

## 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 • *S. Reisman*

2018 • *N. Lewis*

2017 • *T. D. Tilley*

2015 • *D. MacMillan*

2014 • *A. Holmes*

2013 • *G. Gertand*

2011 • *S. Denmark*

2010 • *B. Feringa*

2009 • *R. Grubbs*

2008 • *P. Seeberger*

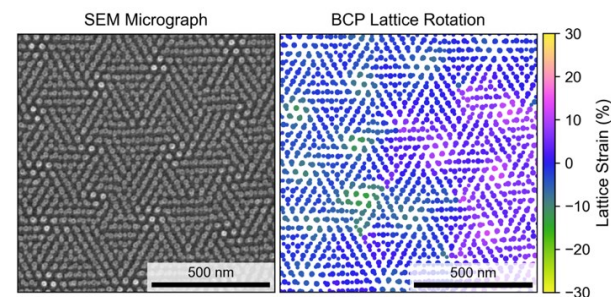


### Department of Chemistry Queen's University

is honoured to host the  
2019 McRae Lecturer:

Jillian Buriak  
University of Alberta

"Let's Do the Twist: From  
Epitaxial Block Copolymer  
Nanopatterns to Graphene  
Bilayers"



Friday, December 13, 2019  
11:30 AM  
Room 117, Chernoff Hall

## PROFESSOR JILLIAN BURIAK



### Jillian Buriak

Professor, Editor-In-Chief for Chemistry of Materials Science  
Chemistry  
University of Alberta  
4-255 Centennial Centre for Interdisciplinary Science

**Dr. Jillian Buriak** holds the Canada Research Chair of Nanomaterials for Energy. Born and raised in the Toronto area, she received an A.B. from Harvard University in 1990, and a Ph.D. from the Université Louis Pasteur in Strasbourg, France, in 1995. After an NSERC postdoctoral appointment at The Scripps Research Institute in La Jolla, California, Buriak started her independent faculty career at Purdue University in 1997, and was promoted to associate professor with tenure in 2001. In 2003 she joined the University of Alberta and the National Institute for Nanotechnology as a full professor and Canada Research Chair. She is presently Editor-in-Chief of the American Chemical Society journal, *Chemistry of Materials*. Buriak is a Fellow of the American Association for the Advancement of Science, the Royal Society of Chemistry (UK), and the Royal Society of Canada. Recent awards include the Arthur Doolittle Award from the Polymer Materials Science and Engineering Division (PMSE) of the American Chemical Society (ACS), the Rio Tinto Alcan Award of the Canadian Society for Chemistry (CSC), the Burghausen Award from the City of Burghausen, Germany, the E. W. R. Steacie Award from the CSC, and others. She is interested in the chemistry and applications of nanoscale materials, interfaces, materials for energy, and the world of scientific publishing.

## SELECTED HONOURS & AWARDS

- Editor-in-Chief of *Chemistry of Materials*, ACS Publications (2014-present)
- Associate Editor, *ACS Nano*, ACS Publications (2009-2013)
- Board of Reviewing Editors, *Science*, AAAS (2004-2008)
- Canada Research Chair of Nanomaterials for Energy
- Rio Tinto Alcan Award of the Canadian Society for Chemistry
- Arthur Doolittle Award, Polymer Materials Science and Engineering Division (PMSE) of the American Chemical Society

## RECENT PUBLICATIONS

- Jin, C.; Olsen, B. C.; Lubber, E. J.; Buriak, J. M. Preferential Alignment of Incommensurate Block Copolymer Dot Arrays Forming Moiré Superstructures. *ACS Nano* **2017**, *11*, 3237-3246.
- Cao, B.; Adutwum, L. A.; Oliynyk, A. O.; Lubber, E. J.; Olsen, B. C.; Mar, A.; Buriak, J. M. How to Optimize Materials and Devices *via* Design of Experiments and Machine Learning: Demonstration Using Organic Photovoltaics. *ACS Nano* **2018**, *12*, 7434-7444.