci-hub.tw/10.1016/j.ica.2018.04.015

[9] Green Synthesis of Palladium Nanoparticles: Applications in Aryl Halide Cyanation and Hiyama Cross-Coupling Reaction Under Ligand Free Conditions. Vishal Kandathil, **Ramesh B. Dateer**, B. S. Sasidhar, Shivaputra A. Patil Siddappa A. Patil. *Catalysis lett*. **2018**, 148, 1562-1578 (I.F = 2.79 Link: https://sci- hub.tw/https://doi.org/10.1007/s10562-018-2369-5

[8] Magnetic nanoparticle tethered Schiff base-palladium(II): highly active and reusable heterogeneous catalyst

for Suzuki-Miyaura cross-coupling and reduction of nitroarenes in aqueous medium at room temperature Manjunatha K, Tuhin S. Koley, Vishal Kandathil, **Ramesh B. Dateer**, Geetha Balakrishna, Sasidhar B. S, Shivaputra A. Patil, Siddappa A. Patil *Applied Organometallic Chemistry* **2018**, *32*, 4266 (I.F = 3.58 Link: https://sci-hub.tw/https://doi.org/10.1002/aoc.4266

Before Independent Carrier (Before 06. 2017)

[7] Borane-Catalyzed Selective Hydrosilylation of Internal Ynamides Leading to *β*-Silyl(*Z*)- enamides Youngchan Kim,[§] **Ramesh B. Dateer**,[§] and Sukbok Chang* *Org. Lett.* **2017**, *19*, 190-193*(§: indicates authors equal contribution)* [I.F = 6.57, Citation: 5, link: http://pubs.acs.org/doi/abs/10.1021/acs.orglett.6b034850]

[6] Rh(III)-Catalyzed C□H Cyclization of Arylnitrones with Diazo Compounds: Facile Access to *N*-Hydroxyindolines
Ramesh B. Dateer and Sukbok Chang* *Org. Lett.* **2016,** *18*, 68-71.
[I.F = 6.57, Citation: 57, API Score = 4.0, link: http://pubs.acs.org/doi/abs/10.1021/acs.orglett.5b03273]

[5**]** Selective Cyclization of Arylnitrones to Indolines under External Oxidant-Free Conditions: Dual Role of Rh(III)Catalyst in the C□H Activation and Oxygen Atom Transfer
Ramesh B. Dateer and Sukbok Chang* *J. Am Chem. Soc.* **2015**, *137*, 4908-4911.
[I.F = 13.8, Citation: 112, API Score = 7.8 link: http://pubs.acs.org/doi/pdf/10.1021/jacs.5b01065].

[4] Zn(II)- and Au(I)-catalyzed Regioselective Hydrative Oxidations of 3-En-1-ynes with Selectfluor. Realization of 1,4-Dioxo and 1,4-Oxohydroxy Functionalizations
A, M. Jadhav, S. A. Gawade, D. Vasu, **R. B. Dateer**, and R.-S. Liu *Chem- A. Eur. J.* **2014,** *20*, 1813-1817.
[I.F = 5.77, Citation: 20, API Score = 2.3, link: http://onlinelibrary.wiley.com/doi/10.1002/chem.201304322/pdf]

[3] Gold-Catalyzed Intermolecular [4+2] and [2+2+2]-Cycloadditions of Ynamides with Alkenes
R. B. Dateer, B. S. Shaibu and R.-S Liu, *Angew Chem Int. Ed.* **2012**, *51*, 113- 117 (Published as hot article)
[I.F = 11.99, Citation: 96, API Score = 7.0, link: http://onlinelibrary.wiley.com/doi/10.1002/anie.201105921/pdf]

[2] Gold-catalyzed synthesis of substituted 2-aminofurans via formal [4+1]-cycloadditions on 3-en-1-ynamides
R. B. Dateer, K. Pati and R.-S. Liu, *Chem. Commun.*, **2012**, *48*, 7200-7202.
[I.F=6.31,Citation:99, APIScore= 3.9 Link: http://pubs.rsc.org/en/content/articlepdf/2012/cc/c2cc33030j?page=search]

[1] Gold-Catalyzed 1, 2-Difunctionalizations of Aminoalkynes Using Only N-and O-Containing Oxidants
A. Mukherjee, **R. B. Dateer**, R. Chaudhuri, S. Bhunia, S. N. Karad and R.- S Liu, *J. Am. Chem Soc*. **2011**,133, 15372-15375. [I.F = 13.8, Citation: 131, API Score = 5.2, link: http://pubs.acs.org/doi/pdf/10.1021/ja208150d]

Invited Talk: Conferences

- ***References:***

1. Prof. Dr. Sukbok Chang *(Postdoc Adviser)* Professor and Director of Center for Catalytic C-H Functionalization, IBS, Dept. of Chemistry, KAIST, 291, Daehalk-ro, Yuseong-gu, Daejeon, Republic of Korea, 305-701, Tel. (+82)-42-350-2841 Fax: (+82)-42-350-8180 Email: sbchang@kaist.ac.kr	**2. Prof. Dr. Rai-Shung Liu** *(PhD Adviser)* Professor and Dean of college of Science, National Tsing Hua University, Dept. of Chemistry, 101, Sec. 2, Guang-Fu, Rd, 30013, Republic of Taiwan (R.O.C) Tel. (+886) 33385 Fax: 03-5711082 *Email-* rsliu@mx.nthu.edu.tw	**3. Prof. Dr. Olivier Baudoin** *(Postdoc Adviser)* University of Basel Department of Chemistry St. Johanns-Ring 19 CH-4056 Basel, Switzerland Phone: +41 61 207 10 22 (secr.) Fax: +41 61 207 10 05 Email: olivier.baudoin@unibas.ch