

# Kenji Takizawa — *Curriculum Vitae*

**Contact** Department of Modern Mechanical Engineering  
Faculty of Science and Engineering  
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**Education** B.Eng. Engineering, Tokyo Institute of Technology, March 2001  
M.Sc. Science, Tokyo Institute of Technology, March 2002  
Ph.D. Science, Tokyo Institute of Technology, March 2005

## Professional Experience

### Researcher

Project Team for Ship Performance Evaluation in Actual Seas, National Maritime Research Institute,  
Tokyo, Japan  
April 2005 – September 2007

### Research Associate

Mechanical Engineering and Materials Science, Rice University, Houston, Texas, USA  
October 2007 – September 2009

### Research Scientist

Mechanical Engineering and Materials Science, Rice University, Houston, Texas, USA  
October 2009 – March 2011

### Associate Team Leader

Team for Advanced Flow Simulation and Modeling, Rice University, Houston, Texas, USA  
July 2010 – March 2018

### Associate Professor

Department of Modern Mechanical Engineering, Waseda University, Tokyo, Japan  
April 2011 – March 2018

### Associate Professor

Waseda Institute for Advanced Study, Waseda University, Tokyo, Japan  
April 2011 – March 2015

### Associate Professor

Faculty of Science and Engineering, Waseda University, Tokyo, Japan  
April 2015 – March 2018

### Adjunct Associate Professor

Mechanical Engineering, Rice University, Houston, Texas, USA  
April 2011 – March 2018

### Visiting Scientist

Tsukuba Space Center, Japan Aerospace Exploration Agency, Ibaraki, Japan  
April 2013 – March 2016

Team Co-Leader

Team for Advanced Flow Simulation and Modeling, Rice University, Houston, Texas, USA  
April 2018 –

**Professor**

Faculty of Science and Engineering, Waseda University, Tokyo, Japan  
April 2018 –

**Professor**

Department of Modern Mechanical Engineering, Waseda University, Tokyo, Japan  
April 2018 –

Adjunct Professor

Mechanical Engineering, Rice University, Houston, Texas, USA  
April 2018 –

Director

Institute for Frontier Fluid–Structure Interaction Analysis, Green Computing Systems Research Organization, Waseda University, Tokyo, Japan  
April 2019 –

## Honors and Awards

**Forest Hills Scholarship** (HIOKI E. E. Corporation), April 1997 – March 2001

**Young Investigator Award**, Japan Association for Computational Mechanics (2007)

**Best Paper Award**, 12th Japan Society for Computational Engineering and Science Conference, Tokyo, Japan (2007) (K. Takizawa and T. Aoki)

**Fellow Award**, Japan Association for Computational Mechanics (2012)

**Young Investigator Award**, International Association for Computational Mechanics (2012)

**Thomas J.R. Hughes Young Investigator Award**, ASME Applied Mechanics Division (2012)

**First Place Prize**, Rice University Centennial Ken Kennedy Institute Research Nugget Competition (2012) (K. Schjodt, K. Takizawa, N. Kostov and T.E. Tezduyar)

**Young Investigator Award**, Asia-Pacific Association for Computational Mechanics (2013)

**Computational Mechanics Achievement Award** Japan Society of Mechanical Engineers (2014)

**Waseda Research Award (High-Impact Publication)** Waseda University (2014)

**Young Scientists' Prize**, Commendation for Science and Technology by Japan Minister of Education, Culture, Sports, Science and Technology (2015)

**Web of Science Highly Cited Researcher (Engineering)** (2015)

**Japan Research Front Awards 2016**, Thomson Reuters (2016)

**2016 NISTEP Award** Japan National Institute of Science and Technology Policy (2016)

**Web of Science Highly Cited Researcher (Engineering)** (2016)

**Computational Mechanics Award**, Japan Association for Computational Mechanics (2017)

**Web of Science Highly Cited Researcher (Engineering)** (2017)

**Web of Science Highly Cited Researcher (Cross-Field)** (2018)

**The JSPS Prize** (2018)

## Honors and Awards Received by Students Supervised

**Miura Award**, Hirokazu Takagi, Japan Society of Mechanical Engineers (2014)

**MS Thesis Presentation Award**, Hirokazu Takagi, Waseda University, Graduate School of Environment and Energy Engineering (2014)

**First Place Prize**, Takashi Kuraishi, Advances in Computational Fluid–Structure Interaction and Flow Simulation, Student Poster Session (2014)

**Third Place Prize**, Yuuki Tsutsui, Advances in Computational Fluid–Structure Interaction and Flow Simulation, Student Poster Session (2014)

**Fellow Award for Outstanding Young Engineers**, Taro Kanai, Japan Society of Mechanical Engineers (2014)

**Visualization Award for Outstanding Performance**, Takashi Kuraishi, 19th Japan Society for Computational Engineering and Science Conference (2014)

**Best Student Presentation Award**, Takashi Kuraishi, 18th International Conference on Finite Elements in Flow Problems (2015)

**Outstanding Student Presentation Award**, Takafumi Sasaki, 18th International Conference on Finite Elements in Flow Problems (2015)

**Outstanding Student Presentation Award**, Hitoshi Hattori, 18th International Conference on Finite Elements in Flow Problems (2015)

**Outstanding Student Presentation Award**, Yuki Tsutsui, 18th International Conference on Finite Elements in Flow Problems (2015)

**MS Thesis Presentation Award**, Shohei Asada, Waseda University, Graduate School of Environment and Energy Engineering (2015)

**Prize for Encouragement**, Hiroaki Uchikawa, Waseda Mechanical Engineers (WME) (2015)

**Visualization Award for Best Performance**, Taro Kanai, 20th Japan Society for Computational Engineering and Science Conference (2015)

**Visualization Award for Outstanding Performance**, Taro Kanai, 20th Japan Society for Computational Engineering and Science Conference (2015)

**Altair Award Bronze Prize**, Taro Kanai, KSME–JSME Joint Symposium on Computational Mechanics & CAE 2015 (2015)

**Student Presentation Award**, Takashi Kuraishi, 34th JSST Annual Conference International Conference on Simulation Technology (2015).

**Special Recognition Award**, Taro Kanai, 4th Waseda Vision 150 Student Competition (2015)

**MS Thesis Presentation Award**, Taro Kanai, Waseda University, Graduate School of Environment and Energy Engineering (2014)

**20th Anniversary JSCES Scholarship Award**, Takashi Kuraishi, Japan Society for Computational Engineering and Science (2016)

**IACM Travel Award to attend WCCM XII**, Takashi Kuraishi, Japan Society for Computational Engineering and Science (2016)

**IACM Travel Award to attend WCCM XII**, Taro Kanai, Japan Society for Computational Engineering and Science (2016)

**Early Bird Program**, Takashi Kuraishi, Waseda University (2016)

**Outstanding Performance**, Kensuke Shiozaki and Ayaka Yoshida, Waseda Mechanical Engineers (WME) (2016)

**Visualization Award for Outstanding Performance**, Takashi Kuraishi, 21th Japan Society for Computational Engineering and Science Conference (2016)

**Best CFD Graphics Award (animation)** 30th CFD Symposium, 2016

**Young Investigator Award**, Takuya Terahara, 7th workshop of Research Committee on Blood Flow and Cardiovascular System (2017)

**Early Bird Program**, Takafumi Sasaki, Waseda University (2017)

**Fellow Award for Outstanding Young Engineers**, Kenji Komiya, Japan Society of Mechanical Engineers (2017)

**Certificate of Merit for Best Presentation**, Takafumi Sasaki, Japan Society of Mechanical Engineers (2017)

**Early Bird Program**, Taro Kanai, Waseda University (2018)

**JSCES Scholarship Award**, Yuto Ootoguro, Japan Society for Computational Engineering and Science (2018)

**JSCES Scholarship Award**, Takafumi Sasaki, Japan Society for Computational Engineering and Science (2019)

**Inoue Research Award for Young Scientists** Takashi Kuraishi, Inoue Foundation for Science (2019)

**Young Investigator Award**, Takashi Kuraishi, Japan Association for Computational Mechanics (2020)

**JSCES Scholarship Award**, Takuya Terahara, Japan Society for Computational Engineering and Science (2020)

**Visualization Award for Outstanding Performance**, Takuya Terahara, 25th Japan Society for Computational Engineering and Science Conference (2020)

## Editor Positions

**Associate Editor**, *Journal of Applied Mechanics*, ASME, 2011–2017.

**Assistant Editor**, *Computational Mechanics*, Springer, 2012–2019.

## Editorial Boards

**Associate Editor**, *Mechanical Engineering Journal*, *Mechanical Engineering Letters*, *Transactions of the JSME*, JSME, 2015–2018.

**Editorial Advisory Board**, *Engineering Computations*, Emerald, 2015–2019.

**Advisory Board**, *Modeling and Simulation in Science, Engineering and Technology, Series*, Springer, 2016–.

**Editorial Board**, *Computational Mechanics*, Springer, 2019–.

## National and International Committees

**Vice-Chair**, Committee on Fluid–Structure Interaction, Applied Mechanics Division, ASME, July 2010 – June 2013.

**Planning Committee**, Japan Association for Computational Mechanics, April 2012 – .

**Secretary**, Information Committee, Computational Mechanics Division, JSME, April 2013 – March 2015.

**Chair**, Committee on Fluid–Structure Interaction, Applied Mechanics Division, ASME, July 2013 – June 2016.

## Publications Summary

1	Textbook	1	Book Translations
8	Edited Volumes	101	Journal Articles Indexed by the Web of Science
5	Other Journal Articles	25	Book Chapters
42	Invited Conference Papers	20	Contributed Conference Papers

**Researcher ID:** [E-2245-2013](#)

**Scopus:** [7103221835](#)

**Google Scholar:** [yP6hAUIAAAAJ](#)

## Publications

### Books

- 1 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, *Computational Fluid–Structure Interaction: Methods and Applications*. Wiley, February 2013, ISBN 978-0470978771.

### Book Translations

- 1 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, *Computational Fluid–Structure Interaction: Methods and Applications*. Morikita, December 2015, ISBN 978-4-627-67481-3, Translation from English: Y. Tsugawa and **K. Takizawa**.

### Edited Volumes

- 1 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, “Computational Fluid Mechanics and Fluid–Structure Interaction”, **48** (3) (2011), *Computational Mechanics*, Springer.
- 2 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, “Computational Fluid Mechanics and Fluid–Structure Interaction”, **79** (2012), *Journal of Applied Mechanics*, ASME.
- 3 **K. Takizawa**, Y. Bazilevs, and T.E. Tezduyar, “Computational Fluid Mechanics and Fluid–Structure Interaction”, **50** (6) (2012), *Computational Mechanics*, Springer.
- 4 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, “Computational Fluid–Structure Interaction, Mathematical Models and Methods in Applied Sciences”, **23** (2) (2013), World Scientific.
- 5 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, “Computational Fluid Mechanics and Fluid–Structure Interaction”, **54** (4) (2014), *Computational Mechanics*, Springer.
- 6 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, “Stabilized and Multiscale Methods in Fluid Dynamics Modeling”, **25** (12) (2015), World Scientific.

- 7 Y. Bazilevs and **K. Takizawa**, “Advances in Computational Fluid–Structure Interaction and Flow Simulation: New Methods and Challenging Computations”, (2016), Springer.
- 8 Y. Bazilevs and **K. Takizawa**, “Advances in Fluid–Structure Interaction”, (2016), *Computers & Fluids*, Elsevier.

#### Journal Articles Indexed by the Web of Science

- 1 T. Nakamura, R. Tanaka, T. Yabe, and **K. Takizawa**, “Exactly conservative semi-Lagrangian scheme for multi-dimensional hyperbolic equations”, *Journal of Computational Physics*, **174** (2001) 171–207, doi:[10.1006/jcph.2001.6888](https://doi.org/10.1006/jcph.2001.6888).
- 2 T. Yabe, Y. Ogata, **K. Takizawa**, T. Kawai, A. Segawa, and K. Sakurai, “The next generation CIP as a conservative semi-Lagrangian solver for solid, liquid and gas”, *Journal of Computational and Applied Mathematics*, **149** (2002) 267–277, doi:[10.1016/S0377-0427\(02\)00535-6](https://doi.org/10.1016/S0377-0427(02)00535-6).
- 3 **K. Takizawa**, T. Yabe, and T. Nakamura, “Multi-dimensional semi-Lagrangian scheme that guarantees exact conservation”, *Computer Physics Communications*, **148** (2002) 137–159, doi:[10.1016/S0010-4655\(02\)00472-1](https://doi.org/10.1016/S0010-4655(02)00472-1).
- 4 T. Yabe, **K. Takizawa**, F. Xiao, T. Aoki, T. Himeno, T. Takahashi, and A. Kunimatsu, “A new paradigm of computer graphics by universal solver for solid, liquid and gas”, *Japan Society of Mechanical Engineers International Journal. Ser. B, Fluids and Thermal Engineering*, **47** (2004) 653–663, doi:[10.1299/jsmeb.47.656](https://doi.org/10.1299/jsmeb.47.656).
- 5 T. Yabe, H. Mizoe, **K. Takizawa**, H. Moriki, H. Im, and Y. Ogata, “Higher-order schemes with CIP method and adaptive Soroban grid towards mesh-free scheme”, *Journal of Computational Physics*, **194** (2004) 57–77, doi:[10.1016/j.jcp.2003.08.019](https://doi.org/10.1016/j.jcp.2003.08.019).
- 6 **K. Takizawa**, T. Yabe, M. Chino, T. Kawai, K. Wataji, H. Hoshino, and T. Watanabe, “Simulation and experiment on swimming fish and skimmer by CIP method”, *Computers & Structures*, **83** (2005) 397–408, doi:[10.1016/j.compstruc.2004.04.023](https://doi.org/10.1016/j.compstruc.2004.04.023).
- 7 T. Yabe, **K. Takizawa**, M. Chino, M. Imai, and C. Chu, “Challenge of CIP as a universal solver for solid, liquid and gas”, *International Journal for Numerical Methods in Fluids*, **47** (2005) 655–676, doi:[10.1002/flid.830](https://doi.org/10.1002/flid.830).
- 8 **K. Takizawa**, T. Yabe, Y. Tsugawa, T.E. Tezduyar, and H. Mizoe, “Computation of free–surface flows and fluid–object interactions with the CIP method based on adaptive meshless Soroban grids”, *Computational Mechanics*, **40** (2007) 167–183, doi:[10.1007/s00466-006-0093-2](https://doi.org/10.1007/s00466-006-0093-2).
- 9 T. Yabe, **K. Takizawa**, T.E. Tezduyar, and H.-N. Im, “Computation of fluid–solid and fluid–fluid interfaces with the CIP method based on adaptive Soroban grids — An overview”, *International Journal for Numerical Methods in Fluids*, **54** (2007) 841–853, doi:[10.1002/flid.1473](https://doi.org/10.1002/flid.1473).
- 10 **K. Takizawa**, K. Tanizawa, T. Yabe, and T.E. Tezduyar, “Ship hydrodynamics computations with the CIP method based on adaptive Soroban grids”, *International Journal for Numerical Methods in Fluids*, **54** (2007) 1011–1019, doi:[10.1002/flid.1466](https://doi.org/10.1002/flid.1466).
- 11 Y. Imai, T. Aoki, and **K. Takizawa**, “Conservative form of interpolated differential operator scheme for compressible and incompressible fluid dynamics”, *Journal of Computational Physics*, **227** (2008) 2263–2285, doi:[10.1016/j.jcp.2007.11.031](https://doi.org/10.1016/j.jcp.2007.11.031).
- 12 **K. Takizawa**, J. Christopher, T.E. Tezduyar, and S. Sathe, “Space–time finite element computation of arterial fluid–structure interactions with patient-specific data”, *International Journal for Numerical Methods in Biomedical Engineering*, **26** (2010) 101–116, doi:[10.1002/cnm.1241](https://doi.org/10.1002/cnm.1241).
- 13 M. Manguoglu, **K. Takizawa**, A.H. Sameh, and T.E. Tezduyar, “Solution of linear systems in arterial fluid mechanics computations with boundary layer mesh refinement”, *Computational Mechanics*, **46** (2010) 83–89, doi:[10.1007/s00466-009-0426-z](https://doi.org/10.1007/s00466-009-0426-z).
- 14 T.E. Tezduyar, **K. Takizawa**, C. Moorman, S. Wright, and J. Christopher, “Multiscale sequentially-coupled arterial FSI technique”, *Computational Mechanics*, **46** (2010) 17–29, doi:[10.1007/s00466-009-0423-2](https://doi.org/10.1007/s00466-009-0423-2).

- 15 **K. Takizawa**, C. Moorman, S. Wright, J. Christopher, and T.E. Tezduyar, “Wall shear stress calculations in space–time finite element computation of arterial fluid–structure interactions”, *Computational Mechanics*, **46** (2010) 31–41, doi:[10.1007/s00466-009-0425-0](https://doi.org/10.1007/s00466-009-0425-0).
- 16 T.E. Tezduyar, **K. Takizawa**, C. Moorman, S. Wright, and J. Christopher, “Space–time finite element computation of complex fluid–structure interactions”, *International Journal for Numerical Methods in Fluids*, **64** (2010) 1201–1218, doi:[10.1002/flid.2221](https://doi.org/10.1002/flid.2221).
- 17 **K. Takizawa**, C. Moorman, S. Wright, T. Spielman, and T.E. Tezduyar, “Fluid–structure interaction modeling and performance analysis of the Orion spacecraft parachutes”, *International Journal for Numerical Methods in Fluids*, **65** (2011) 271–285, doi:[10.1002/flid.2348](https://doi.org/10.1002/flid.2348).
- 18 **K. Takizawa**, C. Moorman, S. Wright, J. Purdue, T. McPhail, P.R. Chen, J. Warren, and T.E. Tezduyar, “Patient-specific arterial fluid–structure interaction modeling of cerebral aneurysms”, *International Journal for Numerical Methods in Fluids*, **65** (2011) 308–323, doi:[10.1002/flid.2360](https://doi.org/10.1002/flid.2360).
- 19 **K. Takizawa**, S. Wright, C. Moorman, and T.E. Tezduyar, “Fluid–structure interaction modeling of parachute clusters”, *International Journal for Numerical Methods in Fluids*, **65** (2011) 286–307, doi:[10.1002/flid.2359](https://doi.org/10.1002/flid.2359).
- 20 Y. Bazilevs, M.-C. Hsu, I. Akkerman, S. Wright, **K. Takizawa**, B. Henicke, T. Spielman, and T.E. Tezduyar, “3D simulation of wind turbine rotors at full scale. Part I: Geometry modeling and aerodynamics”, *International Journal for Numerical Methods in Fluids*, **65** (2011) 207–235, doi:[10.1002/flid.2400](https://doi.org/10.1002/flid.2400).
- 21 M. Manguoglu, **K. Takizawa**, A.H. Sameh, and T.E. Tezduyar, “Nested and parallel sparse algorithms for arterial fluid mechanics computations with boundary layer mesh refinement”, *International Journal for Numerical Methods in Fluids*, **65** (2011) 135–149, doi:[10.1002/flid.2415](https://doi.org/10.1002/flid.2415).
- 22 T.E. Tezduyar, **K. Takizawa**, T. Brummer, and P.R. Chen, “Space–time fluid–structure interaction modeling of patient-specific cerebral aneurysms”, *International Journal for Numerical Methods in Biomedical Engineering*, **27** (2011) 1665–1710, doi:[10.1002/cnm.1433](https://doi.org/10.1002/cnm.1433).
- 23 **K. Takizawa** and T.E. Tezduyar, “Multiscale space–time fluid–structure interaction techniques”, *Computational Mechanics*, **48** (2011) 247–267, doi:[10.1007/s00466-011-0571-z](https://doi.org/10.1007/s00466-011-0571-z).
- 24 **K. Takizawa**, B. Henicke, T.E. Tezduyar, M.-C. Hsu, and Y. Bazilevs, “Stabilized space–time computation of wind-turbine rotor aerodynamics”, *Computational Mechanics*, **48** (2011) 333–344, doi:[10.1007/s00466-011-0589-2](https://doi.org/10.1007/s00466-011-0589-2).
- 25 **K. Takizawa**, T. Spielman, and T.E. Tezduyar, “Space–time FSI modeling and dynamical analysis of spacecraft parachutes and parachute clusters”, *Computational Mechanics*, **48** (2011) 345–364, doi:[10.1007/s00466-011-0590-9](https://doi.org/10.1007/s00466-011-0590-9).
- 26 **K. Takizawa**, B. Henicke, D. Montes, T.E. Tezduyar, M.-C. Hsu, and Y. Bazilevs, “Numerical-performance studies for the stabilized space–time computation of wind-turbine rotor aerodynamics”, *Computational Mechanics*, **48** (2011) 647–657, doi:[10.1007/s00466-011-0614-5](https://doi.org/10.1007/s00466-011-0614-5).
- 27 M. Manguoglu, **K. Takizawa**, A.H. Sameh, and T.E. Tezduyar, “A parallel sparse algorithm targeting arterial fluid mechanics computations”, *Computational Mechanics*, **48** (2011) 377–384, doi:[10.1007/s00466-011-0619-0](https://doi.org/10.1007/s00466-011-0619-0).
- 28 **K. Takizawa**, T. Spielman, C. Moorman, and T.E. Tezduyar, “Fluid–structure interaction modeling of spacecraft parachutes for simulation-based design”, *Journal of Applied Mechanics*, **79** (2012) 010907, doi:[10.1115/1.4005070](https://doi.org/10.1115/1.4005070).
- 29 **K. Takizawa**, T. Brummer, T.E. Tezduyar, and P.R. Chen, “A comparative study based on patient-specific fluid–structure interaction modeling of cerebral aneurysms”, *Journal of Applied Mechanics*, **79** (2012) 010908, doi:[10.1115/1.4005071](https://doi.org/10.1115/1.4005071).
- 30 **K. Takizawa**, B. Henicke, A. Puntel, T. Spielman, and T.E. Tezduyar, “Space–time computational techniques for the aerodynamics of flapping wings”, *Journal of Applied Mechanics*, **79** (2012) 010903, doi:[10.1115/1.4005073](https://doi.org/10.1115/1.4005073).

- 31 **K. Takizawa** and T.E. Tezduyar, “Computational methods for parachute fluid–structure interactions”, *Archives of Computational Methods in Engineering*, **19** (2012) 125–169, doi:[10.1007/s11831-012-9070-4](https://doi.org/10.1007/s11831-012-9070-4).
- 32 **K. Takizawa**, Y. Bazilevs, and T.E. Tezduyar, “Space–time and ALE-VMS techniques for patient-specific cardiovascular fluid–structure interaction modeling”, *Archives of Computational Methods in Engineering*, **19** (2012) 171–225, doi:[10.1007/s11831-012-9071-3](https://doi.org/10.1007/s11831-012-9071-3).
- 33 **K. Takizawa** and T.E. Tezduyar, “Space–time fluid–structure interaction methods”, *Mathematical Models and Methods in Applied Sciences*, **22** (supp02) (2012) 1230001, doi:[10.1142/S0218202512300013](https://doi.org/10.1142/S0218202512300013).
- 34 Y. Bazilevs, M.-C. Hsu, **K. Takizawa**, and T.E. Tezduyar, “ALE-VMS and ST-VMS methods for computer modeling of wind-turbine rotor aerodynamics and fluid–structure interaction”, *Mathematical Models and Methods in Applied Sciences*, **22** (supp02) (2012) 1230002, doi:[10.1142/S0218202512300025](https://doi.org/10.1142/S0218202512300025).
- 35 **K. Takizawa**, B. Henicke, A. Puntel, N. Kostov, and T.E. Tezduyar, “Space–time techniques for computational aerodynamics modeling of flapping wings of an actual locust”, *Computational Mechanics*, **50** (2012) 743–760, doi:[10.1007/s00466-012-0759-x](https://doi.org/10.1007/s00466-012-0759-x).
- 36 **K. Takizawa**, N. Kostov, A. Puntel, B. Henicke, and T.E. Tezduyar, “Space–time computational analysis of bio-inspired flapping-wing aerodynamics of a micro aerial vehicle”, *Computational Mechanics*, **50** (2012) 761–778, doi:[10.1007/s00466-012-0758-y](https://doi.org/10.1007/s00466-012-0758-y).
- 37 **K. Takizawa**, K. Schjodt, A. Puntel, N. Kostov, and T.E. Tezduyar, “Patient-specific computer modeling of blood flow in cerebral arteries with aneurysm and stent”, *Computational Mechanics*, **50** (2012) 675–686, doi:[10.1007/s00466-012-0760-4](https://doi.org/10.1007/s00466-012-0760-4).
- 38 **K. Takizawa**, M. Fritze, D. Montes, T. Spielman, and T.E. Tezduyar, “Fluid–structure interaction modeling of ringsail parachutes with disreefing and modified geometric porosity”, *Computational Mechanics*, **50** (2012) 835–854, doi:[10.1007/s00466-012-0761-3](https://doi.org/10.1007/s00466-012-0761-3).
- 39 **K. Takizawa**, D. Montes, M. Fritze, S. McIntyre, J. Boben, and T.E. Tezduyar, “Methods for FSI modeling of spacecraft parachute dynamics and cover separation”, *Mathematical Models and Methods in Applied Sciences*, **23** (2013) 307–338, doi:[10.1142/S0218202513400058](https://doi.org/10.1142/S0218202513400058).
- 40 **K. Takizawa**, D. Montes, S. McIntyre, and T.E. Tezduyar, “Space–time VMS methods for modeling of incompressible flows at high Reynolds numbers”, *Mathematical Models and Methods in Applied Sciences*, **23** (2013) 223–248, doi:[10.1142/s0218202513400022](https://doi.org/10.1142/s0218202513400022).
- 41 **K. Takizawa**, K. Schjodt, A. Puntel, N. Kostov, and T.E. Tezduyar, “Patient-specific computational analysis of the influence of a stent on the unsteady flow in cerebral aneurysms”, *Computational Mechanics*, **51** (2013) 1061–1073, doi:[10.1007/s00466-012-0790-y](https://doi.org/10.1007/s00466-012-0790-y).
- 42 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, “Challenges and directions in computational fluid–structure interaction”, *Mathematical Models and Methods in Applied Sciences*, **23** (2013) 215–221, doi:[10.1142/S0218202513400010](https://doi.org/10.1142/S0218202513400010).
- 43 **K. Takizawa**, B. Henicke, A. Puntel, N. Kostov, and T.E. Tezduyar, “Computer modeling techniques for flapping-wing aerodynamics of a locust”, *Computers & Fluids*, **85** (2013) 125–134, doi:[10.1016/j.compfluid.2012.11.008](https://doi.org/10.1016/j.compfluid.2012.11.008).
- 44 **K. Takizawa** and T.E. Tezduyar, “Bringing them down safely”, *Mechanical Engineering*, **134** (12) (2012) 34–37.
- 45 **K. Takizawa**, T.E. Tezduyar, S. McIntyre, N. Kostov, R. Kolesar, and C. Habluetzel, “Space–time VMS computation of wind-turbine rotor and tower aerodynamics”, *Computational Mechanics*, **53** (2014) 1–15, doi:[10.1007/s00466-013-0888-x](https://doi.org/10.1007/s00466-013-0888-x).
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- 10 T.E. Tezduyar, **K. Takizawa**, and Y. Bazilevs, “Fluid–structure interaction and flows with moving boundaries and interfaces”, in E. Stein, R.D. Borst, and T.J.R. Hughes, editors, *Encyclopedia of Computational Mechanics Second Edition*, Part 2 Fluids, Wiley, published online, December 2017, ISBN 9781119003793, doi:[10.1002/9781119176817.ecm2069](https://doi.org/10.1002/9781119176817.ecm2069).
- 11 **K. Takizawa** and T.E. Tezduyar, “New directions in space–time computational methods”, in Y. Bazilevs and **K. Takizawa**, editors, *Advances in Computational Fluid–Structure Interaction and Flow Simulation: New Methods and Challenging Computations*, Modeling and Simulation in Science, Engineering and Technology, 159–178, Springer, 2016, ISBN 978-3-319-40825-5, doi:[10.1007/978-3-319-40827-9\\_13](https://doi.org/10.1007/978-3-319-40827-9_13).
- 12 H. Suito, **K. Takizawa**, V.Q.H. Huynh, D. Sze, T. Ueda, and T.E. Tezduyar, “A geometrical-characteristics study in patient-specific FSI analysis of blood flow in the thoracic aorta”, in Y. Bazilevs and **K. Takizawa**, editors, *Advances in Computational Fluid–Structure Interaction and Flow Simulation: New Methods and Challenging Computations*, Modeling and Simulation in Science, Engineering and Technology, 379–386, Springer, 2016, ISBN 978-3-319-40825-5, doi:[10.1007/978-3-319-40827-9\\_29](https://doi.org/10.1007/978-3-319-40827-9_29).
- 13 A. Castorrini, A. Corsini, F. Rispoli, P. Venturini, **K. Takizawa**, and T.E. Tezduyar, “SUPG/PSPG computational analysis of rain erosion in wind-turbine blades”, in Y. Bazilevs and **K. Takizawa**, editors, *Advances in Computational Fluid–Structure Interaction and Flow Simulation: New Methods and Challenging Computations*, Modeling and Simulation in Science, Engineering and Technology, 77–96, Springer, 2016, ISBN 978-3-319-40825-5, doi:[10.1007/978-3-319-40827-9\\_7](https://doi.org/10.1007/978-3-319-40827-9_7).
- 14 **K. Takizawa**, T.E. Tezduyar, and T. Sasaki, “Estimation of element-based zero-stress state in arterial FSI computations with isogeometric wall discretization”, in P. Wriggers and T. Lenarz, editors, *Biomedical Technology: Modeling, Experiments and Simulation*, Lecture Notes in Applied and Computational Mechanics, 101–122, Springer, 2018, ISBN 978-3-319-59547-4, doi:[10.1007/978-3-319-59548-1\\_7](https://doi.org/10.1007/978-3-319-59548-1_7).
- 15 **K. Takizawa**, T.E. Tezduyar, T. Terahara, and T. Sasaki, “Heart valve flow computation with the Space–Time Slip Interface Topology Change (ST-SI-TC) method and Isogeometric Analysis (IGA)”, in P. Wriggers and T. Lenarz, editors, *Biomedical Technology: Modeling, Experiments and Simulation*, Lecture Notes in Applied and Computational Mechanics, 77–99, Springer, 2018, ISBN 978-3-319-59547-4, doi:[10.1007/978-3-319-59548-1\\_6](https://doi.org/10.1007/978-3-319-59548-1_6).
- 16 T. Sawada, H. Watanabe, **K. Takizawa**, and T.E. Tezduyar, “Fluid–structure interaction analysis”, in *Flow Simulation with the Finite Element Method*, Chapter 9, 209–247, Maruzen, 2017, ISBN 978-4-621-30183-8, in Japanese.
- 17 **K. Takizawa** and T.E. Tezduyar, “Space–time computational methods and applications”, in *Flow Simulation with the Finite Element Method*, Chapter 10, 249–269, Maruzen, 2017, ISBN 978-4-621-30183-8, in Japanese.

- 18 **K. Takizawa** and T.E. Tezduyar, “Space–time computational analysis in energy applications”, in *Flow Simulation with the Finite Element Method*, Chapter 11.2, 278–288, Maruzen, 2017, ISBN 978-4-621-30183-8, in Japanese.
- 19 Y. Ootoguro, **K. Takizawa**, and T.E. Tezduyar, “A general-purpose NURBS mesh generation method for complex geometries”, in T.E. Tezduyar, editor, *Frontiers in Computational Fluid–Structure Interaction and Flow Simulation: Research from Lead Investigators under Forty – 2018*, Modeling and Simulation in Science, Engineering and Technology, 399–434, Springer, 2018, ISBN 978-3-319-96468-3, doi:[10.1007/978-3-319-96469-0\\_10](https://doi.org/10.1007/978-3-319-96469-0_10).
- 20 T. Kuraishi, **K. Takizawa**, and T.E. Tezduyar, “Space–time computational analysis of tire aerodynamics with actual geometry, road contact and tire deformation”, in T.E. Tezduyar, editor, *Frontiers in Computational Fluid–Structure Interaction and Flow Simulation: Research from Lead Investigators under Forty – 2018*, Modeling and Simulation in Science, Engineering and Technology, 337–376, Springer, 2018, ISBN 978-3-319-96468-3, doi:[10.1007/978-3-319-96469-0\\_8](https://doi.org/10.1007/978-3-319-96469-0_8).
- 21 **K. Takizawa**, T.E. Tezduyar, H. Uchikawa, T. Terahara, T. Sasaki, K. Shiozaki, A. Yoshida, K. Komiya, and G. Inoue, “Aorta flow analysis and heart valve flow and structure analysis”, in T.E. Tezduyar, editor, *Frontiers in Computational Fluid–Structure Interaction and Flow Simulation: Research from Lead Investigators under Forty – 2018*, Modeling and Simulation in Science, Engineering and Technology, 29–89, Springer, 2018, ISBN 978-3-319-96468-3, doi:[10.1007/978-3-319-96469-0\\_2](https://doi.org/10.1007/978-3-319-96469-0_2).
- 22 A. Korobenko, Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, “Recent advances in ALE-VMS and ST-VMS computational aerodynamic and FSI analysis of wind turbines”, in T.E. Tezduyar, editor, *Frontiers in Computational Fluid–Structure Interaction and Flow Simulation: Research from Lead Investigators under Forty – 2018*, Modeling and Simulation in Science, Engineering and Technology, 253–336, Springer, 2018, ISBN 978-3-319-96468-3, doi:[10.1007/978-3-319-96469-0\\_7](https://doi.org/10.1007/978-3-319-96469-0_7).
- 23 Y. Bazilevs, **K. Takizawa**, T.E. Tezduyar, M.-C. Hsu, Y. Ootoguro, H. Mochizuki, and M.C.H. Wu, “ALE and space–time variational multiscale isogeometric analysis of wind turbines and turbomachinery”, in A. Grama and A. Sameh, editors, *Parallel Algorithms in Computational Science and Engineering*, Modeling and Simulation in Science, Engineering and Technology, 195–233, Springer, 2020, ISBN 978-3-030-43735-0, doi:[10.1007/978-3-030-43736-7\\_7](https://doi.org/10.1007/978-3-030-43736-7_7).
- 24 T.J.R. Hughes, **K. Takizawa**, Y. Bazilevs, T.E. Tezduyar, and M.-C. Hsu, “Computational cardiovascular analysis with the variational multiscale methods and isogeometric discretization”, in A. Grama and A. Sameh, editors, *Parallel Algorithms in Computational Science and Engineering*, Modeling and Simulation in Science, Engineering and Technology, 151–193, Springer, 2020, ISBN 978-3-030-43735-0, doi:[10.1007/978-3-030-43736-7\\_6](https://doi.org/10.1007/978-3-030-43736-7_6).
- 25 **K. Takizawa**, Y. Bazilevs, T.E. Tezduyar, and A. Korobenko, “Variational multiscale flow analysis in aerospace, energy and transportation technologies”, in A. Grama and A. Sameh, editors, *Parallel Algorithms in Computational Science and Engineering*, Modeling and Simulation in Science, Engineering and Technology, 235–280, Springer, 2020, ISBN 978-3-030-43735-0, doi:[10.1007/978-3-030-43736-7\\_8](https://doi.org/10.1007/978-3-030-43736-7_8).

## Invited Conference Papers

- 1 **K. Takizawa**, K. Tanizawa, T. Yabe, and T.E. Tezduyar, “Computational ship hydrodynamics with the CIP method”, in E. Onate, J. Garcia, P. Bergan, and T. Kvamsdal, editors, *Marine 2007*, CIMNE, Barcelona, Spain, (2007).
- 2 T. Yabe, **K. Takizawa**, and T.E. Tezduyar, “Computation of fluid–structure interactions with the CIP method based on adaptive meshless Soroban grids”, in E. Onate, J. Garcia, P. Bergan, and T. Kvamsdal, editors, *Marine 2007*, CIMNE, Barcelona, Spain, (2007).
- 3 **K. Takizawa**, S. Sathe, and T.E. Tezduyar, “Incompressible flow computations with the multi-moment and SUPG/PSPG formulations”, in *Proceedings of the Third Asian-Pacific Congress on Computational Mechanics (CD-ROM)*, Kyoto, Japan, (2007).
- 4 T.E. Tezduyar, **K. Takizawa**, J. Christopher, C. Moorman, and S. Wright, “Interface projection techniques for complex FSI problems”, in T. Kvamsdal, B. Pettersen, P. Bergan, E. Onate, and J. Garcia, editors, *Marine 2009*, CIMNE, Barcelona, Spain, (2009).
- 5 T.E. Tezduyar, **K. Takizawa**, and J. Christopher, “Sequentially-coupled FSI technique”, in T. Kvamsdal, B. Pettersen, P. Bergan, E. Onate, and J. Garcia, editors, *Marine 2009*, CIMNE, Barcelona, Spain, (2009).
- 6 **K. Takizawa**, J. Christopher, C. Moorman, S. Wright, J. Martin, and T.E. Tezduyar, “Fluid–structure interaction modeling of the Orion spacecraft parachutes”, in B. Schrefler, E. Onate, and M. Papadrakakis, editors, *Coupled Problems 2009*, CIMNE, Barcelona, Spain, (2009).
- 7 **K. Takizawa**, J. Christopher, C. Moorman, J. Martin, J. Purdue, T. McPhail, P.R. Chen, J. Warren, and T.E. Tezduyar, “Space–time finite element computation of arterial FSI with patient-specific data”, in B. Schrefler, E. Onate, and M. Papadrakakis, editors, *Coupled Problems 2009*, CIMNE, Barcelona, Spain, (2009).
- 8 T.E. Tezduyar, **K. Takizawa**, J. Christopher, C. Moorman, and S. Wright, “Space–time finite element computation of complex FSI problems”, in B. Schrefler, E. Onate, and M. Papadrakakis, editors, *Coupled Problems 2009*, CIMNE, Barcelona, Spain, (2009).
- 9 M. Manguoglu, **K. Takizawa**, A.H. Sameh, and T.E. Tezduyar, “Novel solvers for linear systems in computational fluid dynamics”, in T. Kvamsdal, B. Pettersen, P. Bergan, E. Onate, and J. Garcia, editors, *Marine 2009*, CIMNE, Barcelona, Spain, (2009).
- 10 T. Yabe, Y. Ogata, T. Sugimoto, **K. Takizawa**, and K. Takahashi, “Soroban-Grid CIP method for ocean research and ship design - High performance computing with Earth Simulator -”, in *Parallel CFD 2009*, California, USA, (2009).
- 11 **K. Takizawa**, T. Brummer, T.E. Tezduyar, and P.R. Chen, “Comparative patient-specific FSI modeling of cerebral aneurysms”, in M. Papadrakakis, E. Onate, and B. Schrefler, editors, *Coupled Problems 2011*, CIMNE, Barcelona, Spain, (2011).
- 12 **K. Takizawa** and T.E. Tezduyar, “Multiscale space–time computation techniques”, in M. Papadrakakis, E. Onate, and B. Schrefler, editors, *Coupled Problems 2011*, CIMNE, Barcelona, Spain, (2011).
- 13 **K. Takizawa**, T. Spielman, and T.E. Tezduyar, “Space–time FSI modeling and dynamical analysis of ringsail parachute clusters”, in M. Papadrakakis, E. Onate, and B. Schrefler, editors, *Coupled Problems 2011*, CIMNE, Barcelona, Spain, (2011).
- 14 **K. Takizawa**, T. Spielman, and T.E. Tezduyar, “Fluid–structure interaction modeling of ringsail parachute clusters”, in *Recent Progress in Fluid Dynamics Research, Proceedings of the Sixth International Conference on Fluid Mechanics*, AIP Conf. Proc. Vol 1376, 7–11, American Institute of Physics, Guangzhou, China, (2011), doi:[10.1063/1.3651825](https://doi.org/10.1063/1.3651825).
- 15 **K. Takizawa**, T. Spielman, and T.E. Tezduyar, “Space–time FSI modeling of ringsail parachute clusters”, in E. Onate, B. Kroplin, and K.-U. Bletzinger, editors, *Structural Membranes 2011*, CIMNE, Barcelona, Spain, (2011).

- 16 **K. Takizawa**, S. Wright, J. Christopher, and T.E. Tezduyar, “Multiscale sequentially-coupled FSI computation in parachute modeling”, in E. Onate, B. Kroplin, and K.-U. Bletzinger, editors, *Structural Membranes 2011*, CIMNE, Barcelona, Spain, (2011).
- 17 **K. Takizawa**, M. Fritze, T. Spielman, C. Moorman, S. Tabata, and T.E. Tezduyar, “Space–time FSI computation of parachute disreefing”, in *Proceedings of the 25th Computational Fluid Dynamics Conference*, Osaka, Japan, (2011).
- 18 **K. Takizawa**, S. Asada, N. Kostov, and T.E. Tezduyar, “Space–time formulation of fully-coupled fluid–object interaction”, in *Proceedings of the 25th Computational Fluid Dynamics Conference*, Osaka, Japan, (2011).
- 19 T.E. Tezduyar, **K. Takizawa**, and S. Wright, “Fluid–structure interaction modeling of spacecraft parachutes”, in *Extended Abstracts of the 61st National Congress of Theoretical and Applied Mechanics*, Tokyo, Japan, (2012).
- 20 T.E. Tezduyar and **K. Takizawa**, “Space–time computational FSI techniques — Core technologies”, in *Lectures on Computational Fluid–Structure Interaction*, Tokyo, Japan, (2012).
- 21 **K. Takizawa** and T.E. Tezduyar, “Space–time computational FSI techniques — Special technologies”, in *Lectures on Computational Fluid–Structure Interaction*, Tokyo, Japan, (2012).
- 22 T.E. Tezduyar, **K. Takizawa**, and Y. Bazilevs, “Stabilized formulations in computational fluid mechanics and fluid–structure interaction”, in *Lectures on Computational Fluid–Structure Interaction*, Tokyo, Japan, (2012).
- 23 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, “ALE method and ALE-VMS technique”, in *Lectures on Computational Fluid–Structure Interaction*, Tokyo, Japan, (2012).
- 24 **K. Takizawa**, T.E. Tezduyar, and Y. Bazilevs, “Space–time method and Space–Time VMS technique”, in *Lectures on Computational Fluid–Structure Interaction*, Tokyo, Japan, (2012).
- 25 Y. Bazilevs, **K. Takizawa**, and T.E. Tezduyar, “Introductory computational structural mechanics”, in *Lectures on Computational Fluid–Structure Interaction*, Tokyo, Japan, (2012).
- 26 T.E. Tezduyar, **K. Takizawa**, and Y. Bazilevs, “Mesh update methods for computation of flows with moving boundaries and interfaces”, in *Lectures on Computational Fluid–Structure Interaction*, Tokyo, Japan, (2012).
- 27 **K. Takizawa**, T.E. Tezduyar, and Y. Bazilevs, “FSI coupling techniques and iterative solution methods”, in *Lectures on Computational Fluid–Structure Interaction*, Tokyo, Japan, (2012).
- 28 **K. Takizawa**, M. Fritze, D. Montes, S. McIntyre, J. Boben, S. Tabata, Y. Tsutsui, and T.E. Tezduyar, “Computational modeling of parachute fluid–structure interaction”, in *Proceedings of 17th Japan Society of Computational Engineering and Science Conference*, Kyoto, Japan, (2012).
- 29 **K. Takizawa**, K. Schjodt, A. Puntel, N. Kostov, H. Takagi, S. Asada, and T.E. Tezduyar, “Patient-specific modeling of cerebral aneurysms with FSI and stent”, in *Proceedings of 17th Japan Society of Computational Engineering and Science Conference*, Kyoto, Japan, (2012).
- 30 **K. Takizawa**, B. Henicke, A. Puntel, N. Kostov, and T.E. Tezduyar, “Space–time computational techniques for the aerodynamics of flapping locust wings”, in *Proceedings of International Workshop on Future of CFD and Aerospace Sciences*, Kobe, Japan, (2012).
- 31 T.E. Tezduyar and **K. Takizawa**, “Space-time computational fluid-structure interaction techniques”, in *Proceedings of the 19th National Computational Fluid Dynamics Conference*, Penghu, Taiwan, (2012).
- 32 **K. Takizawa**, T. Brummer, K. Schjodt, N. Kostov, A. Puntel, H. Takagi, and T.E. Tezduyar, “Patient-specific modeling of fluid–structure interaction and stenting in cerebral arteries with aneurysm”, in *Extended Abstracts of JSME-CMD International Computational Mechanics Symposium 2012*, Kobe, Japan, (2012).
- 33 **K. Takizawa**, T. Spielman, and T.E. Tezduyar, “Dynamical analysis of parachute clusters”, in *Extended Abstracts of JSME-CMD International Computational Mechanics Symposium 2012*, Kobe, Japan, (2012).
- 34 T.E. Tezduyar and **K. Takizawa**, “Introduction to computational fluid mechanics with computer-generated movies and pictures”, in *Lecture Notes on Finite Elements in Flow Problems — Basics and Applications*, Tokyo, Japan, (2012).

- 35 T.E. Tezduyar and **K. Takizawa**, “Mesh update methods for flows with moving interfaces”, in *Lecture Notes on Finite Elements in Flow Problems — Basics and Applications*, Tokyo, Japan, (2012).
- 36 **K. Takizawa** and T.E. Tezduyar, “FSI coupling techniques”, in *Lecture Notes on Finite Elements in Flow Problems — Basics and Applications*, Tokyo, Japan, (2012).
- 37 T.E. Tezduyar and **K. Takizawa**, “Stabilized formulations — Special techniques”, in *Lecture Notes on Finite Elements in Flow Problems — Basics and Applications*, Tokyo, Japan, (2012).
- 38 **K. Takizawa** and T.E. Tezduyar, “Space–time method and space–time VMS technique”, in *Lecture Notes on Finite Elements in Flow Problems — Basics and Applications*, Tokyo, Japan, (2012).
- 39 T.E. Tezduyar and **K. Takizawa**, “Space–time computational FSI techniques — Core technologies”, in *Lecture Notes on Finite Elements in Flow Problems — Basics and Applications*, Tokyo, Japan, (2012).
- 40 **K. Takizawa** and T.E. Tezduyar, “Space–time computational FSI techniques — Special technologies”, in *Lecture Notes on Finite Elements in Flow Problems — Basics and Applications*, Tokyo, Japan, (2012).
- 41 **K. Takizawa**, H. Takagi, and T.E. Tezduyar, “Effect of longitudinal prestress in arterial FSI”, in *Extended Abstracts of JSME 25th Computational Mechanics Division Conference*, Kobe, Japan, (2012).
- 42 **K. Takizawa**, D. Montes, M. Fritze, S. McIntyre, J. Boben, Y. Tsutsui, and T.E. Tezduyar, “FSI modeling of spacecraft parachute dynamics and cover separation”, in *Extended Abstracts of JSME 25th Computational Mechanics Division Conference*, Kobe, Japan, (2012).

#### Contributed Conference Papers

- 1 **K. Takizawa** and T. Yabe, “Development of multi dimensional conservative semi-Lagrangian scheme”, in *Proceedings of 14th Computational Fluid Dynamics, Japan Society of Fluid Mechanics*, Tokyo, Japan, (2000).
- 2 T. Yabe, F. Xiao, **K. Takizawa**, and K. Sakurai, “Three-phase flow calculation with conservative semi-Lagrangian CIP method”, in *ASME Joint U.S.–European Fluids Engineering Conference*, Montreal, Canada, (2002).
- 3 **K. Takizawa** and T. Yabe, “Three-dimentional simulation of skimmer on water”, in *Proceedings of FEDSM’03, 4th ASME–JSME Joint Fluids Engineering Conference*, Hawaii, USA, (2003).
- 4 M. Chino, **K. Takizawa**, and T. Yabe, “Experimental research on rotating skimmer”, in *Proceedings of FEDSM’03, 4th ASME–JSME Joint Fluids Engineering Conference*, Hawaii, USA, (2003).
- 5 Y. Ogata, T. Yabe, **K. Takizawa**, and T. Ohkubo, “The analysis of electromagnetic waves using CIP scheme with Soroban grid”, in *Computational Fluid Dynamics 2004*, volume 1, (2004) 141–146.
- 6 **K. Takizawa**, T. Yabe, and T.E. Tezduyar, “Flow calculations with the Soroban CIP scheme”, in *Proceedings of the Japan Society of Mechanical Engineers 17th Computational Mechanics Conference*, Sendai, Japan, (2004).
- 7 T. Nakamura, T. Ishikawa, T. Yabe, and **K. Takizawa**, “A new numerical solver for a 2-d non-linear-shallow water equation using a Soroban grid system”, in *Proceedings of Hydraulics Engineering, JSCE*, volume 49, (2005) 685–690.
- 8 **K. Takizawa** and K. Tanizawa, “Computation of waves around a floating body by high accuracy CFD”, in *Conference Proceedings, The Japan Society of Naval Architects and Ocean Engineers*, Kobe, Japan, (2006).
- 9 **K. Takizawa** and T. Aoki, “Turbulent flow computations by conservative Interpolated Differential Operator (IDO) scheme”, in *Proceedings of International Conference on Recent Development of Numerical Schemes for Flow Problems*, Fukuoka, Japan, (2007).
- 10 T. Aoki, Y. Imai, and **K. Takizawa**, “Conservative Interpolated Differential Operator (IDO) scheme”, in *Proceedings of International Conference on Recent Development of Numerical Schemes for Flow Problems*, Fukuoka, Japan, (2007).
- 11 **K. Takizawa** and T. Aoki, “Conservative Interpolated Differential Operator (IDO) scheme”, in *12th Japan Society for Computational Engineering and Science Conference*, Tokyo, Japan, (2007).



- 12 K. Sugihara, **K. Takizawa**, and T. Aoki, “Partly semi-Lagrangian Runge-Kutta time integration for IDO scheme”, in *12th Japan Society for Computational Engineering and Science Conference*, Tokyo, Japan, (2007).
- 13 T. Aoki, K. Sugihara, Y. Imai, and **K. Takizawa**, “High-accurate computation for compressible and incompressible fluid dynamics by multi-moment conservative scheme”, in *The 4th Japan-Taiwan Workshop on Mechanical and Aerospace Engineering*, Japan, (2007).
- 14 **K. Takizawa**, K. Schjodt, N. Kostov, A. Puntel, H. Takagi, and T.E. Tezduyar, “Patient-specific computer modeling of blood flow in cerebral arteries with aneurysm and stent”, in *Proceedings of Annual Meeting of Japan Society of Mechanical Engineers*, Kanazawa, Japan, (2012).
- 15 Y. Tsutsui, N. Toh, T. Terahara, **K. Takizawa**, T.E. Tezduyar, and C. Boswell, “Ringsail-parachute design studies based on aerodynamic-moment computation with resolved geometric porosity”, in *Proceedings of 58th Symposium on Space Science and Technology*, Nagasaki, Japan, (2014).
- 16 T. Kuraishi, **K. Takizawa**, S. Tabata, S. Asada, and T.E. Tezduyar, “Multiscale thermo-fluid analysis of a tire”, in *Proceedings of the 19th Japan Society of Computational Engineering and Science Conference*, Hiroshima, Japan, (2014).
- 17 H. Mochizuki, **K. Takizawa**, H. Hattori, T.E. Tezduyar, L. Pan, and S. Mei, “ST-VMS computational analysis of vertical-axis wind-turbine aerodynamics”, in *Proceedings of 13th Asian International Conference on Fluid Machinery*, Paper No. AICFM13-150, Tokyo, Japan, (2015).
- 18 Y. Ootoguro, T. Terahara, **K. Takizawa**, T.E. Tezduyar, T. Kuraishi, and H. Hattori, “A higher-order ST-VMS method for turbocharger analysis”, in *Proceedings of 13th Asian International Conference on Fluid Machinery*, Paper No. AICFM13-153, Tokyo, Japan, (2015).
- 19 H. Hattori, **K. Takizawa**, T.E. Tezduyar, K. Miyagawa, M. Nomi, M. Isono, H. Uchida, and M. Kawai, “Computational analysis of flow-driven string dynamics in a turbomachinery”, in *Proceedings of 13th Asian International Conference on Fluid Machinery*, Paper No. AICFM13-154, Tokyo, Japan, (2015).
- 20 M. Omori, T. Kuraishi, **K. Takizawa**, and T.E. Tezduyar, “High spatial and temporal resolution computational analysis of flow between an engine cylinder and moving piston”, in *Proceedings of the 11th Pacific Symposium on Flow Visualization and Image Processing*, Kumamoto, Japan, (2017).

## Invited Presentations

### International

- 1 Symposium on Advances in Flow Simulation and Modeling: I) Fundamental and Enabling Technologies, II) Moving Boundaries and Interfaces, 8th US National Congress on Computational Mechanics, Austin, USA, July 2005.
- 2 Symposium on Stabilized, Multiscale and Multiphysics Methods, 7th World Congress on Computational Mechanics, Los Angeles, USA, July 2006.
- 3 Symposium on Methods for Fluid–Structure Interactions, Marine 2007, Barcelona, Spain, June 2007.
- 4 Symposium on Advances in Computational Techniques for Fluid Mechanics and Fluid–Structure Interactions, Third Asian-Pacific Congress on Computational Mechanics, Kyoto, Japan, December 2007.
- 5 HPC Users Workshop, Rice University, Houston, USA, October 2008.
- 6 University of Rome, Rome, Italy, June 2009.
- 7 Symposium on Advances in Computational Techniques for Fluid Mechanics and Fluid–Structure Interactions, Coupled Problems 2009, Ischia, Italy, June 2009 (**Keynote Lecture**).
- 8 First International Workshop on Computational Engineering — Special Topic Fluid–Structure Interaction, Herrsching am Ammersee, Germany, October 2009 (**Keynote Lecture**).
- 9 Symposium Celebrating the 60th Birthday of Yoichiro Matsumoto: Advances in Computational Fluid Mechanics and Fluid–Structure Interactions, ASME International Mechanical Engineering Congress & Exposition, Lake Buena Vista, USA, November 2009.
- 10 Department of Mechanical Engineering and Materials Science, Rice University, Houston, USA, January 2010.

- 11 Symposium on Advances in Computational Fluid Mechanics and Fluid–Structure Interactions, 9th World Congress on Computational Mechanics, Sydney, Australia, July 2010.
- 12 Department of Mechanical Engineering and Materials Science, Rice University, Houston, USA, April 2011 (**2 Lectures**).
- 13 University of Rome, Rome, Italy, May 2011.
- 14 Symposium Celebrating the 70th Birthday of Ahmed Sameh: Fluid–Structure Interactions, Coupled Problems 2011, Kos, Greece, June 2011.
- 15 Coupled Problems 2011, Kos, Greece, June 2011 (**Plenary Lecture**).
- 16 Trends & Challenges in Computational Mechanics 2011, Padua, Italy, September 2011.
- 17 Structural Membranes 2011, Barcelona, Spain, October 2011 (**Plenary Lecture**).
- 18 Symposium on Fluid–Structure Interaction and Wind Engineering, Structural Membranes 2011, Barcelona, Spain, October 2011.
- 19 Department of Mechanical Engineering and Materials Science, Rice University, Houston, USA, February 2012.
- 20 Lectures on Computational Fluid–Structure Interaction, The University of Tokyo, Tokyo, March 2012 (**3 Lectures**).
- 21 International Workshop on Future of CFD and Aerospace Sciences, Kobe, April 2012.
- 22 Computational Fluid–Structure Interaction — A Short Course in Rome, Rome, June 2012 (**4 Lectures**).
- 23 Department of Mechanical Engineering and Materials Science, Rice University, Houston, USA, November 2012.
- 24 Symposium for Lectures by the 2012 Thomas J.R. Hughes Young Investigator Awardees, ASME International Mechanical Engineering Congress & Exposition, Houston, USA, November 2012.
- 25 High Performance Computing and Related Topics, 4th International Conference on Computational Methods, Gold Coast, Australia, November 2012.
- 26 4th International Conference on Computational Methods, Gold Coast, Australia, November 2012 (**Plenary Lecture**).
- 27 Computational Fluid–Structure Interaction — A Short Course in San Diego, San Diego, February 2013 (**4 Lectures**).
- 28 Advances in Computational Mechanics (ACM 2013) — A Conference Celebrating the 70th Birthday of Thomas J.R. Hughes, San Diego, February 2013 (**Semi-Plenary Lecture**).
- 29 The 4th CREST-SBM International Symposium — Collaboration Between Mathematical Science and Clinical Medicine, Tokyo, March 2013 .
- 30 2013 Spring Progress in Mathematical and Computational Studies on Science and Engineering Problems, Taiwan, May 2013 (**2 Lectures**).
- 31 University of Rome, Rome, Italy, June 2013.
- 32 Biomedical Fluid–Structure Interaction, Coupled Problems 2013, Ibiza, Spain, June 2013 (**Keynote Lecture**).
- 33 Structural Membranes 2013, Munich, Germany, October 2013 (**Plenary Lecture**).
- 34 Symposium on Fluid–Structure Interaction and Wind Engineering, Structural Membranes 2013, Munich, Germany, October 2013.
- 35 Symposium on Fluid–Structure Interaction, 5th Asia Pacific Congress on Computational Mechanics & 4th International Symposium on Computational Mechanics, Singapore, December 2013 (**Keynote Lecture**).
- 36 Department of Mechanical Engineering, Rice University, Houston, USA, February 2014 (**2 Lectures**).
- 37 Advances in Computational Fluid–Structure Interaction and Flow Simulation (AFSI 2014) — A Conference Celebrating the 60th Birthday of Tayfun E. Tezduyar, Tokyo, March 2014 (**Plenary Lecture**).
- 38 Computational Fluid–Structure Interaction — A Short Course in Tokyo, Tokyo, March 2014 (**4 Lectures**).
- 39 Computational Reliability/Safety Assessment for Space Vehicles, COMPSAFE 2014, Sendai, April 2014.
- 40 Computational Fluid–Structure Interaction — A Short Course in Barcelona, Barcelona, Spain, July 2014 (**4 Lectures**).

- 41 Innovative Methods for Fluid–Structure Interaction, Barcelona, Spain, July 2014 (**Keynote Lecture**).
- 42 Computational Methods in Fluid–Structure Interactions, Dynamics and Vibration, Vibroacoustics — A Minisymposium in Honor of Prof. Roger Ohayon, Barcelona, Spain, July 2014.
- 43 Stabilized Methods in Aerodynamics Modeling, Prague, Czech Republic, September 2014.
- 44 Department of Mechanical Engineering, Rice University, Houston, USA, February 2015 (**3 Lectures**).
- 45 Computational Fluid–Structure Interaction — A Short Course in Taipei, Taipei, Taiwan, March 2015 (**4 Lectures**).
- 46 The 18th International Conference on Finite Elements in Flow Problems, Taipei, Taiwan, March 2015 (**Semi-Plenary Lecture**).
- 47 Computational Fluid–Structure Interaction — A Short Course in Istanbul, Istanbul, Turkey, May 2015 (**4 Lectures**).
- 48 Advances in Computational Fluid–Structure Interaction and Flow Simulation, Istanbul, Turkey, May 2015.
- 49 Flows With Moving Boundaries and Interfaces, San Diego, July 2015 (**Keynote Lecture**).
- 50 International Conference on Biomedical Technology, Hannover, Germany, October 2015 (**Keynote Lecture**).
- 51 International Workshop on the Multi-Phase Flow; Analysis, Modeling and Numerics, Tokyo, November 2015.
- 52 11th Korea–Japan CFD Workshop, Fukuoka, December 2015 .
- 53 12th World Congress on Computational Mechanics, Seoul, Korea, July 2016 (**Semi-Plenary Lecture**).
- 54 Application of IGA and Meshfree Methods to Coupled Problems and Contact, San Diego, US, October 2016 (**Keynote Lecture**).
- 55 International Workshop on the Multi-Phase Flows; Analysis, Modeling and Numerics, Tokyo, Japan, November 2016,
- 56 The 19th International Conference on Finite Elements in Flow Problems, Rome, Italy, April 2017 (**Semi-Plenary Lecture**).
- 57 IGA of fluids and fluid–structure interaction, Pavia, Italy, September 2017.
- 58 Department of Mechanical Engineering, Rice University, Houston, USA, November 2017.
- 59 International Workshop on the Multi-Phase Flow; Analysis, Modeling and Numerics, Tokyo, November 2017.
- 60 Numerical Analysis: Applications to Biomedical Problems and Foundations, Tokyo, February 2018.
- 61 Advances in Computational Fluid–Structure Interaction and Flow Simulation (AFSI 2018) — A Conference Dedicated to the 75th Birthday of Thomas J.R. Hughes, Banff, May 2018.
- 62 Innovative methods for fluid-structure interaction, Glasgow, UK, June 2018.
- 63 Advances in Computational Fluid–Structure Interaction and Flow Simulation (AFSI 2019) — A Conference Dedicated to the 65th Birthday of Tayfun E. Tezduyar, Okinawa, June 2019.
- 64 7th Asia Pacific Congress on Computational Mechanics (APCOM VII), Taiwan, December 2019 (**Keynote Lecture**).

## Japanese

- 1 Tokyo Institute of Technology and Earth Simulator Center Joint Workshop, Yokohama, Japan, December 2008.
- 2 34th Nano-Biomedical Engineering Series Seminar, Tohoku University, Sendai, Japan, September 2009.
- 3 Waseda Institute for Advanced Study, Waseda University, Tokyo, Japan, June 2011.
- 4 Osaka University, Osaka, Japan, September 2011.
- 5 61st National Congress of Theoretical and Applied Mechanics, Tokyo, March 2012 (**Plenary Lecture**).
- 6 Recent Developments of Mesh Generation and Biofluids, Tokyo, March 2012.
- 7 Workshop on CFD and HPC, Nagano, May 2012.
- 8 Fluid–Structure Interaction in Any Scale, Kyoto, May 2012.
- 9 Biomedical Modeling and Geometry, The University of Tokyo, Tokyo, Japan, July 2012.
- 10 Lectures on Finite Elements in Flow Problems — Basics and Applications, Nihon University, Tokyo, Japan, August 2012 (**2 Lectures**).

- 11 2nd Symposium on Computational Dynamics, Science Council of Japan, Tokyo, December 2012.
- 12 Japan Society of Mechanical Engineers (JSME) — Fluid Noise and Vibration, Tokyo, March 2013.
- 13 Research Institute for Mathematical Sciences (RIMS) Workshop, Kyoto University, October 2014.
- 14 Early Bird, Waseda University, January 2015.
- 15 Monthly Seminar, Waseda University, July 2015.
- 16 Nonlinear Science Colloquium, Waseda University, November 2016.
- 17 Lectures on Finite Elements in Flow Problems — Basics and Applications, Nihon University, Tokyo, Japan, August 2017.
- 18 JST Mathematics Caravan, Ueda High School, August 2017.
- 19 53rd Autumn Assembly of the Japan Radiological Society, Ehime, September 2017.
- 20 83rd Annual Conference of Turbomachinery Society of Japan, Online, May, 2020 (**Plenary Lecture**)
- 21 84th Annual Scientific Meetings of the Japanese Circulation Society, Online, July, 2020

## Graduate Students Supervised or Co-Supervised

M.S. Past

- A. Ni Annaidh (Visiting from University College of Dublin), 2007–2008.
- J. Christopher, Mechanical Engineering and Materials Science (Rice), 2007–2009.
- P. McKenna (Visiting from University College of Dublin), 2008–2009.
- J. Purdue (Visiting from University College of Dublin), 2008–2010.
- C. Moorman, Mechanical Engineering and Materials Science (Rice), 2008–2010.
- S. Wright, Mechanical Engineering and Materials Science (Rice), 2008–2010.
- T. Brummer, Mechanical Engineering and Materials Science (Rice), 2009–2011.
- T. Curlett, Mechanical Engineering and Materials Science (Rice), 2009–2011.
- B. Henicke, Mechanical Engineering and Materials Science (Rice), 2009–2011.
- T. Spielman, Mechanical Engineering and Materials Science (Rice), 2009–2011.
- D. Montes, Mechanical Engineering and Materials Science (Rice), 2010–2012.
- A. Puntel, Mechanical Engineering and Materials Science (Rice), 2010–2012.
- K. Schjodt, Mechanical Engineering and Materials Science (Rice), 2010–2012.
- M. Fritze, Mechanical Engineering and Materials Science (Rice), 2011–2012.
- J. Boben, Mechanical Engineering and Materials Science (Rice), 2011–2013.
- S. McIntyre, Mechanical Engineering and Materials Science (Rice), 2011–2013.
- H. Takagi, Modern Mechanical Engineering (**Waseda**), 2012–2014.
- C. Boswell, Mechanical Engineering (Rice), 2012–2014.
- A. Buscher, Mechanical Engineering (Rice), 2012–2014.
- C. Habluetzel, Mechanical Engineering (Rice), 2012–2014.
- R. Kolesar, Mechanical Engineering (Rice), 2012–2014.
- S. Asada, Modern Mechanical Engineering (**Waseda**), 2013–2015.
- N. Okada, Modern Mechanical Engineering (**Waseda**), 2013–2015.
- S. Tabata, Modern Mechanical Engineering (**Waseda**), 2013–2015.
- K. Montel, Mechanical Engineering (Rice), 2013–2015.
- Y. Tsutsui, Modern Mechanical Engineering (**Waseda**), 2013–2015.
- H. Hattori, Modern Mechanical Engineering (**Waseda**), 2014–2016.
- T. Kuraiishi, Modern Mechanical Engineering (**Waseda**), 2014–2016.
- T. Kanai, Modern Mechanical Engineering (**Waseda**), 2014–2016.
- Y. Otaguro, Modern Mechanical Engineering (**Waseda**), 2014–2016.
- T. Sasaki, Modern Mechanical Engineering (**Waseda**), 2014–2016.
- N. Toh, Modern Mechanical Engineering (**Waseda**), 2014–2016.
- L. Pan, Mechanical Engineering (Rice), 2014–2016.
- R. Zhang, Mechanical Engineering (Rice), 2014–2016.
- S. Mei, Mechanical Engineering (Rice), 2014–2016.
- H. Mochizuki, Modern Mechanical Engineering (**Waseda**), 2015–2017.
- T. Terahara, Modern Mechanical Engineering (**Waseda**), 2015–2017.
- A. Hartmann, Mechanical Engineering (Rice), 2015–2017.
- Y. Yu, Mechanical Engineering (Rice), 2015–2017.
- T. Jitsukawa, Modern Mechanical Engineering (**Waseda**), 2016–2018.
- T. Ohara, Modern Mechanical Engineering (**Waseda**), 2016–2018.
- H. Okamura, Modern Mechanical Engineering (**Waseda**), 2016–2018.
- H. Uchikawa, Modern Mechanical Engineering (**Waseda**), 2016–2018.
- M. Fu, Mechanical Engineering (Rice), 2016–2018.
- M. Kaneko, Modern Mechanical Engineering (**Waseda**), 2017–2019.
- K. Komiya, Modern Mechanical Engineering (**Waseda**), 2017–2019.
- K. Nagaoka, Modern Mechanical Engineering (**Waseda**), 2017–2019.
- K. Shiozaki, Modern Mechanical Engineering (**Waseda**), 2017–2019.
- A. Yoshida, Modern Mechanical Engineering (**Waseda**), 2017–2019.
- K. Yoshida, Mechanical Engineering (Tottori University), 2017–2018.
- Y. Zhang, Mechanical Engineering (Rice), 2017–2019.
- T. Tanaka, Modern Mechanical Engineering (**Waseda**), 2017–2020.
- K. Hirota, Modern Mechanical Engineering (**Waseda**), 2018–2020.
- G. Inoue, Modern Mechanical Engineering (**Waseda**), 2018–2020.
- R. Kobayashi, Modern Mechanical Engineering (**Waseda**), 2018–2020.
- S. Shimamura, Modern Mechanical Engineering (**Waseda**), 2018–2020.
- R. Takeda, Modern Mechanical Engineering (**Waseda**), 2018–2020.
- S. Utsuka, Modern Mechanical Engineering (**Waseda**), 2018–2020.
- N. Yano, Modern Mechanical Engineering (**Waseda**), 2018–2020.

#### M.S. Current

M. Omori, Modern Mechanical Engineering (Waseda), 2017–.  
T. Ogura, Modern Mechanical Engineering (Waseda), 2018–.  
T. Chigawa, Modern Mechanical Engineering (Waseda), 2019–.  
K. Goto, Modern Mechanical Engineering (Waseda), 2019–.  
M. Kuwada, Modern Mechanical Engineering (Waseda), 2019–.  
D. Matsuda, Modern Mechanical Engineering (Waseda), 2019–.  
K. Nagai, Modern Mechanical Engineering (Waseda), 2019–.  
A. Miwa, Modern Mechanical Engineering (Waseda), 2019–.  
Y. Okumura, Modern Mechanical Engineering (Waseda), 2019–.  
M. Takano, Modern Mechanical Engineering (Waseda), 2019–.  
A. Tsushima, Modern Mechanical Engineering (Waseda), 2019–.  
Z. Xu, Modern Mechanical Engineering (Waseda), 2019–.  
K. Yamada, Modern Mechanical Engineering (Waseda), 2019–.  
S. Yamasaki, Modern Mechanical Engineering (Waseda), 2019–.  
Y. Zhang, Modern Mechanical Engineering (Waseda), 2019–.  
N. Hiraoka, Modern Mechanical Engineering (Waseda), 2020–.  
T. Iino, Modern Mechanical Engineering (Waseda), 2020–.  
J. Ito, Modern Mechanical Engineering (Waseda), 2020–.  
M. Minamihara, Modern Mechanical Engineering (Waseda), 2020–.  
T. Nakamura, Modern Mechanical Engineering (Waseda), 2020–.  
S. Nishikawa, Modern Mechanical Engineering (Waseda), 2020–.  
Y. Okui, Modern Mechanical Engineering (Waseda), 2020–.  
Y. Saito, Modern Mechanical Engineering (Waseda), 2020–.

#### Ph.D. Current

L. Aydinbakar, Modern Mechanical Engineering (Waseda), 2016–.  
R. Avsar, Mechanical Engineering (Rice), 2016–.  
Y. Liu, Modern Mechanical Engineering (Waseda), 2019–.

#### Ph.D. Past

N. Kostov, Mechanical Engineering and Materials Science (Rice), 2010–2013.  
Y. Otaguro, Modern Mechanical Engineering (Waseda), 2016–2018.  
T. Kanai, Modern Mechanical Engineering (Waseda), 2016–2019.  
T. Kuraishi, Modern Mechanical Engineering (Waseda), 2016–2019.  
T. Sasaki, Modern Mechanical Engineering (Waseda), 2016–2019.  
B. Huang, (Visiting from Southwest Jiaotong University), 2017–2019.  
T. Terahara, Modern Mechanical Engineering (Waseda), 2017–2020.

### Research Associates Supervised or Co-Supervised

#### Past

R. Sanches, 2017–2018.  
S. Nakagawa, Mechanical Engineering and Materials Science (Rice), 2007–2009.  
K. Sugihara, Mechanical Engineering (Rice) 2013–2014.

### Undergraduate Students Supervised or Co-Supervised

#### Past

S. Kruzick, Electrical Engineering (Rice), 2007–2009.  
S. Sollee (US Military Academy), 2009 (Summer).  
M. Fritze, Mechanical Engineering and Materials Science (Rice), 2010–2011.  
S. Asada, Modern Mechanical Engineering (Waseda), 2011–2013.  
S. Tabata, Modern Mechanical Engineering (Waseda), 2011–2013.  
Y. Tsutsui, Modern Mechanical Engineering (Waseda), 2012–2013.  
T. Kanai, Modern Mechanical Engineering (Waseda), 2012–2014.  
T. Kuraishi, Modern Mechanical Engineering (Waseda), 2012–2014.  
N. Toh, Modern Mechanical Engineering (Waseda), 2012–2014.  
N. Aoyama, Modern Mechanical Engineering (Waseda), 2013–2015.  
H. Mochizuki, Modern Mechanical Engineering (Waseda), 2013–2015.

T. Terahara, Modern Mechanical Engineering (**Waseda**), 2013–2015.  
 S. Hayashi, Modern Mechanical Engineering (**Waseda**), 2014–2016.  
 T. Ohara, Modern Mechanical Engineering (**Waseda**), 2014–2016.  
 H. Uchikawa, Modern Mechanical Engineering (**Waseda**), 2014–2016.  
 M. Kaneko, Modern Mechanical Engineering (**Waseda**), 2015–2017.  
 T. Tanaka, Modern Mechanical Engineering (**Waseda**), 2015–2017.  
 K. Tomizawa, Modern Mechanical Engineering (**Waseda**), 2015–2017.  
 K. Nagaoka, Modern Mechanical Engineering (**Waseda**), 2015–2017.  
 M. Omori, Modern Mechanical Engineering (**Waseda**), 2015–2017.  
 K. Shiozaki, Modern Mechanical Engineering (**Waseda**), 2015–2017.  
 A. Yoshida, Modern Mechanical Engineering (**Waseda**), 2015–2017.  
 K. Arai, Modern Mechanical Engineering (**Waseda**), 2015–2018.  
 S. Wada, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 M. Iwago, Mechanical Engineering (Tokyo University of Science), 2016 (Spring).  
 K. Hirota, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 G. Inoue, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 R. Kobayashi, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 T. Ogura, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 S. Shimamura, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 R. Takeda, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 K. Takeuchi, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 S. Utsuka, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 N. Yano, Modern Mechanical Engineering (**Waseda**), 2016–2018.  
 K. Yoshida, Mechanical Engineering (Tottori University), 2017 (Spring).  
 T. Sato, Aerospace Engineering (Nagoya University), 2017 (Fall).  
 J. Gu, Mechanical Engineering (Rice), 2017–2018.  
 G. Endo, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 K. Goto, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 Y. Ito, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 M. Kuwada, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 D. Matsuda, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 K. Nagai, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 N. Nagashima, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 A. Miwa, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 Y. Okumura, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 M. Takano, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 A. Tsushima, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 K. Yamada, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 S. Yamasaki, Modern Mechanical Engineering (**Waseda**), 2017–2019.  
 T. Chigawa, Modern Mechanical Engineering (**Waseda**), 2018–2019.  
 N. Hiraoka, Modern Mechanical Engineering (**Waseda**), 2018–2020.  
 M. Hori, Modern Mechanical Engineering (**Waseda**), 2018–2020.  
 T. Iino, Modern Mechanical Engineering (**Waseda**), 2018–2020.  
 J. Ito, Modern Mechanical Engineering (**Waseda**), 2018–2020.  
 M. Minamihara, Modern Mechanical Engineering (**Waseda**), 2018–2020.  
 T. Nakamura, Modern Mechanical Engineering (**Waseda**), 2018–2020.  
 S. Nishikawa, Modern Mechanical Engineering (**Waseda**), 2018–2020.  
 Y. Okui, Modern Mechanical Engineering (**Waseda**), 2018–2020.  
 Y. Saito, Modern Mechanical Engineering (**Waseda**), 2018–2020.  
 A. Usui, Modern Mechanical Engineering (**Waseda**), 2018–2020.

#### Current

M. Sakamoto, Modern Mechanical Engineering (**Waseda**), 2016–.  
 H. Azuma, Modern Mechanical Engineering (**Waseda**), 2019–.  
 T. Handa, Modern Mechanical Engineering (**Waseda**), 2019–.  
 K. Ishida, Modern Mechanical Engineering (**Waseda**), 2019–.  
 R. Kamijo, Modern Mechanical Engineering (**Waseda**), 2019–.  
 S. Onda, Modern Mechanical Engineering (**Waseda**), 2019–.

T. Shirai, Modern Mechanical Engineering (**Waseda**), 2019–.  
A. Suzuki, Modern Mechanical Engineering (**Waseda**), 2019–.  
K. Takahashi, Modern Mechanical Engineering (**Waseda**), 2019–.  
K. Takemura, Modern Mechanical Engineering (**Waseda**), 2019–.  
Y. Watanabe, Modern Mechanical Engineering (**Waseda**), 2019–.  
H. Akira, Modern Mechanical Engineering (**Waseda**), 2020–.  
L. Chenghao, Modern Mechanical Engineering (**Waseda**), 2020–.  
S. Kamiya, Modern Mechanical Engineering (**Waseda**), 2020–.  
R. Kaneko, Modern Mechanical Engineering (**Waseda**), 2020–.  
A. Kitamura, Modern Mechanical Engineering (**Waseda**), 2020–.  
S. Kitamura, Modern Mechanical Engineering (**Waseda**), 2020–.  
T. Kondo, Modern Mechanical Engineering (**Waseda**), 2020–.  
R. Kubota, Modern Mechanical Engineering (**Waseda**), 2020–.  
P. Lawsirirat, Modern Mechanical Engineering (**Waseda**), 2020–.  
J. Wang, Modern Mechanical Engineering (**Waseda**), 2020–.  
E. Yamamoto, Modern Mechanical Engineering (**Waseda**), 2020–.  
S. Yoshida, Modern Mechanical Engineering (**Waseda**), 2020–.

## Professional Activities

### Technical Committee Memberships

**Vice-Chair**, Committee on Fluid–Structure Interaction, Applied Mechanics Division, ASME, July 2010 – June 2013.

**Planning Committee**, Japan Association for Computational Mechanics, April 2012 – .

**Secretary**, Information Committee, Computational Mechanics Division, JSME, April 2013 – 2015.

**Chair**, Committee on Fluid–Structure Interaction, Applied Mechanics Division, ASME, July 2013 – June 2016.



## Conference Organizations

- Co-Organizer**, Symposium on Advances in Computational Fluid Mechanics and Fluid–Structure Interactions, 9th World Congress on Computational Mechanics, Sydney, Australia, July 2010. (5 sessions) (with T. Tezduyar and Y. Bazilevs).
- Co-Organizer**, Symposium on Computational Methods for Fluid–Structure Interaction, ASME International Mechanical Engineering Congress and Exposition, Vancouver, Canada, November 2010 (4 sessions) (with Y. Bazilevs and T. Tezduyar).
- Co-Organizer**, Symposium on Fluid–Structure Interactions, Fifth International Conference on Computational Methods for Coupled Problems in Science and Engineering, Kos Island, Greece, June 2011 (with T. Tezduyar and Y. Bazilevs).
- Co-Organizer**, Symposium on Fluid–Structure Interaction, 16th International Conference on Finite Elements in Flow Problems, Munich, Germany, March 2011 (with T. Tezduyar and Y. Bazilevs).
- Co-Organizer**, Symposium Celebrating the 70th Birthday of Ahmed Sameh: Fluid–Structure Interactions, Kos, Greece, June 2011 (5 sessions) (with Y. Bazilevs and T. Tezduyar).
- Co-Organizer**, Fluid–Structure Interaction, Kobe, Japan, 2012 (4 sessions) (with T. Tezduyar and Y. Imai).
- Co-Chair**, Advances in Computational Mechanics (ACM 2013) — A Conference Celebrating the 70th Birthday of Thomas J.R. Hughes With Special Track Finite Elements in Flow Problems (FEF 2013), San Diego, USA, February 2013, (with Y. Bazilevs and T. Tezduyar).
- Co-Organizer**, Biomedical Fluid Mechanics and FSI, San Diego, US, February 2013 (3 sessions) (with Y. Bazilevs and T. Tezduyar).
- Co-Organizer**, Flows With Moving Boundaries and Interfaces, San Diego, US, February 2013 (3 sessions) (with Y. Bazilevs and T. Tezduyar).
- Co-Organizer**, Fluid–Structure Interactions, San Diego, US, February 2013 (3 sessions) (with Y. Bazilevs and T. Tezduyar).
- Co-Organizer**, Biomedical Fluid Mechanics and Fluid–Structure Interactions, Ibiza, Spain, June 2013 (1 session) (with Y. Bazilevs and T. Tezduyar).
- Co-Organizer**, Flows With Moving Boundaries and Interfaces, Ibiza, Spain, June 2013 (2 sessions) (with Y. Bazilevs and T. Tezduyar).
- Co-Organizer**, Fluid–Structure Interactions, Ibiza, Spain, June 2013 (2 sessions) (with Y. Bazilevs and T. Tezduyar).
- Co-Chair**, Advances in Computational Fluid–Structure Interaction and Flow Simulation (AFSI 2014) — A Conference Celebrating the 60th Birthday of Tayfun E. Tezduyar, Tokyo, Japan, March 2014, (with Y. Bazilevs)
- Co-Organizer**, Computational Reliability/Safety Assessment for Space Vehicles, Sendai, Japan, April 2014 (1 session) (with K. Fujimoto and T. Tezduyar).
- Co-Chair**, Advances in Computational Fluid–Structure Interaction and Flow Simulation (AFSI 2015), Istanbul, Turkey, May 2015, (with T. Tezduyar and Y. Bazilevs)
- Co-Organizer**, Biomedical Fluid Mechanics and FSI, San Diego, July 2015 (with M.-C. Hsu, Y. Bazilevs and T. Tezduyar).
- Co-Organizer**, Fluid–Structure Interaction, San Diego, July 2015 (with T. Tezduyar and M.-C. Hsu).
- Co-Chair**, Advances in Computational Fluid–Structure Interaction and Flow Simulation (AFSI 2018) — A Conference Dedicated to the 75th Birthday of Thomas J.R. Hughes, Banff, Canada, May 2018, (with A. Korobenko, Y. Bazilevs and T. Tezduyar)
- Co-Chair**, Advances in Computational Fluid–Structure Interaction and Flow Simulation (AFSI 2019) — A Conference Dedicated to the 65th Birthday of Tayfun E. Tezduyar, Okinawa, Japan, May 2019, (with Y. Bazilevs)

Review Service to Scholarly Journals

ACM SIGGRAPH

Computational Mechanics

Computer Methods in Applied Mechanics and Engineering

Computers & Fluids

Engineering Computations

International Journal of Computational Fluid Dynamics

International Journal of Heat and Fluid Flow

Japan Society for Computational Engineering and Science

Journal of Applied Mechanics

Journal of Computational Physics

Journal of Computational Science and Technology

Technology and Health Care

July 20, 2020