

## Curriculum Vitae

Laurean Ilies, Ph.D.



Associate Professor

Department of Chemistry, Graduate School of Science, The University of Tokyo

7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

Tel: +81(03)-5841-4368

E-mail: laur@chem.s.u-tokyo.ac.jp

### Education

- 2006-2009 Ph.D., Science, The University of Tokyo (Prof. Eiichi Nakamura)  
Thesis: “Synthesis, Properties and Applications of Functionalized Benzo[*b*]siloles”
- 2004-2006 M.S., Chemistry, The University of Tokyo (Prof. Eiichi Nakamura)  
Thesis: “2,3-Disubstituted Benzofuran, Indole and Related Conjugated Compounds via 3-Zincobenzoheterole”
- 2000-2004 B.S., Chemistry, The University of Tokyo  
Thesis: “Intramolecular Addition of Zinc Aryloxides and Amides to Triple Bonds and Its Applications in the Synthesis of Disubstituted Benzofurans and Indoles”
- 1999-2000 Japanese Language Center for International Students, Fuchu, Tokyo, Japan
- 1996-1999 The Faculty of Chemistry and Chemical Engineering, Babes-Bolyai University, Cluj-Napoca, Romania (not completed; research advisor: Prof. Ioan A. Silberg)

### Professional Experience

- 2014-present Associate Professor, Department of Chemistry, Graduate School of Science, The University of Tokyo
- 2009-2014 Assistant Professor, Department of Chemistry, Graduate School of Science, The University of Tokyo
- 2009 Postdoctoral Associate, Chemistry, The University of Tokyo (Prof. Eiichi Nakamura)
- 2006 Visiting researcher, The University of Chicago (Prof. Rustem Ismagilov)

### Accolades

- 2016 Young Career Focus, *Synform*, DOI: 10.1055/s-0035-1562244
- 2015 Incentive Award in Synthetic Organic Chemistry, Japan

2015	The Young Scientists' Prize (The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology), Japan
2015	Thieme Chemistry Journal Award
2014	Banyu Chemist Award
2013	Diploma of Excellency from the Ministry of Education of Romania
2012	Chemistry Innovation University of Tokyo GCOE Lectureship
2009	Incentive Award of the Graduate School of Science (awarded for the best Ph.D. thesis), The University of Tokyo
2008	Student Presentation Award, Annual Meeting of the Chemical Society of Japan
2007	Poster Award, The First Asian Silicon Symposium, Miyagi, Japan
2007–2009	Japanese Society for the Promotion of Science (JSPS) Fellowship (DC2)
2006–2007	Tonen (Exxon Mobile) International Foundation Scholarship
1999–2006	Japanese Government (Monbukagakusho) Scholarship

### Publications List

1. "Manganese-Catalyzed Directed Methylation of C(sp<sup>2</sup>)-H Bonds at 25 °C with High Catalytic Turnover", Takenari Sato, Takumi Yoshida, Hamad H. Al Mamari, Laurean Ilies,\* Eiichi Nakamura,\* *Org. Lett.* **2017**, *19*, 5458–5461.
2. "Iron-Catalyzed Borylation of Aryl Chlorides in the Presence of Potassium *t*-Butoxide", Takumi Yoshida, Laurean Ilies,\* Eiichi Nakamura,\* *ACS Catal.* **2017**, *7*, 3199–3203. [highlighted in SYNFACTS, 2017, 13, 639]
3. "Indole Synthesis via Cyclative Formation of 2,3-Dizincindoles and Regioselective Electrophilic Trapping", Laurean Ilies,\* Mayuko Isomura, Shin-ichi Yamauchi, Tomoya Nakamura, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2017**, *139*, 23–26. [highlighted in SYNFACTS, 2017, 13, 245]
4. "Iron/Zinc-Cocatalyzed Directed Arylation and Alkenylation of C(sp<sup>3</sup>)-H Bonds with Organoborates", Laurean Ilies,\* Yuki Itabashi, Rui Shang, Eiichi Nakamura,\* *ACS Catal.* **2017**, *7*, 89–92. [highlighted in SYNFACTS, 2017, 7, 89]
5. "Iron-Catalyzed C–H Bond Activation", Laurean Ilies,\* *Journal of Organic Synthetic Chemistry, Japan* **2017**, *75*, 802–809 (award account).
6. "Iron-Catalyzed C–H Bond Activation", Rui Shang, Laurean Ilies,\* Eiichi Nakamura,\* *Chem. Rev.* **2017**, *117*, 9086–9139 (invited contribution to a special issue on C–H activation).
7. "Iron-Catalyzed *ortho* C–H Functionalization of Aromatics Bearing a Simple Carbonyl Group with Methylaluminum and Tridentate Phosphine Ligand", Rui Shang, Laurean Ilies,\* Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2016**, *138*, 10132–10135.

8. "Oxidative C–H Activation Approach to Pyridone and Isoquinolone via Iron-Catalyzed Coupling of Amide with Alkyne", Tatsuaki Matsubara, Laurean Ilies,\* Eiichi Nakamura,\* *Chem. Asian J.* **2016**, *11*, 380–384. (invited contribution to "Catalysis and Transformation of Complex Molecules" special issue).
9. "Iron-Catalyzed C–H Bond Activation", Laurean Ilies,\* Eiichi Nakamura, *Topics in Organometallic Chemistry: C-H Bond Activation and Catalytic Functionalization II*, Eds.: P. H. Dixneuf and H. Doucet, pp 1-18, Springer Berlin Heidelberg (2016).
10. "Iron-Catalyzed Directed C(sp<sup>2</sup>)–H and C(sp<sup>3</sup>)–H Functionalization with Trimethylaluminum", Rui Shang, Laurean Ilies,\* Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2015**, *137*, 7660–7663 [highlighted in SYNFACTS, 2015, 969, and chosen *Synfact of the Month*].
11. "Iron-Catalyzed Directed Alkylation of Alkenes and Arenes with Alkylzinc Halides", Laurean Ilies,\* Saki Ichikawa, Sobi Asako, Tatsuaki Matsubara, Eiichi Nakamura,\* *Adv. Synth. Catal.* **2015**, *357*, 2175–2179 (Very Important Publication, invited contribution to the special issue dedicated to Stephen L. Buchwald).
12. "Iron-Catalyzed C(sp<sup>2</sup>)–H Bond Functionalization with Organoboron Compounds", Rui Shang, Laurean Ilies,\* Sobi Asako, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2014**, *136*, 14349–14352.
13. "Iron-Catalyzed Directed Alkylation of Aromatic and Olefinic Carboxamides with Primary and Secondary Alkyl Tosylates, Mesylates, and Halides", Laurean Ilies,\* Tatsuaki Matsubara, Saki Ichikawa, Sobi Asako, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2014**, *136*, 13126–13129.
14. "*ortho*-Allylation of 1-Arylpyrazoles with Allyl Phenyl Ether via Iron-catalyzed C–H Bond Activation under Mild Conditions", Sobi Asako, Jakob Norinder, Laurean Ilies,\* Naohiko Yoshikai, Eiichi Nakamura,\* *Adv. Synth. Catal.* **2014**, *356*, 1481–1485 (invited contribution to the *Directed C–H Activation* thematic issue, Ed. J.-Q. Yu).
15. "Theoretical Study on Alkoxydiphosphine Ligand for Bimetallic Cooperation in Nickel-Catalyzed Monosubstitution of C–F Bond", Sobi Asako, Laurean Ilies,\* Pritha Verma, Saki Ichikawa, Eiichi Nakamura,\* *Chem. Lett.* **2014**, *43*, 726–728.
16. "Synthesis of Anthranilic Acid Derivatives through Iron-Catalyzed *Ortho* Amination of Aromatic Carboxamides with *N*-Chloroamines", Tatsuaki Matsubara, Sobi Asako, Laurean Ilies,\* Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2014**, *136*, 646–649. [highlighted in SYNFACTS, 2014, 408]

17. "Synthesis of Polysubstituted Enynes via Iron-Catalyzed Carbomagnesiation of Conjugated Diynes", Laurean Ilies, Takumi Yoshida, Eiichi Nakamura,\* *Synlett* **2014**, *25*, 527–530.
18. "Iron Catalysis for Organic Synthesis" (translation from the Japanese), Laurean Ilies, Eiichi Nakamura, in *Iron Dictionary*, Chapter 8.9.2, pp 234–241, Asakura Publishing Co. (2014).
19. "Synthetic Strategy for Multisubstituted Fused Furan Compounds Using Main-Group Metal Reagents", Hayato Tsuji,\* Laurean Ilies, Eiichi Nakamura,\* *Synlett* **2014**, *25*, 2099–2110.
20. "Iron-Catalyzed Cross-Coupling Reactions", Laurean Ilies, Eiichi Nakamura,\* in *The Chemistry of Organoiron Compounds*, Eds.: I. Marek and Z. Rappoport, pp 539–567, John Wiley&Sons, Ltd.: Chichester, UK (2014).
21. "Iron-Catalyzed Cross-Coupling Reactions", Eiichi Nakamura,\* Takuji Hatakeyama, Shingo Ito, Kentaro Ishizuka, Laurean Ilies, Masaharu Nakamura in *Organic Reactions*, vol. 83, pp 1–209, Ed.: S. E. Denmark, John Wiley&Sons, Inc. (2014).
22. "Iron-Catalyzed Ortho Allylation of Aromatic Carboxamides with Allyl Ethers", Sobi Asako, Laurean Ilies,\* Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2013**, *135*, 17755–17757. [highlighted in SYNFACTS, 2014, 190]
23. " $\beta$ -Arylation of Carboxamides via Iron-Catalyzed C(sp<sup>3</sup>)-H Bond Activation", Rui Shang, Laurean Ilies, Arimasa Matsumoto, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2013**, *135*, 6030–6032. [highlighted in SYNFACTS, 2013, 771]
24. "Iron-Catalyzed Allylic Arylation of Olefins via C(sp<sup>3</sup>)-H Activation under Mild Conditions", Masaki Sekine, Laurean Ilies, Eiichi Nakamura,\* *Org. Lett.* **2013**, *15*, 714–717. [highlighted in SYNFACTS, 2013, 433]
25. "Nickel-Catalyzed Synthesis of Diarylamines via Oxidatively Induced C–N Bond Formation at Room Temperature", Laurean Ilies, Tatsuaki Matsubara, Eiichi Nakamura,\* *Org. Lett.* **2012**, *14*, 5570–5573.
26. "Iron-Catalyzed Chemo- and Stereoselective Hydromagnesiation of Diarylalkynes and Diynes", Laurean Ilies, Takumi Yoshida, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2012**, *134*, 16951–16954. [highlighted in SYNFACTS, 2013, 88]
27. "Synthesis of Polysubstituted Naphthalenes by Iron-Catalyzed [2 + 2 + 2] Annulation of Grignard Reagents with Alkynes", Laurean Ilies, Arimasa Matsumoto, Motoaki Kobayashi, Naohiko Yoshikai, Eiichi Nakamura,\* *Synlett* **2012**, *23*, 2381–2384.
28. "Iron-Catalyzed *ortho* Monoarylation of Benzamide Derivatives", Laurean Ilies, Eita Konno, Quan Chen, Eiichi Nakamura,\* *Asian J. Org. Chem* **2012**, *1*, 142–145.

29. "Nickel-Catalyzed Monosubstitution of Polyfluoroarenes with Organozinc Reagents Using Alkoxydiphosphine Ligand", Yuki Nakamura, Naohiko Yoshikai, Laurean Ilies, Eiichi Nakamura,\* *Org. Lett.* **2012**, *14*, 3316–3319. [highlighted in SYNFACTS, 2012, 1007]
30. "Iron-Catalyzed Regio- and Stereoselective Chlorosulfonylation of Terminal Alkynes with Aromatic Sulfonyl Chlorides", Xiaoming Zeng, Laurean Ilies, Eiichi Nakamura,\* *Org. Lett.* **2012**, *14*, 954–956.
31. "Iron-Catalyzed Nitrogen-Directed Coupling of Arene and Aryl Bromides Mediated by Metallic Magnesium", Laurean Ilies, Motoaki Kobayashi, Arimasa Matsumoto, Naohiko Yoshikai, Eiichi Nakamura,\* *Adv. Synth. Catal.* **2012**, *354*, 593–596.
32. "Iron-Catalyzed Direct Functionalization of Inert C–H Bonds", Laurean Ilies,\* Eiichi Nakamura,\* *Fine Chemicals* **2012**, *41*, 40–45.
33. "Synthesis of Functionalized 1*H*-Indenes via Copper-Catalyzed Arylative Cyclization of Arylalkynes with Aromatic Sulfonyl Chlorides", Xiaoming Zeng, Laurean Ilies, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2011**, *133*, 17638–17640.
34. "Iron-Catalyzed Oxidative Monoarylation of Primary Amines with Organozinc Reagents", Yuki Nakamura, Laurean Ilies, Eiichi Nakamura,\* *Org. Lett.* **2011**, *13*, 5998–6001. [highlighted in SYNFACTS, 2012, 199]
35. "Iron-Catalyzed C–H Bond Activation for the *ortho*-Arylation of Aryl Pyridines and Imines with Grignard Reagents", Naohiko Yoshikai, Sobi Asako, Takeshi Yamakawa, Laurean Ilies, Eiichi Nakamura,\* *Chem. Asian J.* **2011**, *6*, 3059–3065.
36. "Cobalt-Catalyzed Coupling of Alkyl Grignard Reagent with Benzamide and 2-Phenylpyridine Derivatives through Directed C–H Bond Activation under Air", Quan Chen, Laurean Ilies, Naohiko Yoshikai, Eiichi Nakamura,\* *Org. Lett.* **2011**, *13*, 3232–3234. [highlighted in SYNFACTS, 2011, 1008]
37. "Iron-Catalyzed Stereospecific Activation of Olefinic C–H Bonds with Grignard Reagent for Synthesis of Substituted Olefins", Laurean Ilies, Sobi Asako, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2011**, *133*, 7672–7675. [highlighted in SYNFACTS, 2011, 896]
38. "Phenanthrene Synthesis by Iron-Catalyzed [4 + 2] Benzannulation between Alkyne and Biaryl or 2-Alkenylphenyl Grignard Reagent", Arimasa Matsumoto, Laurean Ilies, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2011**, *133*, 6557–6559. [highlighted in SYNFACTS, 2011, 774]

39. "Cobalt-Catalyzed Chemoselective Insertion of Alkene into the Ortho C–H Bond of Benzamide", Laurean Ilies, Quan Chen, Xiaoming Zeng, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2011**, *133*, 5221–5223.
40. "Cobalt-Catalyzed *ortho*-Alkylation of Secondary Benzamide with Alkyl Chloride through Directed C–H Bond Activation", Quan Chen, Laurean Ilies, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2011**, *133*, 428–429. [highlighted in SYNFACTS 2011, 7, 433]
41. "Iron-Catalyzed, Directed Oxidative Arylation of Olefins with Organozinc and Grignard Reagents", Laurean Ilies, Jun Okabe, Naohiko Yoshikai, Eiichi Nakamura,\* *Org. Lett.* **2010**, *12*, 2838–2840. [highlighted in SYNFACTS 2010, 1053]
42. "Iron-Catalyzed C–C Bond Formation at  $\alpha$ -Position of Aliphatic Amines via C–H Bond Activation through 1,5-Hydrogen Transfer", Naohiko Yoshikai, Adam Mieczkowski, Arimasa Matsumoto, Laurean Ilies, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2010**, *132*, 5568–5569. [highlighted in SYNFACTS 2010, 820]
43. "Synthesis of Tetrasubstituted Alkenes by Stereo- and Regioselective Stannyllithiation of Diarylacetylenes", Hayato Tsuji,\* Yasuyuki Ueda, Laurean Ilies, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2010**, *132*, 11854–11855. [highlighted in SYNFACTS 2010, 1257, also selected "SYNFACT of the month"]
44. "Modular Synthesis of Polybenzo[*b*]silole Compounds for Hole-Blocking Material in Phosphorescent Organic Light Emitting Diodes", Laurean Ilies, Yoshiharu Sato,\* Chikahiko Mitsui, Hayato Tsuji,\* Eiichi Nakamura,\* *Chem. Asian J.* **2010**, *5*, 1376–1381.
45. "Synthesis of Benzo[*b*]siloles via KH-Promoted Cyclization of (2-Alkynylphenyl)silanes", Laurean Ilies, Hayato Tsuji,\* Eiichi Nakamura,\* *Org. Lett.* **2009**, *11*, 3966–3968.
46. "Tetraaryl-substituted Benzo[1,2-*b*:4,5-*b'*]dipyrroles: Synthesis, Properties, and Applications to Hole-Injection Materials in OLED Devices", Hayato Tsuji,\* Yuki Yokoi, Chikahiko Mitsui, Laurean Ilies, Yoshiharu Sato, Eiichi Nakamura,\* *Chem. Asian J.* **2009**, *4*, 655–657.
47. "Modular Synthesis of Benzo[*b*]phosphole Derivatives via BuLi-Mediated Cyclization of (*o*-Alkynylphenyl)phosphine", Hayato Tsuji,\* Kosuke Sato, Laurean Ilies, Yoshimitsu Itoh, Yoshiharu Sato, Eiichi Nakamura,\* *Org. Lett.* **2008**, *10*, 2263–2265.
48. "Modular Synthesis of Functionalized Benzosiloles by Tin-mediated Cyclization of (*o*-Alkynylphenyl)silane", Laurean Ilies, Hayato Tsuji,\* Yoshiharu Sato, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2008**, *130*, 4240–4241 [highlighted in SYNFACTS 2008, 702]

49. “Synthesis and Properties of 2,3,6,7-Tetraarylbenzo[1,2-*b*:4,5-*b'*]difurans as Hole-Transporting Material”, Hayato Tsuji,\* Chikahiko Mitsui, Laurean Ilies, Yoshiharu Sato, Eiichi Nakamura,\* *J. Am. Chem. Soc.* **2007**, *129*, 11902–11903.
50. “2,3-Disubstituted Benzofuran and Indole by Copper-Mediated C–C Bond Extension Reaction of 3-Zincobenzoheterole”, Masaharu Nakamura,\* Laurean Ilies, Saika Otsubo, Eiichi Nakamura,\* *Org. Lett.* **2006**, *8*, 2803–2805. [highlighted in SYNFACTS 2006, 832]
51. “3-Zincobenzofuran and 3-Zincindole: Versatile Tools for Construction of Conjugated Structures Containing Multiple Benzoheterole Units”, Masaharu Nakamura,\* Laurean Ilies, Saika Otsubo, Eiichi Nakamura,\* *Angew. Chem. Int. Ed.* **2006**, *45*, 944–947. [highlighted in SYNFACTS 2006, 427]

### Patents

1. “Process for the Synthesis of Optical Active Proton Pump Inhibitors” (translation from the Japanese), Eiichi Nakamura, Laurean Ilies, Yoji Oderaotoshi, Takuhiro Izumi, *Jpn. Kokai Tokkyo Koho*, 2014-264317; international application: WO2016104668.
2. “Iron-Catalyzed Process for the Synthesis of Coupling Compounds” (translation from the Japanese), Eiichi Nakamura, Laurean Ilies, Rui Shang, *Jpn. Kokai Tokkyo Koho*, 2014-47532.
3. “Aryl-Substituted Siloles, Their Preparation, and Threshold-Reduced Organic Electroluminescent Devices Therewith” (translation from the Japanese), Eiichi Nakamura, Yoshiharu Sato, Hayato Tsuji, Laurean Ilies, *Jpn. Kokai Tokkyo Koho*, 2008-264653.

### Invited Lectures

1. “Iron-Catalyzed C–H Bond Activation”, The 4th International Symposium on C-H Activation (ISCHA-4), Keio University, Yokohama, August 30-September 2, 2018 (invitation accepted).
2. “Choosing the Path of Research in Japan: 19 Years Later”, Special Lecture 2018, The 98th Annual Meeting of the Chemical Society of Japan, Nihon University, Funabashi, March 21, 2018 (invitation accepted).
3. “Iron-Catalyzed C–H Bond Activation”, The 67th Conference of Japan Society of Coordination Chemistry, Hokkaido University, Hokkaido, September 16-18, 2017.
4. “Iron-Catalyzed C–H Bond Activation of Simple Substrates”, International Symposium on Pure & Applied Chemistry 2017, Ho Chi Minh, Vietnam, June 8-10, 2017.
5. “Iron-Catalyzed C–H Bond Activation”, The 5th Keio Organic Chemistry Young Chemists

- Symposium, Keio University, Tokyo, April 22, 2017.
6. "Taming Iron for Catalytic C–H Bond Activation", The 27th Kanagawa University Hiratsuka Symposium, Kanagawa University, Hiratsuka, March 4, 2017.
  7. "Iron-Catalyzed C–H Bond Activation", The 33rd Seminar on Organic Synthetic Chemistry, Hilton Niseko Village, Hokkaido, September 7, 2016 (award lecture).
  8. "Iron-Catalyzed Hydro- and Carbometalation of Triple Bonds", Base Metal Catalysis Symposium, Princeton University, September 2, 2016.
  9. "High-Valent Iron Catalysis for Directed C–H Activation", Joint Workshop on Chirality Network and Soft Molecule Activation, Chiba University, Chiba, March 17, 2016.
  10. "Directed C–H Bond Activation using Iron Catalysis", The 95th Annual Meeting of the Chemical Society of Japan, Japan-China Young Chemists Forum, Nihon University, Funabashi, March 27, 2015.
  11. "Iron-Catalyzed C–H Functionalization", series of lectures: Institute Charles Gerhardt, Montpellier (June 22, 2015, Host: Prof. Jean-Marc Campagne); Laboratoire de Chimie de Coordination, Toulouse (June 23, 2015, Host: Prof. Emmanuel Gras); University of Leuven (June 25, Host: Prof. Erik Van der Eycken); University of Ghent (June 26, Host: Prof. Johan Van der Eycken).
  12. "Iron-Catalyzed C–H Activation", The 13th Ibn Sina International Conference on Pure and Applied Heterocyclic Chemistry, Hurghada, Egypt, February 14-17, 2015.
  13. "Iron-Catalyzed C–H Activation", NTU-SNU-UT Chemistry Symposium, National Taiwan University, Taipei, January 16, 2015.
  14. "Iron-Catalyzed C–H Activation", The 42th Organometallic Seminar: "The Art of Catalysis Design", Tokyo University of Agriculture and Technology, Koganei, Tokyo, November 25, 2014.
  15. "Iron-Catalyzed Directed C–H Activation", The 7th Symposium on Molecular Activation, Sapporo, June 20, 2014.
  16. "Iron-Catalyzed C–H Functionalization", The 41th Organometallic Seminar: "Frontiers of Catalysis", Okayama University, Okayama, December 19, 2013.
  17. "Iron-Catalyzed C–H Activation", International Symposium on Catalysis and Fine Chemicals (C&CF) 2013, Beijing, December 1-5, 2013.
  18. "Iron-Catalyzed Directed C–H Activation", 4<sup>th</sup> Symposium for Young Chemists on Molecular Activation, Kagoshima, November 14-15, 2013.
  19. "Organoiron Species in Catalysis: C–H Activation and Related Stories", series of lectures in China, 2013: Institute of Chemistry, Chinese Academy of Science (February 25, Host: Prof. Dequing Zhou); Peking University (February 26, Host: Prof. Zhenfeng Xi); Tsinghua University (February 27, Host: Prof. Xi Zhang), Nankai University (February 28, Host: Prof. Qi-Lin Zhou); Xi'an Jiaotong University (March 4, Host: Prof. Xiang Zhao).
  20. "First-Row Transition-Metal-Catalyzed C–H Bond Functionalization", series of lectures in



Germany, 2012: Max-Planck Institute für Kohlenforschung (February 29, Host: Prof. Alois Fürstner); RWTH Aachen University (March 2, Hosts: Prof. Carsten Bolm and Prof. Jun Okuda); Philipps Universität Marburg (March 5, Host: Prof. Eric Meggers); Max-Planck Institute for Polymer Research (March 7, Host: Prof. Klaus Müllen); WWU Münster (March 8, Host: Prof. Frank Glorius).

21. “First-Row Transition Metal-Catalyzed C–H Bond Functionalization”, The 8th Seminar on the Chemistry of Organic Elements, Kyoto University, Uji, November 2011.
  22. “Iron- and Cobalt-Catalyzed C–H Bond Functionalization”, Taisho Pharmaceuticals, Omiya, August 2011.
  23. “Sustainable Organic Synthesis using Iron- and Cobalt-Catalyzed C–H Bond Functionalization”, Tokyo Institute of Technology, May 2011.
  24. “Realization of My Dream”, The 3rd Symposium: My Dream as a Professional, Chemistry Innovation Global COE Program at the University of Tokyo, January 2010.
  25. “My Chemical Journey: From New Reaction to New Compounds, Properties and Applications”, 1<sup>st</sup> ZESTY Seminar, The University of Tokyo, April 2008.
- (over 120 oral and poster presentations at national and international conferences)

### **Society Memberships**

The Chemical Society of Japan

The Society of Synthetic Organic Chemistry, Japan

The Japanese Society for Process Chemistry

### **Languages**

Romanian (native), English (fluent), Japanese (fluent).

### **Service**

- 2017 IUPAC Congress, Young Observer; delegate of the Japan Science Council (international adviser)
- 2017– Selection Committee, Tonen International Scholarship Foundation.
- 2016 Chairman, International Symposium “Chemistry: A Bridge between Molecular and Real Worlds”, Tokyo Dome Hotel, Tokyo, July 03
- 2016 Chairman, “Symposium on Frontiers of Molecular Science and Technology”, Koshiba Hall, The University of Tokyo, July 02
- 2016– Super Science High School (SSH) Project Consultant, Omiya Kita High School
- 2016– Vice-chair, undergraduate organic chemistry experiments
- 2015– Consultant, Towa Pharmaceutical Co., Ltd.
- 2015– Future Planning Committee of the Japanese Society for Process Chemistry
- 2014 Organizing Committee, The 26<sup>th</sup> International Conference on Organometallic

- Chemistry (ICOMC2014), Sapporo, Japan
- 2015– Gender equality committee of the School of Science, The University of Tokyo
- 2015– Environmental safety committee of the Department of Chemistry, School of Science, The University of Tokyo
- 2014– Computer network management committee of the Department of Chemistry, School of Science, The University of Tokyo
- 2014– Common instrumentation management committee of the Department of Chemistry, School of Science, The University of Tokyo
- 2011– NMR management committee of the Department of Chemistry, School of Science, The University of Tokyo. From 2016, vice-chair.

### **Outreach**

- 2017 Consultant for the series “Science of Carbon 2: Introduction to Organic Chemistry” Newton magazine, April edition.
- 2017 Chemistry Views, Wiley-VCH, interview on the Global Science Course Program at the Department of Chemistry, University of Tokyo.
- 2016 “Why did I Come to Japan: Japanese Research Seen from an International Perspective”, The 27th SSH Science Forum, Yashiro High School, Nagano
- 2015 “Synthetic Chemistry: From Alchemy to Modern Organic Chemistry”, Summer Lecture Series for High School Students, School of Science, The University of Tokyo
- 2015 “Synthetic Chemistry: From Alchemy to Modern Organic Chemistry”, lecture for the Open Campus Program of the School of Science, The University of Tokyo.
- 2015 “Organic Synthetic Chemistry”, lecture for the UTRIP program of the School of Science, The University of Tokyo
- 2015 “How did a Romanian Become a Researcher in Japan?”, Career Forum, Omiya-Kita High School
- 2015 Experiments with 3<sup>rd</sup> grade undergraduate students and presentation at the Spring Festival of the University of Tokyo
- 2014 “My 15 Years Journey in Japan”, lecture for the Tonen International Scholarship Foundation
- 2011– “One Day Experience of Chemistry Research” program for high school students to visit the lab for one day and perform experiments (iron-catalyzed cross-coupling).
- 2010 “Realization of My Dream”, The 3rd Symposium: My Dream as a Professional, Chemistry Innovation Global COE Program at the University of Tokyo.
- 2010 Interview on the cross-coupling reaction, with the occasion of the Chemistry Nobel Prize, “Super News”, Fuji TV (<http://datazoo.jp/tv/スーパーニュース/438670>).
- 2009 “Why are European chemists doing research in Japan”, interview for Nikkei Business Publication (in Japanese: <http://www.nikkeibp.co.jp/article/nba/20090703/165049/>)