



Annual Report 2019
Color Research Center
Faculty of Mass Communication Technology
Rajamangala University of Technology Thanyaburi

Preface

This report presents the activities of Color Research Center (CRC) in 2019. In this report, reader will know more about Color Research Center such as history of CRC and our research. Also, the report shown our international advisors who are support us in research and experiment and shown the members of CRC who working in this center. In addition, the author reports activities of CRC such as Asia Student Workshop (ASW 2019) which we sent the student to participate two times in this year. Asia Color Association Conference (ACA 2019), a stage where students show their project, practice their oral presentation in English and build a new experience.

On behalf of Color Research Center, we hope that this report will be advantages for the reader and makes the reader know more CRC

Color Research Center

Content

	Page
Preface.....	i
Content.....	ii
Introduction.....	1
CRC international advisors.....	2
CRC members.....	4
Instrument.....	5
Research.....	6
Conference.....	10
Asia Student Workshop 2019.....	12
Visiting of Professor.....	17

Introduction

Color Research Center (CRC) is a highly regarded research and development in color science in field of science, engineering and design. CRC is an integral part of the Faculty of Mass Communication Technology, Rajamangala University of Technology Thanyaburi. With international professional scholars support researchers, students, living society and industries. Therefore, CRC have set of high performance equipment for serving all teaching and research activities. This report contains CRC's equipment and research activities in past fiscal year.

The CRC was formally established in August and the open ceremony was held in December 2013. We intend to promote color science and its application in this country and also join and cooperate with color scientists in the world.



Opening Ceremony



The logo represents the hue ring of the opponent colors theory composed of four unique colors, red, yellow, green, and blue.

CRC international advisor



Dr. Tetsuji Takeuchi

A former president of Japan Electric Lamp Manufacturers Association JELMA



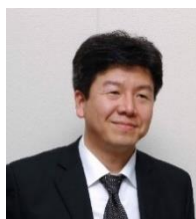
Dr. Hirohisa Yaguchi

Professor Emeritus
Chiba University, Japan



Dr. Young – In Kim

Professor, Department of Human Environment and Design
College of Human Ecology
Yonsei University, Korea



Dr. Hiroyuki Shinoda

Professor, Department of Information and Computer Intelligence,
College of Information Science and Engineering
Ristumeikan University, Japan



Dr. Mikiko Kawasumi

Associate Professor, Department of Information Engineering, Faculty
of Science and Technology
Meijo University, Japan
Visiting researcher, Rajamangala University of Technology
Thanyaburi



Dr. Yasuki Yamauchi

Professor, Faculty of Engineering

Yamagata University, Japan



Dr. Yoko Mizokami

Professor, Department of Imaging Sciences, Graduate

School of Engineering

Chiba University, Japan

CRC Members



Dr. Chanprapha Phuangsuan, Director of CRC

Assistant Professor

Field to cover: Color Vision and Color Appearance



Dr. Uravis Tangkijiwat

Assistant Professor

Field to cover: Color preference and Color Psychology



Dr. Mitsuo Ikeda

Professor emeritus, Tokyo Institute of Technology

Field to cover: Visual Information Processing and Color Vision



Dr. Kitirochna Rattanakasamsuk

Assistant Professor

Field to cover: Color Applications



Dr. Waiyawut Wuthiastarn

Assistant Professor

Field to cover: Media Accessibility



Pappim Chuenjai

Technical Assistant

Instrument

No.	Name	Items
1.	Spectroradiometer: Konica Minolta CS2000	1
2.	Reflectance and Transmission Spectrophotometer CM-3700d	1
3.	Illuminance Meter: Konica Minolta CL-200A	3
4.	Illuminance Meter: Konica Minolta T-10A	1
5.	Illuminance Meter: Konica Minolta CL-100	3
6.	Illuminance Spectrophotometer: Konica Minolta CL-500 A	1
7.	Luminance Meter: Konica Minolta CS100A	2
8.	Spectrophotometer: Konica Minolta CM-512m3A	1
9.	Farnsworth-Munsell: 100 Hue Test	1
10.	The Munsell Book of Color Glossy Collection	1
11.	Data Processor: Konica Minolta DP-100	3
12.	Laptop HP	1
13.	Laptop DELL	1

Research

Researcher	Name of the research project	Published	
Dr. Uravis Tangkijviwat	Tangkijviwat, U. and Kuptasthien, N. Active Learning in Quality Control and Standardization in Printing and Packaging. Proceedings of 15 th International CDIO Conference, Aarhus, Denmark; pp. 549-557. (2019)	15 th International CDIO conference proceedings	2019
Dr. Kitirochna Rattanakasamsuk	Meekaew, J., Rattanakasamsuk, K., Sinsuwan, N., and Phuangsuwan, C. (2019) Unattractive Colors for Plain Cigarette Packaging Design. Journal of the Color Science Association of Japan, 43(3) Supplement, June 1-2, 2019, Tokyo, Japan, pp. 192-194.	Journal of the Color Science Association of Japan, 43(3) Supplement	2019
	Jankeaw, K., Rattanakasamsuk, K., Kihara, R., and Kawasumi, M. (2019) Representative Colors of Grapes. Proceeding of the 5th Asia Color Association Conference, November 29 – December 2, 2019, Nagoya, Japan, pp. 283-288.	Proceeding of the 5th Asia Color Association Conference, November 29 – December 2, 2019, Nagoya, Japan.	2019
	Rattanakasamsuk, K., and Kawasumi, M. (2019) Comparison of Color Interference in Gender Identification between Thai and Japanese Proceeding of the 5th Asia Color Association Conference, November 29 – December 2, 2019, Nagoya, Japan, pp. 442-446.	Proceeding of the 5th Asia Color Association Conference, November 29 – December 2, 2019, Nagoya, Japan.	2019
	Thammachart, P., Khemthong, H., Piengthisong, N., Saksirikosol, C., and Rattanakasamsuk, K. (2019) Preference of Coffee Image Color Tone in Advertising. Proceeding of the 5th Asia Color Association Conference, November 29 – December 2, 2019, Nagoya, Japan, pp. 519-522.	Proceeding of the 5th Asia Color Association Conference, November 29 – December 2, 2019, Nagoya, Japan.	2019
	Puenpa, S., Rattanakasamsuk, K., and Srisuro, P. (2019). Relationship between Proper Contrast and Image Satisfaction. Proceeding of the 5th Asia Color Association Conference, November 29 –	Proceeding of the 5th Asia Color Association Conference, November 29 –	2019

Researcher	Name of the research project	Published	
	December 2, 2019, Nagoya, Japan, pp. 573-575.	December 2, 2019, Nagoya, Japan.	
Prof. Mitsuo Ikeda and Dr. Chanprapha Phuangsuwan	Mepean, J., Ikeda, M. and Phuangsuwan, C. Simultaneous Color Contrast Determined by Different Viewing Distances. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 175-180.	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019
	Ikeda, M. and Phuangsuwan, C. The Effect of Tissue Paper on the Color Appearance of Colored Papers. Journal of Optical Society of America A	Journal of Optical Society of America A	Accepted
	Chitapanya, P., Phuangsuwan, C., and Ikeda, M. Color Appearance of Objects in the Environment lit with LED Lamps. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 56-61.	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019
	Pattarasoponkun, N., Phuangsuwan, C., and Ikeda, M. Skin Color of Thai People. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 143-148.	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019
	Panitanang, N., Phuangsuwan, C., Kuriki, I., Tokunaga, R., and Ikeda, M. Thai Basic Color Terms and New Candidate Nominations. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 164-169.	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019
	Pumila, W., Phuangsuwan, C., Mizokami, Y., and Ikeda, M. Colors for Female and Male Image by Thai and Japanese People. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 204-209.	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019
	Somdang, K., Phuangsuwan, C., Kawasumi, M., and Ikeda, M. Color of Lipstick to Make Thai Girls Healthier. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 149-	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019

Researcher	Name of the research project	Published	
	153.		
	Sukontee, P., Phuangsuwan, C., Iyota, H., Sakai, H., and Ikeda, M. Color of Cooked rice to Improve Appetite for Elderlies. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 39-43.	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019
	Jinphol, S., Ikeda, M., Phuangsuwan, C., and Mizokami, Y. Effect of Haze Value and Materials on the Color Appearance in the Tissue Experiment of the Simultaneous Color Contrast. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 226-231	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019
	Nguensawat, P., Ikeda, M., Phuangsuwan, C., and Mizokami, Y. Effect of the Viewing Distance to the Simultaneous Color Contrast. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 232-237.	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019
	Upakit, O., Phuangsuwan, C., and Ikeda, M. Size Constancy Demonstrated on Photographs. Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan, 29 November to -2 December, 2019, pp. 385-388.	Proceeding of the 5th Asia Color Association Conference, Nagoya, Japan	2019
Dr. Waiyawut Wuthiastarn	ไวยวุฒิ วุฒิอรอดสาร. การสำรวจความต้องการค่าบรรยายแทนเสียงของผู้ชมในเขตกรุงเทพมหานคร. วารสารศาสตร์ มหาวิทยาลัยธรรมศาสตร์, ปีที่ 12 ฉบับที่ 1 : 189 – 214, 2562.	วารสารศาสตร์ มหาวิทยาลัยธรรมศาสตร์, ปีที่ 12 ฉบับที่ 1 : 189 – 214.(2562)	2019
	Waiyawut Wuthiastarn, Jirasak Preechaveerakul, Nuttawut Dairup, Sirawat Saiwat (2019) “The flexible plate Light-emitting diode for lighting in the limited area”. The 2 nd International Conference on Applied Science, Engineering and International Studies 2019 and The 4 th Prachachuen Research Network National International Conference (2 nd ASEIS & 4 th PRN-CON 2019)	Proceedings of the 2 nd ASEIS & 4 th PRN-CON 2019	2019

Researcher	Name of the research project	Published	
	<p>ไวยวุฒิ วุฒิอรรถสาร “ปัจจัยความสำเร็จในการให้บริการให้บริกรคำบรรยายแทนเสียงและล่ามภาษามือบนจอโทรทัศน์” ในการประชุมวิชาการเวทีวิจัยมานุษยศาสตร์และสังคมศาสตร์ ประจำปี 2562</p> <p>“ความพลิกผันของศาสตร์มนุษย์และสังคมในยุคดิจิทัล: Humanities and Social Sciences Disruption in the Digital Era”</p>	<p>นำเสนองานวิจัยในการประชุมวิชาการเวทีวิจัยมานุษยศาสตร์และสังคมศาสตร์ ประจำปี 2562</p>	2019
	<p>Wuthiastarn, W. (2019). The Study of How the First – Time Voters Memorize the Color of Political Parties. Proceeding of The 5th Asia Color Association Conference, Nagoya, Japan , 28 November - 2 December, pp.44-45 (2019)</p>	<p>Proceeding of The 5th Asia Color Association Conference, Nagoya, Japan , 28 November - 2 December (2019)</p>	2019

Conference

The Third Asia Color Association Conference (ACA 2019)

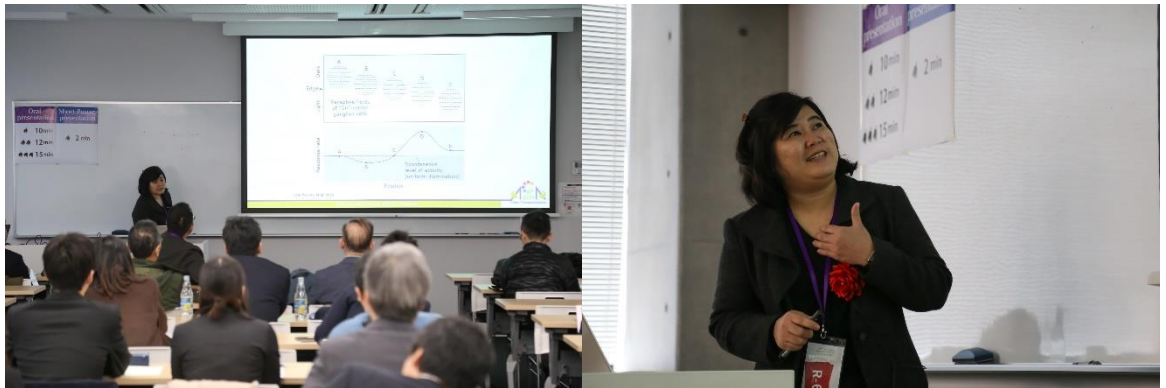
There are 9 students of faculty of Mass Communication and Technology participated in Asia Color Association Conference (ACA2019 Nagoya): Color Communications from 29 November – 1 December 2019 in Nagoya, Japan. In the conference, they presented their project (oral presentation).

List of students

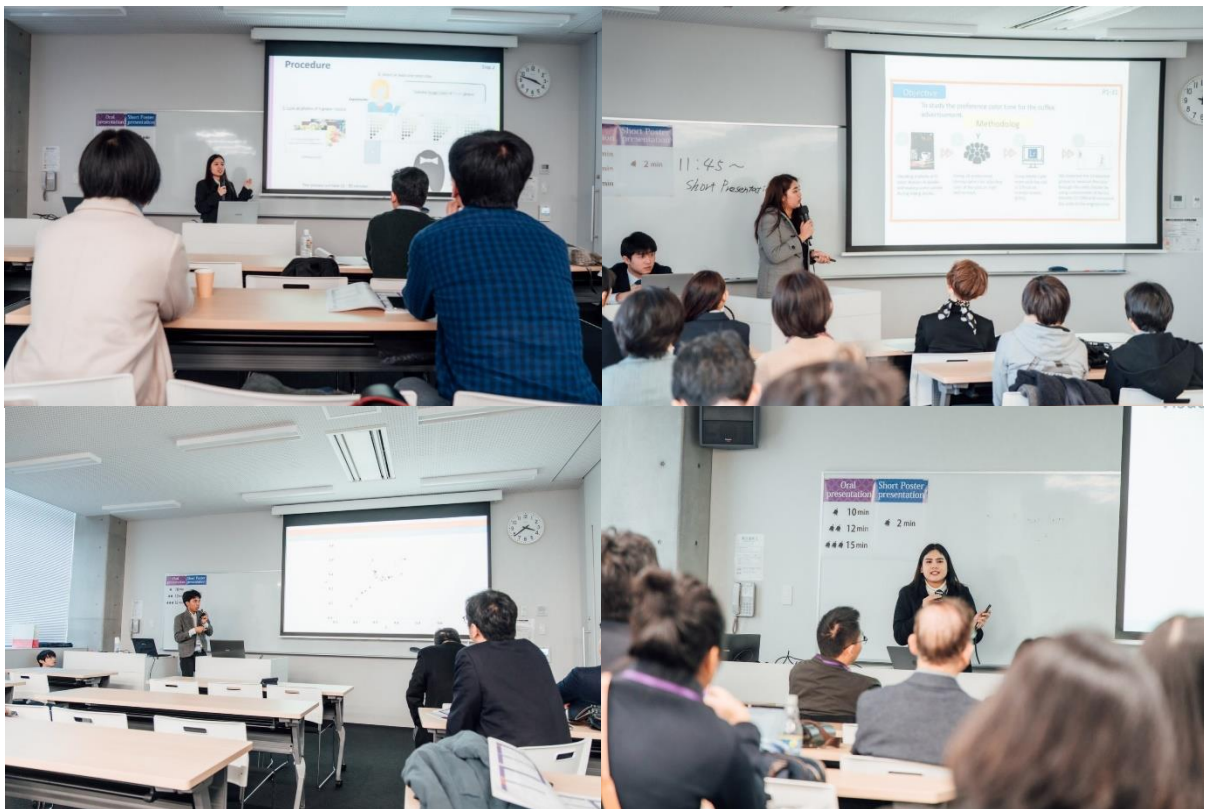
1. Pratthana Thammachart
2. Hathaichanok Khemthong
3. Saran Chantra
4. Piyamon Nguensawat
5. Supattra Jinhphol
6. Kanokwan Somdang
7. Kanchaporn Jankeaw
8. Wipada Pumila
9. Pantakan Sukontee



Opening ceremony



Dr. Chanprapha, a director of CRC was selected as an invited speaker. The topic she talked in the ACA was "Chromatic Adaptation to Illumination"



MCT students were presenting

7.3 Asia Student Workshop 2019

MCT students went to Japan

- 31 January – 24 February 2019

There are totally 7 students from MCT who participated Asia Student Workshop on Science Image (ASW 2019) at Chiba University, Japan from 31 January to 24 February 2019. There are 6 undergraduate students joined in D2D program and 1 graduated student joined in L2L program.

List of students

No.	Name	Department
D2D Program		
1	Mr. Wongsathon Suteerapongpan	Photography and Cinematography Technology
2	Ms. Warin Chuenaram	Advertising and Public Relations
3	Mr. Srijan Jaratsrimanee	Photography and Cinematography Technology
4	Ms. Hathaichanok Khemthong	Advertising and Public Relations
5	Mr. Chatchai Nuangcharoenporn	Photography and Cinematography Technology
6	Ms. Kanchaporn Jankeaw	Printing Technology
L2L Program		
7	Mr. Phubet Chitapanya	Color Technology and Design



MCT students wearing Kimano in Japan cultural activity



MCT students in laboratory



MCT students and Chiba students in front of National Museum of Japanese History

- **21 November - 14 December 2019**

There are totally 6 students from MCT who participated Asia Student Workshop on Science Image (ASW 2019) at Chiba University, Japan from 21 November to 14 December 2019. There are 4 undergraduate students joined in D2D program and 2 graduated students joined in L2L program.

List of students

No.	Name	Department
D2D Program		
1	Supaluk Prommanee	Photography and Cinematography Technology
2	Sopita Sinpaldee	Advertising and Public Relations
3	Tanapat Piriyanpong	Photography and Cinematography Technology
4	Chatchai Nuangcharoenporn	Photography and Cinematography Technology
L2L Program		
5	Janejira Mepean	Color Technology and Design
6	Nutticha Pattarasoponkun	Color Technology and Design



MCT students with Chiba students at Chiba university



MCT students in laboratory



MCT students in laboratory

Students from Chiba University came to MCT, RMUTT

- 2 – 23 September 2019

Three students from Chiba University, Mr. Takeshi Haga, Mr. Masatsugu Doi and Ms. Maiko Tozawa came to Thailand to join Asia Student Workshop 2019 at faculty of Mass Communication and Technology, RMUTT.



Three students from Chiba University took photo with Asst. Prof. Apichat Kaifha, Dean of MCT, lecturers and staffs.



Chiba students with Eve, Ph.D student in laboratory.

Visiting professor

Date	Name of visiting professor	University/ institution	Purpose
1st January 2019	Prof. Mikiko Kawasumi	Mejo University	Taking care exchanged student
9th March 2019	Prof. Yoko Mizokami	Chiba University	Giving a lecture
May 2019	Prof. Paminto Adhi	Gadjah Mada University	Visiting CRC
25th May 2019	Prof. Yasuki Yamauchi	Yamagata University	Laboratory
4th July 2019	Prof. Hiroyuki Iyota Assoc. Prof. Sakai Hideki	Osaka City University	ASEIS Conference 2019
3rd September 2019	Prof. Yasuki Yamauchi	Yamagata University	Laboratory
6th September 2019	Prof. Mikiko Kawasumi	Mejo University	Visiting CRC
16th December 2019	Prof. Yasuki Yamauchi	Yamagata University	Training Master student