

## 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

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*

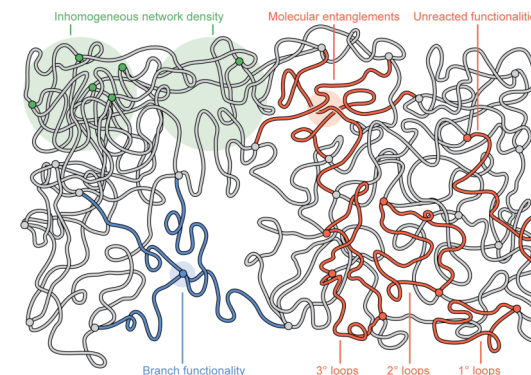


### Department of Chemistry Queen's University

is honoured to host the  
2021 McRae Lecturer:

Jeremiah A. Johnson  
Massachusetts Institute of  
Technology (MIT)

"Cleavable bonds in plastics and  
gels: what can we learn by  
breaking materials apart?"



Friday, April 23, 2021  
11:30 AM  
Virtual via Zoom

## PROFESSOR JEREMIAH A. JOHNSON



**Jeremiah A. Johnson**  
Department of Chemistry  
Massachusetts Institute of Technology (MIT)  
77 Massachusetts Avenue, Room 18-296  
Cambridge, MA 02139-4307 USA

**Dr. Jeremiah A. Johnson** earned a BA in Biomedical Engineering and Chemistry from Washington University in St. Louis, BS, where he conducted research under the supervision of Prof. Karen L. Wooley, working on the development of novel fluoropolymers. In 2009, Jeremiah earned his PhD in Chemistry from Columbia University; his research was conducted under the supervision of both Prof. Nicholas J. Turro and Prof. Jeffrey T. Koberstein. His PhD research was in the same realm of polymer synthesis, where he designed photodegradable polymers and polymer networks. As a Beckman Institute Postdoctoral Scholar, Jeremiah worked with Nobel Laureate Dr. Robert H. Grubbs in collaboration with Prof. David A. Tirrell on the application of polymers for drug delivery and release.

In 2011, Jeremiah became an Assistant Professor in the Chemistry Department of the Massachusetts Institute of Technology (MIT). He is also part of the MIT Polymers and Soft Matter program. In 2020, Jeremiah became a Full Professor, in addition to being a member of the Koch Institute at MIT and an Associate Member at the Broad Institute of MIT and Harvard. As a research group, the Johnson group firmly believes that diversity is a source of scientific creativity and innovation. Their research seeks creative, macromolecular solutions to problems at the interface of chemistry, medicine, biology, and materials science. By applying traditional organic and organometallic synthesis tools, synthetic polymer chemistry, photochemistry, surface science, and biopolymer engineering, they can create new materials. Their applications range from drug delivery to the development of semiconducting organometallic polymers, to name a few.

Throughout his entire career, Dr. Johnson has been recognized with several teaching and research awards.

## SELECTED HONOURS & AWARDS

- 2019 Arthur C. Cope Scholar Award; American Chemical Society
- 2018 Nobel Laureate Signature Award for Graduate Education in Chemistry; American Chemical Society
- 2018 School of Science Prize in Undergraduate Teaching
- 2014 DuPont Young Professor Award; DuPont
- 2008 Hammett Award for Excellence in Graduate Research; Columbia University Department of Chemistry