

COINS Seminar #50

[Date] 6/December/2019 (Fri.) 11:00 - 12:00 (Registration Open at 10:30)

*There is no research mixer.

[Venue] Innovation Center of NanoMedicine (iCONM) 3F 3001 Meeting room

[Registration] URL: https://www.cis-trans.jp/coins_seminar50/index.html

Title : Bio-related ATRP

Abstract :

Atom transfer radical polymerization (ATRP) has been successfully used to covalently attach polymer chains to various biomolecules such as proteins, enzymes and nucleic acids. Recently ATRP was also employed to conjugate polymers to surfaces of exosomes to enhance their stability and function. Properties of the resulting bioconjugates will be presented.

Speaker : Kris Matyjaszewski

Affiliation : Carnegie Mellon University

Position : J.C. Warner University Professor of Natural Sciences

URL : www.cmu.edu/maty



<CV>

Ph.D. 1976, Polish Academy of Sciences,

1985- present Professor, Carnegie Mellon University

1995- present, Director, Center for Macromolecular Engineering

2001- Editor, Progress in Polymer Science (IF=25)

2006 Member, National Academy of Engineering

2014 Fellow, National Academy of Inventors

2019 Member, National Academy of Sciences

2004 Member, Polish Academy of Sciences

2012 Member, Russian Academy of Sciences

2019 Member, Australian Academy of Science

2013-15 President, Pacific Polymer Federation

Fellow: IUPAC (2002), ACS (2010). Published >1,100 papers, 99 book chapters, 23 books and 62 US patents - cited 143,00 times, H index= 183 (Google Scholar)

<Award>

2009 Presidential Green Chemistry Challenge Award; 2011 Wolf Prize in Chemistry; 2011 Japanese Polymer Science Award; 2014 National Institute of Materials Science, Japan, Medal; 2015 Dreyfus Prize in Chemical Sciences; 2017 Benjamin Franklin Medal in Chemistry

American Chemical Society Awards: Chemistry of Materials (2019), North America Science Award (2013), Hermann Mark Award (2012); Applied Polymer Science (2011), Polymer Chemistry (2002), Creative Polymer Chemistry (1995)

11 doctorate Honoris Causa

<Key words>

ATRP; atom transfer radical polymerization; macromolecular engineering; catalysis; polymers biomedical and energy applications