# Tomonori Sadamoto

#### Curriculum Vitae

#### Assistant Professor

Department of Mechanical Engineering and Intelligent Systems
The University of Electro-Communications

### Education

Mar. 2015 **Ph.D** in Department of Mechanical and Environmental Informatics, Graduate School of Information Science and Engineering, Tokyo Institute of Technology Advisor: Prof. Jun-ichi Imura

Mar. 2011 M.S in Department of Mechanical and Control Engineering, Graduate School of Science and Engineering, Tokyo Institute of Technology

Advisor: Prof. Masaki Yamakita

Mar. 2009 **B.E** in Department of Control and Systems Engineering, Faculty of Engineering, Tokyo Institute of Technology

Advisor: Prof. Masaki Yamakita

### **Academic Positions**

Nov. 2018 - Present	Assistant Professor at Department of Mechanical and Intelligent Sys-
	tems Engineering, The University of Electro-Communications
Aug. 2016 - Nov. 2018	Specially Appointed Assistant Professor at Department of Systems
	& Control Engineering, Tokyo Institute of Technology, Japan
Apr. 2016 - Aug. 2016	Postdoctoral Researcher at Department of Systems & Control Engi-
	neering, Tokyo Institute of Technology, Japan
	Advisor: Prof. Jun-ichi Imura
Jun. 2015 - Mar. 2016	<b>Postdoctoral Scholar</b> at KTH Royal Institute of Technology, Sweden Advisor: Prof. Karl Henrik Johansson and Prof. Henrik Sandberg
Jun. 2014 - Aug. 2014	Visiting Student at KTH Royal Institute of Technology, Sweden Advisor: Prof. Karl Henrik Johansson and Prof. Henrik Sandberg

# Research Experience

Apr. 2016 - Present	CREST (Energy Management System) Project at Tokyo Institute
	of Technology, Japan. Control of power systems with high penetration
	of renewable power generation systems (collaboration with Prof. Aranya Chakrabortty in North Carolina State University.)
Oct. 2017 - Nov. 2017	Visiting Research at North Carolina State University, United States.  Retrofit Control of Power Systems with large-scale DER penetration.

- Jun. 2015 Mar. 2016 **Postdoctoral Research** at KTH Royal Institute of Technology, Sweden.

  Control theory for large-scale network systems (collaboration with Prof. Karl Henrik Johansson, Prof. Henrik Sandberg.)
- Apr. 2013 Mar. 2015 **Doctoral Research** at Tokyo Institute of Technology, Japan. Control theory for large-scale dynamical network systems based on model reduction techniques (advisor: Jun-ichi Imura).
- May. 2014 Aug. 2014 **Visiting Research** at KTH Royal Institute of Technology, Sweden. *Low-dimensional controller design for large-scale network systems*.
- Apr. 2013 Mar. 2014 **CREST Project** at Tokyo Institute of Technology, Japan. Multiresolutional optimization towards supply-demand-storage balancing under PV prediction uncertainty
- Apr. 2011 Mar. 2013 Researcher at Research & Development Center in Sumitomo Heavy Industries, Ltd., Japan. High-precision control of hydraulic drive system & Nonlinear reduced-order modeling of plasticization cylinders
- Apr. 2009 Mar. 2011 Master's Research at Tokyo Institute of Technology, Japan. Optimal adaptive control of nonlinear systems based on reinforcement learning techniques (advisor: Prof. Masaki Yamakita.)
- Apr. 2008 Mar. 2009 Undergraduate Research at Tokyo Institute of Technology, Japan. Fall avoidance control of a bipedal walking robot based on Q-learning (advisor: Prof. Masaki Yamakita.)

### **Business Experience**

Apr. 2011 - Mar. 2013 Research & Development Center in Sumitomo Heavy Industries, Ltd, Japan

## Conference/Journal Paper Awards

- 2015 **Best Paper Award** from ISCIE for the paper: Masakazu Koike, Takayuki Ishizaki, Tomonori Sadamoto, Jun-ichi Imura, *Hierarchical Decentralized Observer Design and Application to Power Networks*, vol.27, no.9, pp.353-363, 2014.
- 2014 **Top 5 of European Control Conference Best Student Paper Award** for the paper: Tomonori Sadamoto, Takayuki Ishizaki, Jun-ichi Imura, *Projective State Observers for Large-Scale Linear Systems*, pp.2969-2974, 2014.
- 2014 Best Paper Award from ISCIE for the paper: Tomonori Sadamoto, Kenji Kashima, Hiroshi Morita, Hiroyuki Mizuno, Nonlinear Reduced Order Modeling of Plasticization Cylinders, vol. 26, no. 5, pp.174-181, 2013.
- 2012 Research Encouragement Award at the 41th SICE Conference on Control Theory

### Fellowship Awards

Apr. 2019 Research Encouragement Award from Funai Foundation

Apr. 2014 - Mar. 2016 Research Fellowship for Young Scientist with research grant from

Japan Society for the Promotion of Science (JSPS)

Apr. 2006 - Mar. 2011 Scholarship from Kitazawa scholarship foundation

### Teaching Experience

2016 - 2018 Supervised two graduate students. Their outcomes are two refereed conference papers.

2014 - 2015 Supervised one undergraduate student. His outcomes are one refereed conference paper, one domestic conference paper, and one domestic journal article.

2013 - 2014 Supervised one graduate student. His outcomes are one refereed conference paper, two domestic conference papers, and total exemption of his student loan.

2009 - 2011 Teaching Assistant: Introduction to creative design (Robots design)

### List of Publications

#### I. Journal Articles

- 1. <u>Tomonori Sadamoto</u>, Aranya Chakrabortty: Improving Controllability and Plug-and-Play Operation of Wind Farms Using B2B Converters, IEEE Control Systems Letters, vol. 4, no.2, pp. 379-384, 2020
- 2. Mitsuru Arahata, Masaki Inoue, <u>Tomonori Sadamoto</u>, Mitsuki Suzumura: Design of Power Flow to Enhance Damping Performance of Power Systems, Transactions of the Society of Instrument and Control Engineers, vol. 55, no. 2, pp. 127-134, 2019
- Hampei Sasahara, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Taisuke Masuta, Yuzuru Ueda, Hideharu Sugihara, Jun-ichi Imura: Damping Performance Improvement for PV-Integrated Power Grids via Retrofit Control, Control Engineering Practice, vol. 84, pp. 92-101, 2019
- 4. <u>Tomonori Sadamoto</u>, Aranya Chakrabortty, Takayuki Ishizaki, Jun-ichi Imura: Dynamic Modeling, Stability, and Control of Power Systems with Distributed Energy Resources, Control System Magazine, vol.39, no.2, pp. 34-65, 2019
- 5. Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura, Henrik Sandberg, Karl Henrik Johansson: Retrofit Control: Localization of Controller Design and Implementation, Automatica, vol. 95, pp. 336-346, 2018
- Tomonori Sadamoto, Aranya Chakrabortty, Takayuki Ishizaki, Jun-ichi Imura: Retrofit Control
  of Wind-Integrated Power Systems, IEEE Transactions on Power Systems, vol.33, no.3, pp.28042815, 2018 (JST Press Release)

- 7. Hampei Sasahara, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Distributed Design of Local Controllers for Transient Stabilization in Power Systems, Transactions of the Society of Instrument and Control Engineers, vol. 53, no. 11, pp. 608-617, 2017
- 8. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Average State Observers for Large-Scale Network Systems, IEEE Transactions on Control of Network Systems, vol.4, no.4, pp.761-769, 2017
- 9. Fumiya Watanabe, <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Average State Kalman Filters for Large-Scale Stochastic Networked Linear Systems, Transactions of the Society of Instrument and Control Engineers, vol.52, no.8, pp.419-427, 2016 (in Japanese)
- Takayuki Ishizaki, Masakazu Koike, Nacim Ramdani, Yuzuru Ueda, Taisuke Masuta, Takashi Oozeki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Interval Quadratic Programming for Day-Ahead Dispatch of Uncertain Predicted Demand, Automatica, vol.64, pp.163-173, 2016
- 11. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Average State Observers for Large-Scale Networked Linear Systems, Transactions of the Institute of Systems, Control and Information Engineers, vol. 28, no.2, pp.73-83, 2015 (in Japanese)
- Tomonori Sadamoto, Takayuki Ishizaki, Masakazu Koike, Yuzuru Ueda, Jun-ichi Imura: Spatiotemporally Multiresolutional Optimization Toward Supply-Demand-Storage Balancing Under PV Prediction Uncertainty, IEEE Transactions on Smart Grid, vol.6, no.2, pp.853-865, 2015
- 13. Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Hierarchical Distributed Stabilization of Power Networks, The European Physical Journal Special Topics on Resilient Power Grids and Extreme Events, vol.223, issue 12, pp.2461-2473, 2014
- 14. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Low-Dimensional Functional Observer Design of Large-Scale Systems, Transactions of the Society of Instrument and Control Engineers, vol. 50, no. 6, pp.478-486, 2014 (in Japanese)
- 15. Masakazu Koike, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Hierarchical Decentralized Observer Design and Application to Power Networks, Transactions of the Institute of Systems, Control and Information Engineers, vol.27, no.9, pp.353-363, 2014 (in Japanese) **Best Paper Award**
- Tomonori Sadamoto, Kenji Kashima, Hiroshi Morita, Hiroyuki Mizuno: Nonlinear Reduced Order Modeling of Plasticization Cylinders Transactions of the Institute of Systems, Control and Information Engineers, vol. 26, no. 5, pp.174-181, 2013 (in Japanese) Best Paper Award

#### II. Referred Conference Papers

- 1. <u>Tomonori Sadamoto</u>, Aranya Chakrabortty: Reinforcement Learning Control using Data-based Dimensionality Reduction, SICE Annual Conference, 2019 (Accepted)
- 2. Anqi Qu, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: A Design Method for Plug-and-Play Modules of Photovoltaic Generators, Asian Control Conference, 2019 (Accepted)

- Mitsuru Arahata, Masaki Inoue, <u>Tomonori Sadamoto</u>, Mitsuki Suzumura: Simultaneous Design of Power Flow and Controller to Enhance Damping Performance of Power Systems, European Control Conference, 2019 (Accepted)
- 4. Shin-ichiro Terao, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: A Study on the Relationship between Power Flow and Characteristic of Power Systems, in Proc. of Grand Renewable Energy, 2018
- Hampei Sasahara, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Distributed Design of Power System Stabilizers for PV-Integrated Grids via Retrofit Control, in Proc. of Grand Renewable Energy, 2018
- Tomonori Sadamoto, Takayuki Ishizaki, Jun-ichi Imura: Retrofitting Based Power System Stabilizer Design of PV-Integrated Power Systems, in Proc. of IEEE Conference on Control Technology and Applications, pp. 40-45, 2018
- Yosuke, Shiozaki, Nobuyuki Yamaguchi, <u>Tomonori Sadamoto</u>: Design of a Wide-Area Damping Controller Considering Communication Time Delays, in Proc. of Power Systems Computation Conference, 2018
- Hampei Sasahara, Takayuki Ishizaki, Masaki Inoue, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: A Characterization of All Retrofit Controllers. Proc. of American Control Conference, pp. 6194 -6199, 2018
- 9. Hampei Sasahara, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura, Henrik Sandberg, Karl Henrik Johansson: Glocal Control for Network Systems via Hierarchical State-Space Expansion, in Proc. of IEEE Conference on Decision and Control, pp.6346-6351, 2017
- Hampei Sasahara, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Distributed Design of Local Controllers for Transient Stabilization in Power Grids, in Proc. of IFAC World Congress, pp.5430-5435, 2017
- 11. <u>Tomonori Sadamoto</u>, Aranya Chakrabortty, Takayuki Ishizaki, Jun-ichi Imura: A Retrofitting-based Supplementary Controller Design for Enhancing Damping Performance of Wind Power Systems, in Proc. of American Control Conference, pp.2755-2760, 2017
- 12. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura, Henrik Sandberg, Karl Henrik Johansson: Retrofitting State Feedback Control of Networked Nonlinear Systems Based on Hierarchical Expansion, in Proc. of IEEE Conference on Decision and Control, pp.3432-3437, 2016
- Tomonori Sadamoto, Henrik Sandberg, Bart Besselink, Takayuki Ishizaki, Jun-ichi Imura, Karl Henrik Johansson: Weak Resilience of Networked Control Systems, in Proc. of European Control Conference, pp.977-982, 2016
- Tomonori Sadamoto, Takayuki Ishizaki, Jun-ichi Imura: Hierarchical Distributed Design of Stabilizing Controllers for an Evolving Network System, in Proc. of IEEE Conference on Decision and Control, pp.3337-3342, 2015
- 15. Shinji Hara, Jun-ichi Imura, Koji Tsumura, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>: Glocal (Global/Local) Control Synthesis for Hierarchical Networked Systems, in Proc. of IEEE Multi-Conference on Systems and Control, pp.107-112, 2015

- Tomonori Sadamoto, Takayuki Ishizaki, Jun-ichi Imura, Bart Besselink, Henrik Sandberg, Karl Henrik Johansson: Distributed Design of Locally Stabilizing Controllers for Large-Scale Networked Linear Systems, in Proc. of IEEE Multi-Conference on Systems and Control, pp.1835-1840, 2051
- 17. Masakazu Koike, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Time-Shifted Request Scheduling for Supply-Demand-Storage Balancing Under Prediction Uncertainty of Photovoltaics, in Proc. of IEEE Multi-Conference on Systems and Control, pp.1534-1539, 2015
- Masakazu Koike, Yoshihiro Tagawa, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Day-Ahead Scheduling for Model Predictive Power Generation Based on Interval Prediction of Photovoltaics -Generalization to Multiple Generators-, in Proc. of SICE Annual Conference, pp.870-873, 2015
- 19. Kosuke Uchida, Eiki Arai, Masakazu Koike, Ikuma Muto, <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Yuzuru Ueda, Jun-ichi Imura: Study on Fair Battery Control in Residential Sector Considering with Grid Operator's Request, in Proc. of SICE Annual Conference 2015, pp.343-346, 2015
- Fumiya Watanabe, <u>Tomonori Sadamoto</u>, <u>Takayuki Ishizaki</u>, <u>Jun-ichi Imura</u>: Average State Kalman Filters for Large-Scale Stochastic Networked Linear Systems, in Proc. of European Control Conference, pp.2823-2828, 2015
- Tomonori Sadamoto, Takayuki Ishizaki, Jun-ichi Imura: Hierarchical Distributed Control for Networked Linear Systems, in Proc. of IEEE Conference on Decision and Control, pp.2447-2452, 2014
- 22. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Projective State Observers for Large-Scale Linear Systems, in Proc. of European Control Conference, pp.2969-2974, 2014 (**Top 5 of Best Student Paper Award**)
- 23. Masakazu Koike, Takayuki Ishizaki, Yuzuru Ueda, Taisuke Masuta, Takashi Oozeki, Nacim Ramdani, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Planning of Optimal Daily Power Generation Tolerating Prediction Uncertainty of Demand and Photovoltaics, in Proc. of IFAC World Congress, pp.3657-3662, 2014
- Tomonori Sadamoto, Ikuma Muto, Takayuki Ishizaki, Masakazu Koike, Jun-ichi Imura: Power Supply Scheduling Optimization from a Viewpoint of Spatio-Temporal Aggregation, in Proc. of IFAC World Congress, pp.4571-4577, 2014
- Takayuki Ishizaki, Masakazu Koike, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Hierarchical Decentralized Observers for Networked Linear Systems, in Proc. of American Control Conference, pp.5718-5723, 2014
- 26. <u>Tomonori Sadamoto</u>, Kenji Kashima, Hiroshi Morita, Hiroyuki Mizuno: Nonlinear Reduced Order Modeling of Plasticization Cylinders, in Proc. of American Control Conference, pp.129-134, 2014
- Tomonori Sadamoto, Takayuki Ishizaki, Jun-ichi Imura: Low-Dimensional Functional Observer Design for Linear Systems via Observer Reduction Approach, in Proc. of IEEE Conference on Decision and Control, pp.776-781, 2013

- 28. <u>Tomonori Sadamoto</u>, Masaki Yamakita: Robust Adaptive Optimal Control for Unknown Dynamical Systems with Discontinuous Cost Function, in Proc. of American Control Conference, pp.1123-1128, 2012
- 29. <u>Tomonori Sadamoto</u>, Masaki Yamakita: Robust Adaptive Optimal Control for Unknown Dynamical Systems without Re-Learning, in Proc. of IFAC World Congress, pp.2656-2661, 2011
- 30. <u>Tomonori Sadamoto</u>, Masaki Yamakita: Robust Adaptive Optimal Control for Unknown Dynamical Systems, in Proc. of American Control Conference, pp.4207-4212, 2011

#### III. Domestic Conference Papers (in Japanese)

- 1. Mitsuru Arahata, Masaki Inoue, <u>Tomonori Sadamoto</u>, Mitsuki Suzumura: Design of Power Flow to Enhance Damping Performance of Power Systems, The 6th Multi-symposium on Control Systems, 2019
- 2. <u>Tomonori Sadamoto</u>, Aranya Chakrabortty: Controllability Enhancement of DFIGs by using B2B Converters, The 6th Multi-symposium on Control Systems, 2019
- 3. Mitsuru Arahata, Masaki Inoue, <u>Tomonori Sadamoto</u>, Mitsuki Suzumura: Power Flow Design to Enhance Damping Performance in Power System, The 61st Japan Automatic Control Conference, 2018
- 4. Yusuke Shiozaki, Nobuyuki Yamaguchi, <u>Tomonori Sadamoto</u>: Preliminary Analysis on The Effect of WADC with Communication Delays, IEEJ Annual meeting, 2018
- 5. Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Power System Stabilizer Design of PV-Integrated Power Systems based on Retrofit Control, The 5th Multi-symposium on Control Systems, 2018
- Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: A Compensation Principle for Controller Retrofit, The 4th Multi-symposium on Control Systems, 1C3-4, 2017
- 7. Yuki Otani, Nobuyuki Yamaguchi, <u>Tomonori Sadamoto</u>: Evaluation of power stabilizer by multiple input considering internal phase angle, IEEJ Annual meeting, 2017
- 8. Yusuke Shiozaki, Nobuyuki Yamaguchi, <u>Tomonori Sadamoto</u>: A Preliminary Study on Influence of Communication Delay with WADC for Power System Stability, IEEJ Annual meeting, 2017
- 9. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Retrofitting State Feedback Control of Networked Nonlinear Systems Based on Hierarchical Expansion, The 59th Japan Automatic Control Conference, 2016
- Tomonori Sadamoto, Takayuki Ishizaki, Masakazu Koike, Jun-ichi Imura: Control of Expandable Network Systems from Glocal Point of View, The 2nd Multi-symposium on Control Systems, 2015
- 11. Fumiya Watanabe, <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Masakazu Koike, Jun-ichi Imura: Average State Kalman Filters for Large-Scale Stochastic Networked Linear Systems, The 2nd Multi-symposium on Control Systems, 2015

- 12. Ikuma Muto, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Masakazu Koike, Jun-ichi Imura: Supply-Demand-Storage Balancing Based on Moving Average Utility Power Requests to Demand Side, The 57th Japan Automatic Control Conference, pp.955-962, 2014
- 13. Masakazu Koike, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Monotonicity Analysis of Interval Quadratic Programming with Application to Regulating Capacity Minimization Problem of Thermal Power Plants, The 1st Multi-symposium on Control Systems, 2014
- 14. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Projective State Observers for Large-Scale Linear Systems, The 1st Multi-symposium on Control Systems, 2014
- 15. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Masakazu Koike, Ikuma Muto, Jun-ichi Imura: Novel Framework of Power Supply Scheduling from a Viewpoint of Spatio-Temporal Aggregation, The 1st Multi-symposium on Control Systems, 2014
- Masakazu Koike, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Analysis of Parameter-Dependent Quadratic Programming and Its Application to Power Systems, The 59th Japan Automatic Control Conference, pp.178-183, 2013
- 17. <u>Tomonori Sadamoto</u>, Kenji Kashima, Hiroyuki Mizuno, Hiroshi Morita: Nonlinear Reduced Order Modeling of Plasticization Cylinders, The 41th SICE Conference on Control Theory, 2012 (Research Encouragement Award)
- 18. <u>Tomonori Sadamoto</u>, Masaki Yamakita: Robust Adaptive Optimal Control for Unknown Dynamical Systems with Discontinuous Cost Function, The 55th Annual Conference of the Institute of Systems, Control and Information Engineers, 2011
- 19. <u>Tomonori Sadamoto</u>, Masaki Yamakita: Robust Adaptive Optimal Control for Unknown Dynamical Systems without Re-Learning, The 11th Symposium on Adaptive Control, 2011
- Tomonori Sadamoto, Masaki Yamakita: Robust Adaptive Optimal Control for Unknown Dynamical Systems, The 39th SICE Conference on Control Theory, 2010

#### IV. Seminars, Workshops, and Symposia

- 1. <u>Tomonori Sadamoto</u>: Data-Compression-based Reinforcement Learning Towards Secure Smart Grids, Frontier of Secure Cyber-Physical-Human System, The University of Electro-Communications, 2019
- 2. <u>Tomonori Sadamoto</u>: Preconditioned Off-Policy Iteration based on Dimensionality Reduction Techniques, Kirishima International Hotel, 2018
- 3. <u>Tomonori Sadamoto</u>: Modeling and Control of Smart Grids, Plenary Talk on Workshop of Control Technology for Development of Smart Society, Keio University, 2018
- 4. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Retrofit Control of Power Systems, The fifth CRREST HARPS meeting, 2018

- Tomonori Sadamoto, Takayuki Ishizaki, Hampei Sasahara, Jun-ichi Imura: Retrofit Control of PV-Integrated Power Systems, JST-NSF-DFG-RCN Workshop on Distributed Energy Management Systems, 2017
- 6. Tomonori Sadamoto: Instruction to HARPS Simulator, Seminar at the University of Tokyo, 2016
- Tomonori Sadamoto, Takayuki Ishizaki, Jun-ichi Imura: Retrofitting State Feedback Control
  of Networked Nonlinear Systems Based on Hierarchical Expansion, International Workshop at
  Waseda University, 2016
- 8. <u>Tomonori Sadamoto</u>: Retrofitting State Feedback Control of Networked Nonlinear Systems Based on Hierarchical Expansion, Seminar at KTH Royal Institute of Technology, 2016
- 9. <u>Tomonori Sadamoto</u>: Issues on reduced-order time-varying Kalman Filter Design, Seminar at KTH Royal Institute of Technology, 2016
- Tomonori Sadamoto, Takayuki Ishizaki, Jun-ichi Imura: Hierarchical Subsystem Clustering for Distributed Control of Networked Systems, SIAM Conference on Applications of Dynamical Systems, MS41, 2015
- 11. Masakazu Koike, Takayuki Ishizaki, <u>Tomonori Sadamoto</u>, Jun-ichi Imura: Optimal Load Dispatch Towards Supply-Demand-Storage Balancing under Prediction Uncertainty of Photovoltaic Power Generation, The 6th International Conference on Integration of Renewable and Distributed Energy Resources (IRED2014), P8-8, 2014
- 12. <u>Tomonori Sadamoto</u>: Hierarchical Distributed Control for Networked Linear Systems, Seminar at the University of Tokyo, 2014
- 13. <u>Tomonori Sadamoto</u>: Hierarchical Distributed Control for Networked Linear Systems, Seminar at KTH Royal Institute of Technology, 2014
- 14. <u>Tomonori Sadamoto</u>: Hierarchical Supply-Demand Balancing based on PV Prediction Uncertainty, The 1st Symposium on Control Theory, 2013

#### V. Book Chapters

- 1. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: (One chapter) Distributed Design of Smart Grids for Large-Scalability and Evolution, Springer Verlag, pp. 117-128, 2019.
- 2. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Plug-in-type control for ensuring the stable power supply of wind-integrated power systems, OHM, Ohmsha, pp.36-39, 2018
- 3. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Kalman Filters for Smart Grid, Journal of the Society of Instrument and Control Engineers, vo.56, no.9, pp. 687-690, 2017 (in Japanese)
- 4. <u>Tomonori Sadamoto</u>, Takayuki Ishizaki, Jun-ichi Imura: Plug-in-type control for ensuring the stable power supply of wind-integrated power systems, JST Press Release, 2017
- 5. Masaki Yamakita, <u>Tomonori Sadamoto</u>: Particle Type Kalman Filters and Its Applications Systems, Control and Information Engineers, vol.50, no.11, pp.963-968, 2011 (in Japanese)

#### VI. Patents

- 1. <u>Tomonori Sadamoto</u>: Feedback Controller Design Devises, Feedback Controllers, and Feedback Controller Design Methods, Patent No. 2013-206408
- 2. <u>Tomonori Sadamoto</u>: Feedback Controller Design Devises, Feedback Controllers, and Feedback Controller Design Methods, Patent No. 2013-254396.
- 3. Tomonori Sadamoto: Injection Molding Machines, Patent No. 2014-046488.
- 4. Tomonori Sadamoto, Hiroyuki Mizuno: Injection Molding Machines, Patent No. 2014-046489.
- 5. Hiroshi Morita, <u>Tomonori Sadamoto</u>: Injection Molding Machines, Patent No. 2013-224017.