

JOHN A. MCRAE

Dr. John Alexander McRae, M.A. (Queen's), Ph.D., D.Sc. (Manchester), LL.D. (Queen's), F.R.I.C., F.R.S.C., was Head of the Department of Chemistry from 1941 to 1956 and member of the chemistry staff for 44 years. After retiring, Dr. McRae was Emeritus Professor of Chemistry until his death in 1960.

Dr. McRae graduated from Queen's University with an M.A. in 1909 and joined the University as a lecturer this same year. From 1910 to 1911, he was a lecturer at the University of Toronto, returning to Queen's the following year. With the exception of the years 1919-1921, during which he attended Manchester University to obtain his Ph.D. and D.Sc., he carried out the remainder of his career at Queen's.

John McRae was elected a Fellow of the Royal Society of Chemistry in 1938 and was a fellow of the Royal Institute of Chemistry and of the Chemical Institute of Canada. After retiring in 1956, Dr. McRae was honoured with a degree of Doctor of Laws from Queen's.

The McRae memorial lectures were established by donations from former students, with the first J.A. McRae Memorial lecture being given by R.H.F. Manske in 1964.

PREVIOUS MCRAE LECTURERS

2022 • *M. Monteiro*

2021 • *J. Johnson*

2019 • *J. Buriak*

2019 • *S. Reisman*

2018 • *N. Lewis*

2017 • *T. D. Tilley*

2015 • *D. MacMillan*

2014 • *A. Holmes*

2013 • *G. Bertrand*

2011 • *S. Denmark*

2010 • *B. Feringa*

2009 • *R. Grubbs*

2008 • *P. Seeberger*

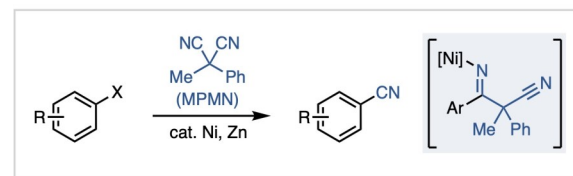


**Department of Chemistry
Queen's University**

is honoured to host the
2024 McRae Lecturer:

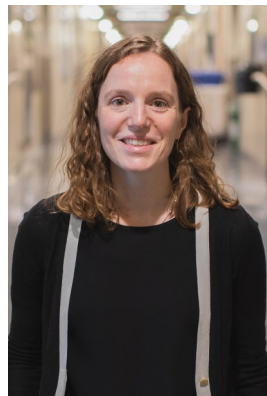
Sophie Rousseaux
University of Toronto

"New Developments in Ni-
Catalyzed Transnitration"



Friday, January 19, 2024
11:30 AM
Room 117, Chernoff Hall

PROFESSOR SOPHIE ROUSSEAU



Sophie Rousseau
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Sophie Rousseau obtained a B.Sc. in Biopharmaceutical Sciences, Medicinal Chemistry from the University of Ottawa in 2007. She remained at the University of Ottawa for her PhD, working with Prof. Keith Fagnou on Pd-catalyzed aliphatic C-H bond functionalization reactions. In 2010, she moved to MIT to complete her graduate research with Prof. Stephen L. Buchwald, working on Pd-catalyzed dearomatization reactions. From 2012–2015, she worked with Prof. Harry L. Anderson, University of Oxford, on the self-assembly of porphyrin nanorings as an NSERC postdoctoral fellow and Glasstone Research Fellow. During her time at Oxford, Sophie also held a Junior Research Fellow at St John's College (2012–2015) and was a Stipendiary Lecturer in Organic Chemistry at Jesus College (2014).

In July 2015, Sophie returned to Canada to join the Department of Chemistry at the University of Toronto as an Assistant Professor, where she was promoted to Associate Professor in July 2022. She holds a Canada Research Chair (Tier 2) in Organic Chemistry since 2016. Her group's research interests include organic synthesis, catalysis, and organometallic chemistry, with a particular focus on the synthesis of small rings and nitrile-containing molecules. Key contributions to the field include: 1) the development of new redox-active leaving groups for Ni-catalyzed cross-couplings using aliphatic alcohols; 2) the development of a new bench-stable and safe reagent for Ni-catalyzed transnitration reactions that avoids the use of cyanide salts in the synthesis of nitriles; 3) the design of a new class of benzonitrile ligands for Ni-catalyzed cross-couplings, which favour challenging reductive eliminations; and 4) the development of new reactivity with metal homoenolates, providing access to cyclopropylamines.

SELECTED HONOURS & AWARDS

- *ChemComm* Emerging Investigator Highly Commended Nomination (2023)
- CSC Keith Fagnou Award (2023)
- McLean Award (2022)
- University of Toronto School of Graduate Studies Early Career Supervision Award (2022)
- Organic Letters Outstanding Publication of the Year Lectureship (2022)
- Sloan Research Fellowship (2021)
- Ontario Early Researcher Award (2021)
- Dorothy Shoichet Women Faculty Science Award of Excellence (2020)