

THE KENNETH RUSSELL ENDOWED LECTURE

Kenneth Russell came to Queen's in 1954. He had research experience in polymer chemistry at Cambridge and Princeton, in thermodynamics of rocket fuels at Penn State and in kinetics of atom recombination at Manchester. He was known particularly for his polymer research and first year and polymer lectures (dating back to 1956). He retired officially in 1990.

His interest in polymer chemistry arose through wartime work on butyl rubber. This led to a Ph.D. thesis on isobutene polymerization by Friedel Crafts catalysts, including kinetic studies of the effects of various co-initiators. His research at Queen's led to an understanding of the dual role of a wide range of co-initiators.

Free radical studies at Princeton led to determination of transfer constants for transfer agents and retarders (still quoted in the Polymer Handbook).

His other main research areas, inspired in large measure by parallel work at Du Pont, consisted of structural studies of polyethylene and grafting of vinyl monomers to polyethylene. These carried on for 12 years into his retirement and profited from cooperation with many members of staff. A main factor in the incorporation of this lecture series was Dr. Russell's work with Drs. Whitney and Parent.

PREVIOUS RUSSELL LECTURERS

2018 • *M. Winnik*

2018 • *T. Lodge*

2017 • *S. Holdcroft*

2016 • *K. Matyjaszewski*

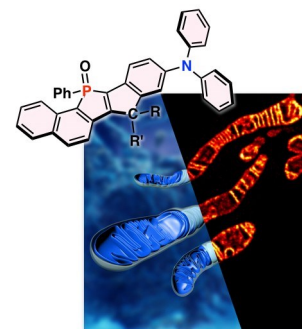


**Department of Chemistry
Queen's University**

is honoured to host the
2019 Russell Lecturer:

Shigehiro Yamaguchi
Nagoya University

"Main-Group π -Materials for
Organic Electronics and
Bioimaging"



Friday, November 8, 2019
11:30 AM
Room 117, Chernoff Hall

DR. SHIGEHIRO YAMAGUCHI



Shigehiro Yamaguchi
Nagoya University
Furomachi, Chikusa-ku, Nagoya

Dr. Shigehiro Yamaguchi earned his B.S. from Kyoto University in 1991. He earned his M.S. in 1993, and his Dr. Eng. in 1997 under the supervision of Dr. K. Tamao at Kyoto University. During his studies, he was a JSPS Research Fellow. He became an Assistant Professor at Kyoto University in 1993, and moved to Nagoya University in 2003 as an Associate Professor. He has worked on many special projects during his tenure, and is currently the Vice-Director of the Institute of Transformative Bio-molecules and the Director of the Research Center for Materials Science at Nagoya University.

Yamaguchi works on a variety of topics in the general fields of main group chemistry and physical organic chemistry. In particular, emphasis is placed on the development of new functional π -electron materials possessing unusual photophysical and electronic properties. On the basis of the new design concepts emanating from his lab, he is able to exploit the features of various main group elements as well as the newly developed synthetic methodologies, various types of functional materials have been developed; including the key molecule in commercial organic electroluminescent devices. He will be involved mainly in the development of innovative bio-imaging tools, collaborating with the groups of Higashiyama, Irle, Itami, and Crudden.

SELECTED HONOURS & AWARDS

- 1993 JSPS Fellowships for Japanese Junior Scientists
- 1997 The Chisso Award in Synthetic Organic Chemistry
- 1999 Young Scientist Award of the Silicon Chemical Society of Japan
- 2002 The Chemical Society of Japan Award for Distinguished Young Chemists
- 2005 Young Scientist Award from the Minister of Education, Culture, Sports, Science and Technology
- 2007 Tokyo Techno Forum Gold Medal Award
- 2008 Nozoe Young Scientist Award
- 2008 Nice-step researcher 2008, National Institute of Science and Technology Policy (NISTEP)
- 2010 SSOCJ DIC Award for Functional Material Chemistry 2009
- 2012 JSPS Award
- 2015 Mukaiyama Award
- 2016 The Chemical Society of Japan Award for Creative Work
- 2017 Merck-Karl Pfister Visiting Professorship (MIT lectureship award)
- 2018 Ichimura Academic Award
- 2019 Humboldt Research Award