

Curriculum Vitae

Dr Gregory J. P. Perry

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Current Appointment

Lecturer in Organic Chemistry, University of Southampton, UK

Education

2008-2012	MChem in Chemistry (1st Class Hons), University of Liverpool, UK <i>with Professor P. Andrew Evans</i>
2011	Industrial Research Placement, Eli Lilly, Windlesham, UK <i>with Dr Jeffery Richardson and Dr Andrew Williams</i>
2012-2016	PhD in Organic Chemistry, University of Manchester, UK <i>with Professor Igor Larrosa</i>

Academic Career

2017-2018	Postdoctoral Research Fellow, Nagoya University, Japan <i>with Professor Kenichiro Itami</i>
2018-2020	Lecturer (fixed-term), University of Manchester, UK <i>with Professor David J. Procter</i>
2021-2023	JSPS Postdoctoral Research Fellow, Kyoto University, Japan <i>with Professor Hideki Yorimitsu</i>
2023-Present	Lecturer in Organic Chemistry, University of Southampton, UK

Publication List

- (32) *Carboxylic Acid Salts as Dual-Function Reagents for Carboxylation and Carbon Isotope Labeling*
S. Wang, I. Larrosa, H. Yorimitsu,* G. J. P. Perry* (*corresponding authors)
Angew. Chem. Int. Ed. 2023, 62, e202218371
DOI: <https://doi.org/10.1002/anie.202218371>
Highlighted as a Team Profile in *Angew. Chem. Int. Ed.* 2023, 62, e202306072

- (31) *Late-stage sulfonic acid/sulfonate formation from sulfonamides via sulfonyl pyrroles*
T. Ozaki, H. Yorimitsu,* G. J. P. Perry* (*corresponding authors)
Tetrahedron 2022, 117-118, 132830
DOI: <https://doi.org/10.1016/j.tet.2022.132830>
Highlighted in **Synfacts** 2022, 18, 0956
- (30) *Sulfur (IV) in Transition-Metal-Free Cross-Couplings for Biaryl Synthesis*
G. J. P. Perry,* H. Yorimitsu* (*corresponding authors)
ACS Sus. Chem. Eng. 2022, 10, 2569-2586
DOI: <https://doi.org/10.1021/acssuschemeng.1c08673>
- (29) *Modular synthesis of unsymmetrical [1]benzothieno[3,2-*b*][1]benzothiophene molecular semiconductors for organic transistors*
M. Tayu, A. Rahmanudin, G. J. P. Perry, R. U. Khan, D. J. Tate, R. M.-Hernandez, Y. Shen, I. Dierking, Y. Janpatompong, S. Aphichatpanichakul, A. Zamhuri, I. Victoria-Yrezabal, M. L. Turner, D. J. Procter
Chem. Sci. 2022, 13, 421-429
DOI: <https://doi.org/10.1039/D1SC05070B>
Highlighted in *Synfacts* 2022, 18, 0259
- (28) *Zincation of Styrylsulfonium Salts*
K. Yamada, M. B. Kintzel, G. J. P. Perry, H. Saito, H. Yorimitsu
Org. Lett. 2022, 24, 7446-7449
DOI: <https://doi.org/10.1021/acs.orglett.2c03013>
- (27) *Sulfonium-aided coupling of aromatic rings via sigmatropic rearrangement*
G. J. P. Perry, H. Yorimitsu
Proc. Jpn. Acad., Ser. B 2022, 98, 190-205
DOI: <https://doi.org/10.2183/pjab.98.012>
- (26) *Identification of stomatal-regulating molecules from de novo arylamine collection through aromatic C–H amination*
Y. Toda, G. J. P. Perry, S. Inoue, E. Ito, T. Kawakami, M. R Narouz, K. Takahashi, Y. Aihara, B. Maeda, T. Kinoshita, K. Itami, K. Murakami
Sci. Rep. 2022, 12, 949
DOI: <https://doi.org/10.1038/s41598-022-04947-z>
- (25) *Primary Sulfonamide Functionalization via Sulfonyl Pyrroles: Seeing the N–Ts Bond in a Different Light*
T. Ozaki, H. Yorimitsu,* G. J. P. Perry* (*corresponding authors)
Chem. Eur. J. 2021, 27, 15387-15391
DOI: <https://doi.org/10.1002/chem.202102748>

- (24) *Modular Synthesis of Stereodefined Benzocyclobutene Derivatives via Sequential Cu- and Pd-Catalysis*
F. J. T. Talbot, S. Zhang, B. Satpathi, G. P. Howell, G. J. P. Perry, G. E. M. Crisenza, D. J. Procter
ACS. Catal. 2021, 11, 14448-14455
DOI: <https://doi.org/10.1021/acscatal.1c04496>
Highlighted in *Synfacts* 2022, 18, 0171
- (23) *Enantioselective Copper-Catalyzed Borylative Cyclization for the Synthesis of Quinazolinones*
Q. Dherbassy, S. Manna, C. Shi, W. Prasitwatcharakorn, G. E. M. Crisenza, G. J. P. Perry, D. J. Procter
Angew. Chem. Int. Ed. 2021, 60, 14355-14359
DOI: <https://doi.org/10.1002/anie.202103259>
- (22) *Copper-catalyzed functionalization of enynes*
Q. Dherbassy, S. Manna, F. J. T. Talbot, W. Prasitwatcharakorn, G. J. P. Perry, D. J. Procter
Chem. Sci. 2020, 11, 11380-11393
DOI: <https://doi.org/10.1039/D0SC04012F>
- (21) *Copper-Catalyzed Borylative Couplings with C–N Electrophiles*
F. J. T. Talbot, Q. Dherbassy, S. Manna, C. Shi, S. Zhang, G. P. Howell, G. J. P. Perry, D. J. Procter
Angew. Chem. Int. Ed. 2020, 59, 20278-20289
DOI: <https://doi.org/10.1002/anie.202007251>
- (20) *Radical C–C Bond Formation using Sulfonium Salts and Light*
A. Peter, G. J. P. Perry, D. J. Procter
Adv. Synth. Catal. 2020, 362, 2135-2142
DOI: <https://doi.org/10.1002/adsc.202000220>
Selected as a “Hot Topic” Article
- (19) *Trifluoromethyl Sulfoxides: Reagents for Metal-Free C–H Trifluoromethylthiolation*
D. Wang, C. G. Carlton, M. Tayu, J. J. W. McDouall, G. J. P. Perry, D. J. Procter
Angew. Chem. Int. Ed. 2020, 59, 15918-15922
DOI: <https://doi.org/10.1002/anie.202005531>
- (18) *Para-coupling of phenols with C2/C3-substituted benzothiophene S-oxides*
Z. He, T. Biremond, G. J. P. Perry, D. J. Procter
Tetrahedron 2020, 76, 131315
DOI: <https://doi.org/10.1016/j.tet.2020.131315>

- (17) *Copper-Catalyzed Functionalization of 1,3-Dienes: Hydrofunctionalization, Borofunctionalization and Difunctionalization*
G. J. P. Perry,* T. Jia, D. J. Procter* (*corresponding authors)
ACS. Catal. 2020, 10, 1485-1499
DOI: <https://doi.org/10.1021/acscatal.9b04767>
- (16) *Sulfoxide-mediated oxidative cross-coupling of phenols*
Z. He, G. J. P. Perry, D. J. Procter
Chem. Sci. 2020, 11, 2001-2005
DOI: <https://doi.org/10.1039/C9SC05668H>
Highlighted in *Synfacts* 2020, 16, 0529
- (15) *Enantio- and Diastereoselective Synthesis of Homopropargyl Amines by Copper-Catalyzed Coupling of Imines, 1,3-Enynes and Diboranes*
S. Manna, Q. Dherbassy, G. J. P. Perry, D. J. Procter
Angew. Chem. Int. Ed. 2020, 59, 4879-4882
DOI: <https://doi.org/10.1002/anie.201915191>
- (14) *Metal-free photoredox-catalyzed formal C–H/C–H coupling of arenes enabled by interrupted Pummerer activation*
M. H. Aukland, M. Šiaučiulis, A. West, G. J. P. Perry, D. J. Procter
Nat. Catal. 2020, 3, 163-169
DOI: <https://doi.org/10.1038/s41929-019-0415-3>
Highlighted in *Synform* 2020, 07, A102–A104
- (13) *Metal-Free Synthesis of Benzothiophenes by Twofold C–H Functionalization: Direct Access to Materials-Oriented Heteroaromatics*
J. Yan, A. P. Pulis, G. J. P. Perry, D. J. Procter
Angew. Chem. Int. Ed. 2019, 58, 15675-15679
DOI: <https://doi.org/10.1002/anie.201908319>
Highlighted in *Synfacts* 2020, 16, 0145
- (12) *Enantioselective and Regioselective Copper-Catalyzed Borocyanation of 1-Aryl-1,3-Butadienes*
T. Jia, M. J. Smith, A. P. Pulis, G. J. P. Perry, D. J. Procter
ACS Catal. 2019, 9, 6744-6750
DOI: <https://doi.org/10.1021/acscatal.9b01911>
Highlighted in *Synfacts* 2019, 15, 1012
- (11) *Pummerer chemistry of benzothiophene S-oxides: Metal-free alkylation and arylation of benzothiophenes*
Z. He, A. P. Pulis, G. J. P. Perry, D. J. Procter
Phosphorus Sulfur Silicon Relat. Elem. 2019, 194, 669-677
DOI: <https://doi.org/10.1080/10426507.2019.1602626>

- (10) *Decarboxylative Suzuki–Miyaura coupling of (hetero)aromatic carboxylic acids using iodine as the terminal oxidant*
J. M. Quibell, G. Duan, G. J. P. Perry, I. Larrosa
Chem. Commun. 2019, **55**, 6445-6448
DOI: <https://doi.org/10.1039/C9CC01817D>
Highlighted in *Synfacts* **2019**, *15*, 1361
- (9) *Transition-Metal-Free Synthesis of C3-Arylated Benzofurans from Benzothiophenes and Phenols*
K. Yang, A. P. Pulis, G. J. P. Perry, D. J. Procter
Org. Lett. 2018, **20**, 7498-7503
DOI: <https://doi.org/10.1021/acs.orglett.8b03267>
- (8) *Transition-metal-free decarboxylative bromination of aromatic carboxylic acids*
G. J. P. Perry,[†] J. M. Quibell,[†] D. M. Cannas, I. Larrosa ([†]equal contribution)
Chem. Sci. 2018, **9**, 3860-3865
DOI: <https://doi.org/10.1039/C8SC01016A>
Highlighted in *Scientific Updates*
- (7) *The use of carboxylic acids as traceless directing groups for regioselective C–H bond functionalisation*
M. Font, J. M. Quibell, G. J. P. Perry, I. Larrosa
Chem. Commun. 2017, **53**, 5584-5597
DOI: <https://doi.org/10.1039/C7CC01755C>
- (6) *Transition-Metal-Free Decarboxylative Iodination: New Routes for Decarboxylative Oxidative Cross-Couplings*
G. J. P. Perry, J. M. Quibell, A. Panigrahi, I. Larrosa
J. Am. Chem. Soc. 2017, **139**, 11527-11536
DOI: <https://pubs.acs.org/doi/10.1021/jacs.7b05155>
The most accessed paper Aug-Oct 2017. Amongst the most accessed papers of the year 2017-2018.
- (5) *Aromatic C–H amination: a radical approach for adding new functions into biology-and materials-oriented aromatics*
K. Murakami, G. J. P. Perry, K. Itami
Org. Biomol. Chem. 2017, **15**, 6071-6075
DOI: <https://doi.org/10.1039/C7OB00985B>
- (4) *Recent Progress in Decarboxylative Oxidative Cross-Coupling for Biaryl Synthesis*
G. J. P. Perry, I. Larrosa
Eur. J. Org. Chem. 2017, **2017**, 3517-3527
DOI: <https://doi.org/10.1002/ejoc.201700121>
Most accessed paper Jun-Jul 2017. Most accessed paper of the year 2017-2018.
“EurJOC Readers’ Choice 2019” article

- (3) *Ru-Catalyzed C–H Arylation of Fluoroarenes with Aryl Halides*
M. Simonetti, G. J. P. Perry, X. C. Cambeiro, F. Juliá-Hernández, J. N. Arokianathar, I. Larrosa
J. Am. Chem. Soc. 2016, 138, 3596-3606
DOI: <https://doi.org/10.1021/jacs.6b01615>
- (2) *C–H Functionalisation of Heteroaromatic Compounds via Gold Catalysis*
N. Ahlsten, X. C. Cambeiro, G. J. P. Perry, I. Larrosa
in *Au-Catalyzed Synthesis and Functionalization of Heteroarenes (Topics in Heterocyclic Chemistry)*; Springer: 2016; Vol. 46, pp 175-226
DOI: https://doi.org/10.1007/7081_2015_5005
- (1) *A silver-free system for the direct C–H auration of arenes and heteroarenes from gold chloride complexes*
N. Ahlsten, G. J. P. Perry, X. C. Cambeiro, T. C. Boorman, I. Larrosa
Catal. Sci. Technol. 2013, 3, 2892-2897
DOI: <https://doi.org/10.1039/C3CY00240C>
Selected as a Hot (recommended) Article in *Catal. Sci. Technol.* July 2013

Invited Lectures

- Mar 2024 Waseda University, Tokyo, Japan
Hosts: Professor Jun Yamaguchi and Dr Kei Muto
- May 2023 RSC South-West Regional Meeting 2023, Reading University, Reading, UK
Organisers: Dr James Cooper and Dr John McKendrick
- Mar 2023 Tokyo University of Science, Tokyo, Japan
Host: Professor Suguru Yoshida
- Mar 2023 RIKEN Center for Sustainable Resource Science, Saitama, Japan
Host: Professor Laurean Ilies
- Feb 2023 Kwansei Gakuin University, Hyogo, Japan
Host: Professor Kei Murakami
- Sep 2017 Ningbo University, Ningbo, China
Host: Dr Junfei Luo

Awards/Grants/Fellowships

- Nov 2024 EPSRC/AstraZeneca iCASE studentship
Project Lead: Gregory J. P. Perry. Industry Lead: Dr Ryan Bragg and Dr Charles Elmore
- Jul 2023 University of Southampton Pump-Primer
Project Lead: Gregory J. P. Perry
- Apr 2021 JSPS International Research Fellowship (ID No. P21039)
Project Lead: Gregory J. P. Perry. Host: Professor Hideki Yorimitsu
- Feb 2020 Marie Skłodowska-Curie Actions (MSCA) Individual Fellowship awarded to Bishnupada Satpathi (ID No. 891624).
Project Lead: David J. Procter. Coordinator: Gregory J. P. Perry
- Jun 2019 Learning through Research Summer Internship awarded to Annabel Basford.
Project Lead: Gregory J. P. Perry

Teaching Experience

Supervision of Students:

- (10) 2023-Present Eleyna Jack
3rd Year MChem Student, University of Southampton, UK
- (9) 2023-Present Charesse Armatey
3rd Year MChem Student, University of Southampton, UK
- (8) 2023-Present Daniel Ryder,
PhD Student, University of Southampton, UK
- (7) 2022-2023 Yoshiteru Shishido
PhD Student, Kyoto University, Japan
Current: PhD with Professor Hideki Yorimitsu, Kyoto University, Japan
- (6) 2021-2023 Shuo Wang
PhD Student, Kyoto University, Japan
Current: Researcher at JSR Corporation, Yokkaichi, Japan
- (5) 2021-2022 Yuki Miyake
BSc Student, Kyoto University, Japan
Current: MChem with Prof. Atsushi Wakamiya, Kyoto University, Japan
- (4) 2021 Tomoya Ozaki
BSc Student, Kyoto University, Japan
Current: PhD with Prof. Shih-Yuan Liu, Boston College, USA

- (3) 2019-2020 Ciaran Elliott
MChem Student, University of Manchester, UK
Current: Secondary School Teacher, Manchester, UK
- (2) 2019 Annabel Basford
Summer Placement Student, University of Manchester, UK
Current: PhD with Dr Rebecca L. Greenaway, Imperial College London, UK
- (1) 2018-2019 Souroprobho Chowdhury
MChem Student, University of Manchester, UK
Current: PhD with Dr. Marco Di Antonio, Imperial College London, UK

Lecture Courses:

- 2024-Present Retrosynthesis and Aromatics (CHEM2031), University of Southampton
- 2018-2020 Advanced Organic Chemistry (CHEM40411), University of Manchester
- 2018-2020 Environmental and Green Chemistry (CHEM20712), University of Manchester

Teaching Awards:

- Sep 2020 Fellow of the Higher Education Academy (FHEA).

Volunteering Activities

- 2017 - 2018 English Teacher, Komagata Orphanage, Nagoya, Japan
Providing free English lessons to Japanese children (aged 9-12 years).
- 2015 - 2016 Social Mobility Foundation Mentor, Online
To support and encourage, through email exchange and ‘Meet-Up’ events, students from low-income backgrounds to pursue opportunities in higher education.
- 2013 - 2016 STEM (Science, Technology, Engineering and Mathematics) Ambassador
Various locations.
To allow young people and their carers to enjoy STEM subjects and to encourage young people to pursue STEM careers.