

HARRISON— MACRAE FAMILY LECTURE

The Harrison – MacRae Family Lecture Series was established through the generosity of the estate of the late John H. Harrison (Queen's B. Comm., 1949) and Elizabeth (Betty) Harrison (nee MacRae, Queen's B.A., 1949). For over a century the Harrison - MacRae family has attended Queen's University and has shown a distinct enthusiasm for the arts and sciences. Elizabeth Harrison is the daughter of Queen's graduates Alex E. MacRae (B.Sc. Chem. Eng., 1914) and Irene McAllister (B.Sc. Math & Physics, 1914), and sister to Queen's graduates Jean C. Doherty (B.A. 1939), Donalda I. Beattie (B.A. 1939), Marion E. Bradley (B.A. 1946), and brother Robert A. MacRae (B.Sc. Chem. Eng., 1954). Their son Ian Harrison (Queen's B.Sc. Chem. Phys., 1981) is a Professor of Chemistry at the University of Virginia. Numerous children, grandchildren and great grandchildren have likewise attended Queen's University. In recognition of their long affinity for Queen's, this lecture series will feature seminars by distinguished scientists on topics within the fields of chemical physics or physical chemistry.

SELECTED RECENT PUBLICATIONS

- Efficient and stable sky-blue delayed fluorescence organic light-emitting diodes with CIEy below 0.4
C.-Y. Chan, M. Tanaka, H. Nakanotani, C. Adachi, *Nat. Comm.*, 9, 5036 (2018)
- Excited state engineering for efficient reverse intersystem crossing
H. Noda, H. Nakanotani, C. Adachi, *Science Advances*, 4, 6, eaao6910 (2018)
- Exploiting Singlet Fission in Organic Light-Emitting Diodes R. Nagata, H. Nakanotani, W. J. Potscavage Jr., C. Adachi, *Adv. Mater.*, 30, 33, 1801484 (2018)
- Simultaneous Edge-on to Face-on Reorientation and 1D Alignment of Small π -Conjugated Molecules Using Room-Temperature Mechanical Rubbing
J.-C. Ribierre, T. Tanaka, L. Zhao, Y. Yokota, S. Matsumoto, D. Hashizume, K. Takaishi, T. Muto, B. Heinrich, S. Méry, F. Mathevet, T. Matsushima, M. Uchiyama, C. Adachi, T. Aoyama, *Adv. Funct. Mater.*, 28, 19, 1707038 (2018)
- High-efficiency electroluminescence and amplified spontaneous emission from a thermally activated delayed fluorescent near-infrared emitter
D.-H. Kim, A. D'Aléo, X.-K. Chen, A. D. S. Sandanayaka, D. Yao, L. Zhao, T. Komino, E. Zaborova, G. Canard, Y. Tsuchiya, E. Choi, J. Weon Wu, F. Fages, J.-L. Brédas, J.-C. Ribierre, C. Adachi, *Nat. Photon.*, 12, 98 - 104, (2018)



**Department of Chemistry
Queen's University**

is honoured to host the
2019 Harrison—MacRae
Lecturer:

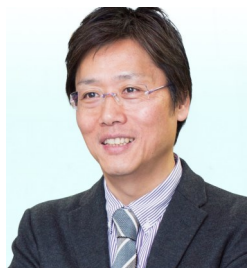
Dr. Chihaya Adachi
Kyushu University

“Exciton management in
OLEDs and organic laser
diodes”



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

PROF. CHIHAYA ADACHI



Chihaya Adachi
Kysushu University
Chihaya Adachi & Hajime Nakanotani lab
Fukuoka

Professor Chihaya Adachi obtained his doctorate in Materials Science and Technology in 1991 from Kyushu University. Before returning to Kyushu University as a professor of the Center for Future Chemistry and the Department of Applied Chemistry, he held positions as a research chemist and physicist in the Chemical Products R&D Center at Ricoh Co., a research associate in the Department of Functional Polymer Science at Shinshu University, research staff in the Department of Electrical Engineering at Princeton University, and an associate professor and professor at Chitose Institute of Science and Technology. He became a distinguished professor at Kyushu University in 2010, and his current posts also include director of Kyushu University's Center for Organic Photonics and Electronics Research (OPERA) since 2010 and program coordinator of Kyushu University's Education Center for Global Leaders in Molecular Systems for Devices and director of the Fukuoka i3 Center for Organic Photonics and Electronics Research since 2013.

He has published 480 articles (h index=82, citations= over 32,000).

SELECTED HONOURS & AWARDS

- Outstanding paper award & presentation award
- 2003: FFIT Award, Funai Foundation for Information Technology
- 2004: Distinguished paper award on Organic electroluminescence, Div. of Molecular Electronics and Bioelectronics, The Japan Society of Applied Physics, Japan
- 2004: Nano-tech 2004, International Nanotechnology Exhibition and Conference, Nano-tech award, IT&Electronics division
- 2005: The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology, Science and Technology Promotion Category, Studies on Organic Electroluminescence
- 2014: SID Fellow Awards
- 2016: The Japan Society of Applied Physics Fellow Awards
- 2016: Thomson Reuters Research Front Award 2016
- 2017: Nishina Memorial Prize