

# Keiko Sato, ph.D.

## Position:

Assistant Professor,  
Department of Intelligent Mechanical Systems Engineering,  
Faculty of Engineering, Kagawa University  
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## Research Interests:

- Color sensation and perception of color vision deficient individuals
- Emotion and impression in multimedia such as visual, audio, and their combinations
- Multimodal interaction
- Color universal design

## Education

- PhD in Engineering, Department of BASE (Bio-Applications and Systems Engineering), Tokyo University of Agriculture and Technology, Japan (March 2011)
- BA in Education, Faculty of Education, Okayama University, Japan (March 2005)
- MA in Education, Graduate School of Education, Okayama University, Japan (March 2007)

## Job Experience

- Assistant Professor, Department of Intelligent Mechanical Systems Engineering, Faculty of Engineering, Kagawa University, Japan, 2013-present
- Research Associate, Department of Psychology, Faculty of Letters, Ritsumeikan University, Japan, 2008-2012

## Teaching Experience

- 2013-present: Information Literacy
- 2013-present: Programing Exercise

- 2013-present: Mechatronics Exercise I and II

## Grants, Funds and Awards

- 2015-2016: Grant-in-Aid for Young Scientists (B) from Japan society for the Promotion Science, Principal Investigator
- 2016: Research Grant from Japan Foundation for Aging and Health, Principal Investigator
- 2015: Best Presentation in Session Award, IEEE-IECON2015
- 2015: Grant Aid for Travel from the Telecommunications Advancement Foundation, Principal Investigator
- 2015: Research Grant from JKA Promotion Foundation, Principal Investigator
- 2014: Research Grant from CASIO Science Promotion Foundation, Principal Investigator
- 2014: Grant-in-Aid for SCOPE (Strategic Information and Communications R&D Promotion Programme) from MIC (Ministry of internal Affairs and Communications), Principal Investigator

## Memberships, Academic and Department Service

- Member, JPA (The Japanese Psychological Association)
- Member, IEEJ (The Institute of Electrical Engineering of Japan)
- Member, IEICE (The Institute of Electronics, Information and Communication Engineers of Japan)
- Member, ICVS (The International Colour Vision Society)
- Member, IEEE (The Institute of Electrical and Electronics Engineers)

## Publications

### Journal Articles

1. K. Sato and T. Inoue, "Perception of color emotions for single colors in red-green defective observers", PeerJ 4:e2751, 2016 [DOI: <https://doi.org/10.7717/peerj.2751> ]
2. K. Sato and Y. Mitsukura, "Effects of Music on Image Impression and Relationship between Impression and Physical Properties", Electronics and Communications in Japan, Vol. 96, No. 9, pp.53-61, 2013

### International Conferences

1. K. Sato, "Warmth and Coolness of Colors in Color-Vision Deficient Observers", In Program and Proc. of the International Congress of Psychology, p.114, 2016
2. K. Sato, H. Takimoto, and Y. Mitsukura, "Analysis of color categorization for color vision deficient subjects at different luminance levels", In Proc. of the Annual Conference of the

IEEE Industrial Electronics Society, pp.2065-2069, 2015

3. K. Sato, H. Takimoto, and Y. Mitsukura, "Color categorization properties and color sensation on monitor for color-vision deficient subjects and normal trichromat subjects", Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics, pp.2424-2428, 2015
4. K. Sato, H. Takimoto, and Y. Mitsukura, "Color naming properties and color impression of subjects with deficient color-vision at different brightness levels", In Abstract book of the 23rd Symposium of the International Colour Vision Society, p.110, July, Sendai, Japan, 2015
5. K. Sato, M. Oda, "The Effect of Color and Shape on Aesthetic Evaluation of Colored Shape", In Proc. of 2013 IEEE RO-MAN: The 22nd International Symposium on Robot and Human Interactive Communication, pp.478-483, August, Gyeongju, Korea, 2013
6. K. Sato, Y. Mitsukura, "Analysis of Interaction between Image and Music focused on Physical features", In Proc. of SICE Annual Conference 2012, pp.2179-2184, August, Akita, Japan, 2012
7. K. Sato, Y. Mitsukura, "Effects of Music on Image Impression: Analysis based on Physical Features of Image and Music", In Proc. of 18th Korea-Japan Joint Workshop on Frontiers of Computer Vision, pp.24-28, February, Kawasaki, Japan, 2012
8. K. Sato, Y. Mitsukura, "Analysis of the Subjective Impression on Combinations of Image and Music", In Proc. of 2011 International Symposium Nonlinear Theory and its Applications, pp.294-297, September, Kobe, Japan, 2011
9. K. Sato, Y. Mitsukura, "Effects of Music on Image Impression and Relationship between Impression and Physical Feature", In Proc. of The 4th International Conference on Human System Interaction, pp.369-373, May, Yokohama, Japan, 2011
10. K. Sato, Y. Mitsukura, "Music Effects Analysis for Image Impression : The Relation between Physical Feature and Kansei Information", In Proc. of The 8th edition of France-Japan and 6th Europe-Asia Congress on Mechatronics, pp.492-496, November, Yokohama, Japan, 2010
11. K. Sato, Y. Mitsukura, "The Analysis of Individual Differences in Impression of 2 Color Combinations", In Proc. of 2010 RISP International Workshop on NCSP, pp.285-288, March, Hawaii, 2010
12. K. Sato, Y. Mitsukura, "Classification and Analysis of 2-Color Impression Focusing Individual Differences", In Proc. of The 11th International Workshop on Advanced Motion Control, pp.246-251, March, Nagaoka, Japan, 2010
13. Y. Fukada, K. Sato, Y. Mitsukura, and M. Fukumi, "A Design of the Mapping Method of Color and Kansei", In Proc. of ICCAS'2007, pp.2158-p.2161, October, Seoul, Korea, 2007
14. K. Sato, Y. Mitsukura, and M. Fukumi, "Judgment of Human Characteristics based on Color Impression", In Proc. of MJISAT 2007, November, Kuala Lumpur, Malaysia, 2007
15. Y. Fukada, K. Sato, Y. Mitsukura, and M. Fukumi, "The Extraction of the Coloration Pattern for Personal Room Design", In Proc. of MJISAT 2007, November, Kuala Lumpur, Malaysia, 2007
16. Y. Fukada, K. Sato, Y. Mitsukura, and M. Fukumi, "A Design of the Mapping Method of Color

- and Kansei", In Proc. of 2007 RISP International Workshop on Nonlinear Circuits and Signal Processing, pp.73-76, Shanghai, China, March, 2007
17. K. Sato, Y. Mitsukura, and M. Fukumi, "Designing of the Color KANSEI Information Map Considering the Individual Characteristic by Using Multivariable Analysis", In Proc. of SICE - ICASE International Joint Conference, pp.3706-3710, October, Busan, Korea, 2006
  18. K. Sato, Y. Mitsukura, and M. Fukumi, "A Kansei Extraction Method from the Individual Characteristics by Using the Color Chart", In Proc. of 2006 RISP International Workshop on NCSP, pp.142-145, March, Hawaii, 2006
  19. K. Sato, Y. Mitsukura, and M. Fukumi, "Emotional Extraction System by Using the Color Combination", In Proc. of 9th International Conference on KES, Part II, pp.258-262, September, Melbourne, Australia, 2005
  20. K. Sato, Y. Mitsukura, and M. Fukumi, "Designing the KANSEI information System Using the Color Coordination", In Proc. of SICE Annual Conference, pp.141-144, August, Okayama, Japan, 2005
  21. K. Sato, M. Kimura, Y. Mitsukura, and M. Fukumi, "The Feeling Classification by the Color based on KANSEI Information Processing", In Proc. of 2005 RISP International Workshop on NCSP, pp.860-863, March, Hawaii, 2005