

Takuya HASEGAWA, Ph.D. Place of Birth Kyoto, Year of Birth 1963	
Affiliation: Birdy Fuel Cells LLC, Founder, Joint Representative, President & CTO Hosei Business School of Innovation Management GMBA Program	
Message to the student: The opening line of Clayton Christensen's renowned book <i>The Innovator's Dilemma</i> states: “This book is about the failure of companies to stay atop their industries when they confront certain types of market and technological change.” As Christensen points out, the failures of large corporations often result not from the scale of their efforts but from their strategic direction. Clues for overcoming such failures can be found at various historical turning points, such as post-World War II Japan and the rise of the internet-driven information industry. Through the two courses, <i>Japanese Management</i> and <i>Japanese Production Management</i> , we will study various cases of disruptive innovation in history and consider guidelines for overcoming the stagnation of innovation in contemporary society.	
Specialty: Innovation Science, Two-Dimensional (2D) Manufacturing, Fuel Cell, Hydrogen Society	
Courses: Japanese Management (Fall), Japanese Production and Supply Chain Management (Spring)	
Background: 1989 Asahi Kasei (-2006) 1997 The University of Texas at Austin, Chemical Engineering, visiting scholar (-1999) 2006 Nissan Motor (-2020) 2015 Hosei Business School of Innovation Management GMBA Program 2016 Doctor of Philosophy in Technology Management (Ritsumeikan University) 2020 Tokyo Gas (-2021) 2021 Tokyo Institute of Technology, Specially Appointed Professor (-2022) Abalance Corporation, Corporate Officer (-2024) Birdy Fuel Cells LLC, Founder, Joint Representative, President & CTO	
Achievement: 1) Separators for lithium-ion batteries 2) Computational simulations of low-Reynolds-number fluid dynamics in micro-porous structure formation 3) Proton Exchange Membranes and pleated-type humidification modules for automotive fuel cells (Project Leader)	

4) Nitrogen-enriched air modules for diesel engines (Project Leader) 5) New-structure fuel cell stacks and rotary production systems (Project Leader) 6) FCEV (Fuel Cell Electric Vehicle) research prototype (Project Leader) 7) Roll-to-Stack continuous production technology (Project Leader)
Selected publications and activities: • Koyama, M.; Hasegawa, T.; Kajikawa, Y. Roadmap of Energy Technologies for Envisioning Future Energy Systems. In Energy Technology Roadmaps of Japan; Kato, Y.; Koyama, M.; Fukushima, Y.; Nakagaki, T., Eds.; Springer: Tokyo, 2016; pp. 13-19. • Hasegawa, T.; Gemba, K.; Ishida, S. Self-sustainability of emerging hydrogen refueling stations and FCEVs in Japan. International Journal of Business and Systems Research 2015, 9, 375-393. • Hasegawa, T. (2014). Papers on Environmental Information Science, 28, 119-124. • Hasegawa, T. (2015). Papers on Environmental Information Science, 29, 147-152 • Hasegawa, T. (2016a). Chemical Engineering of Japan, 80(2), 86-90. • Hasegawa, T. (2016b). Japan Society of Energy and Resources, 37(1), 22-27. • Hasegawa, T. (2019). Journal of the Hydrogen Energy Systems Society of Japan, 44(4), 230-237. • Hasegawa, T. (2020). Chemical Engineering of Japan, 84(1), 18-21. • Hasegawa, T. (2020). Japan Society of Energy and Resources, 41(4), 216-220. • Hasegawa, T. (2020). Journal of Japan Solar Energy Society, 46(6), 31-39. • Hasegawa, T. (2020). Energy: Journal of the Japan energy association, 297, 32-46 • Hasegawa, T. (2024). How to proceed with R&D theme creation and market analysis based on future forecast. Technical Information Institute, January 10, 2024.
Social activities • 2010-2013 Expert of Japan, International Energy Agency, Hydrogen Implementing Agreement, Task28 LARGE SCALE HYDROGEN DELIVERY INFRASTRUCTURE • 2012- Member, HyGrid Research Group • 2012- Member, The Committee on Future Energy and Social Systems, The Society of Chemical Engineers, Japan • 2016- Special Member, The Working Group on Social Implement Engineering, Society of Chemical Engineers, Japan • 2018 Session Chair and Organizer, 83rd Annual Meeting of the Society of Chemical Engineers • 2016-19 Vice Chair(2018-), Committee on Innovation Science for Envisioning Future, Japan Society for the Promotion of Science
Academic Society: GERPISA

Certification:

Certified Specialist of Intellectual Property Management Class II

Working Environment Measurement Expert class I