

# ICIS2010

**The 31<sup>st</sup> International Congress on Imaging Science**  
“Imaging Science and Technology in the Digital Era”

## Final Program

**China National Convention Center, Beijing, China**  
**May 12-16, 2010**

held jointly with

1. The 2<sup>nd</sup> Beijing International Conference on Imaging
2. The 2010 Academic Annual Conference of CSIST



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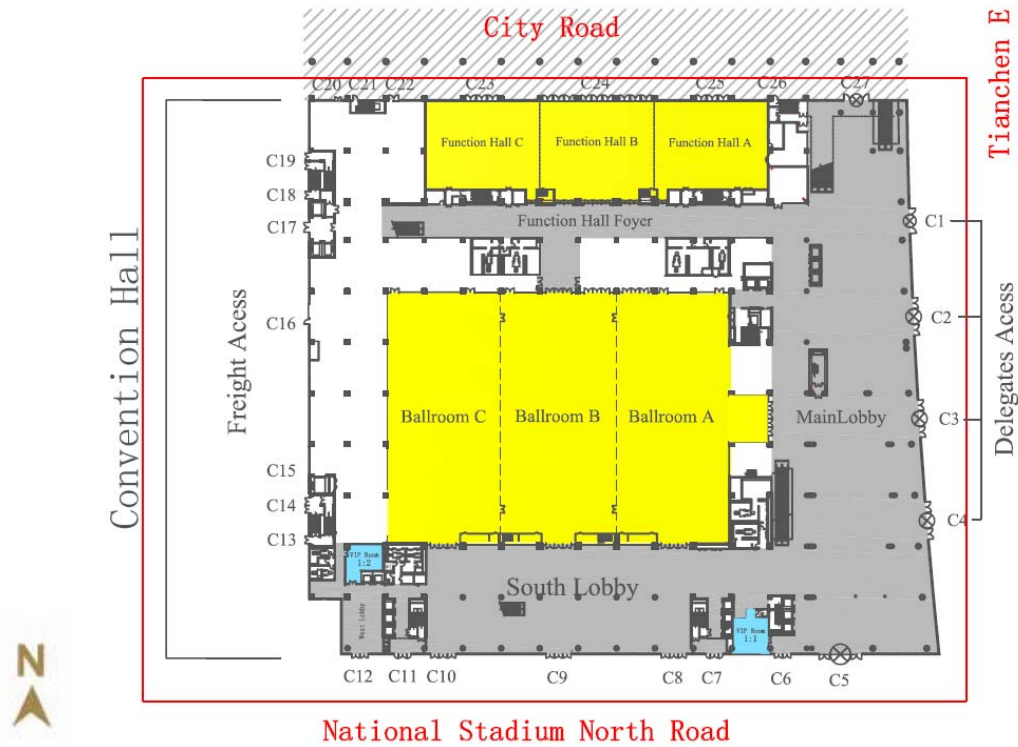
1. Schedule of Events
2. Conference Venue Floor Plans
3. Session Chairs
4. Plenary Speeches
5. Oral Presentation Session
6. Interactive Presentation Session
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# 1. Schedule of Events

<b>Date</b>	<b>Time</b>	<b>Activity</b>	<b>Venue</b>
May 12 Wednesday	7:30-20:30	Registration	Main Lobby, F1
	21:00	Meeting of Session Chairs and Plenary Moderators	Meeting Room 208A, F2
May 13 Thursday	8:00-18:00	Registration	L3 South Foyer, F3
	8:30-9:00	Opening Ceremony	Meeting Room 311, F3
	9:00-11:45	Plenary Talks	Meeting Room 311, F3
	12:00	Lunch	Ballroom B, F1
	13:30-17:45	Oral Presentation Session Track A Joint Track B&C Track D	Meeting Room 302 A, F3 Meeting Room 302 B, F3 Meeting Room 303 A, F3
	18:00	Dinner	Ballroom B, F1
	19:30	The General Meeting of ICIS	Meeting Room 208A, F2
May 14 Friday	8:00-18:00	Registration	Meeting Room 208A, F2
	8:30-12:05	Plenary Talks	Meeting Room 311, F3
	12:05	Lunch	Ballroom B, F1
	13:30-17:15	Oral Presentation Session Track A Track B Track C Track D	Meeting Room 302 A, F3 Meeting Room 302 B, F3 Meeting Room 303 A, F3 Meeting Room 303 B, F3
	18:00	Conference Banquet	Ballroom B, F1
May 15 Saturday	8:00-18:00	Registration	Meeting Room 208A, F2
	8:00-11:15	Oral Presentation Session Track A Track B Track E	Meeting Room 302 A, F3 Meeting Room 302 B, F3 Meeting Room 303 A, F3
	12:00	Lunch	Ballroom B, F1
	11:00-13:30 13:30-16:30 16:30-17:00	Interactive Presentation Session Poster:Set up Poster presentation Poster:Take down	L3 South Foyer, F3
	18:00	Dinner	Ballroom B, F1
May 16 Sunday	8:30-18:30	One day tour	

# 2. Conference Venue Floor Plans

F1: Main Lobby and Ballroom B

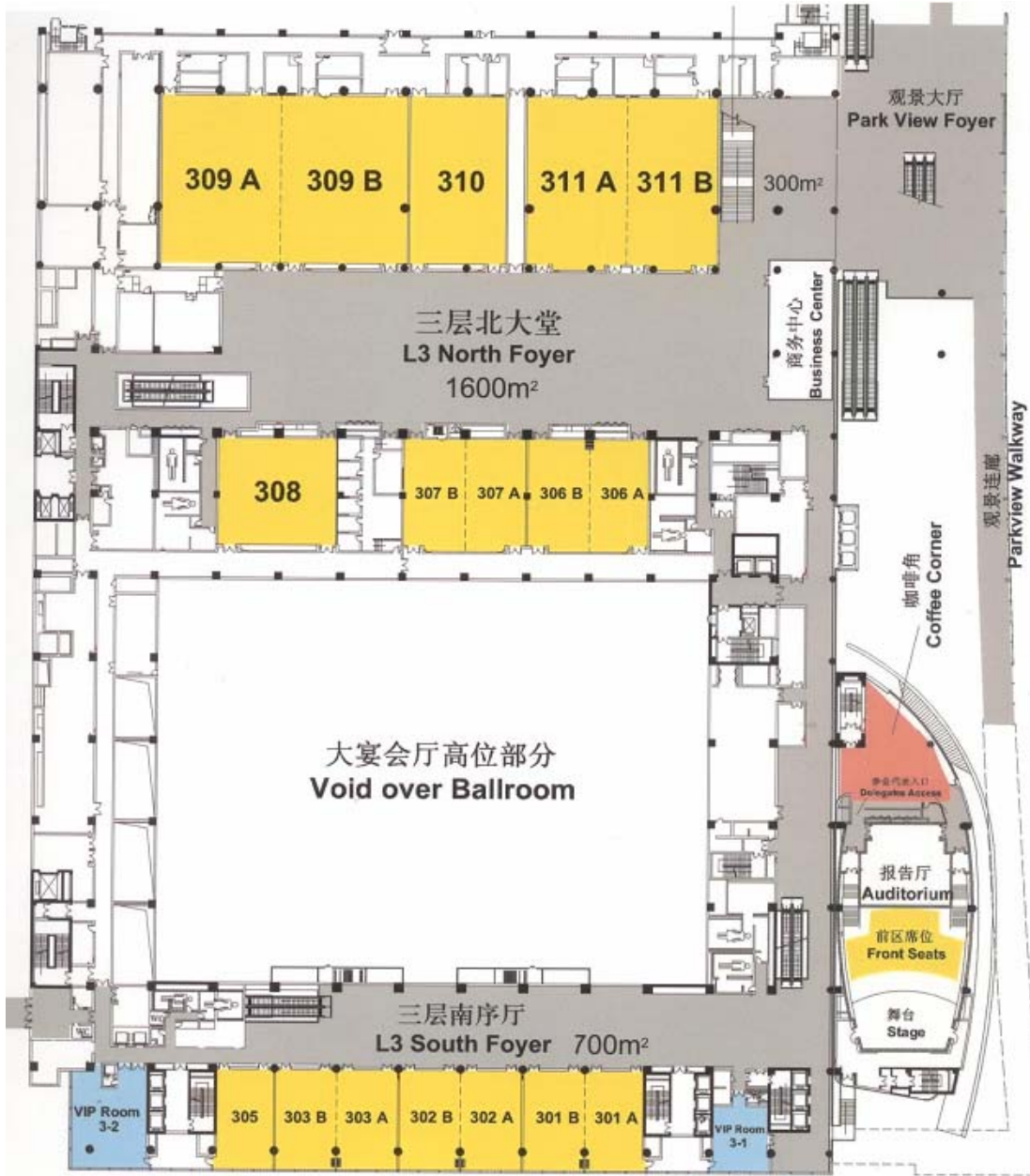


F2: Meeting Room 208A





### F3: Meeting Room 311、302AB and 303AB



# 3. Session Chairs

## Plenary Session Chairs

Plenary number	Session Chair
P01	Jialing Pu, BIGC
P02	Gary House, ICIS
P03	Liqian Ma, Lucky Film
P04	Michael A. Kriss, IS&T
P05	Zhigang Fan, Xerox
P06	Wenfang Shi, USPS
P07	Lei Yan, RS&GIS

## Oral Presentation Session Chairs

	Thursday, May 13		Friday, May 14		Saturday, May 15	
	13:30-15:15	15:30-17:15	13:30-15:15	15:30-17:15	8:30-10:00	10:15-11:15
Track A	Qian Lin Lei Yan	Phil Green Lei Yan	J.Komasatitaya Wei Xue	Dadong Wang Wei Xue	EricG. Hanson Bingfeng Zhou	Zhanglin Zhou Bingfeng Zhou
Track B	M. R. Luo Liqian Ma	Jun Zeng Liqian Ma	S.N.Bezryadin Zhen Liu	Y. J.Kim Zhen Liu	Zhigang Fan Liyuan Wang	Akin Ecer Liyuan Wang
Track C	Ralf Habermann (16:45-17:45)		M.A. Kriss Jingkun Xu	Wolfgang Schmidt Jingkun Xu		
Track D	G.J.Galliford Fushi Zhang	D.Harbourne Fushi Zhang	N. Kobayashi Shuyun Zhou	Rong Bao Yuxia Zhao		
Track E					Ming-Kai Tse Xuanming Duan	MakotoOmodani XuanmingDuan

# 4. Plenary Speeches

## Thursday, May 13, Meeting Room 311

9:00-9:50 P01 *Session Chair: Jialing Pu, BIGC*  
**The Future of Print and the Digital Printing Revolution**, *Stephen Hoover (Xerox, VP Tech, USA)*

**09:50-10:05** **Tea Break**

10:05-10:55 P02 *Session Chair: Gary House, ICIS*  
**Challenge to Digital Imaging“ Past, Present and Future”**, *Shinpei Ikenoue (Fujifilm, Senior Advisor, Japan)*

10:55-11:45 P03 *Session Chair: Liqian Ma, Lucky Film*  
**The Past, Present and Future of Display Technology**, *Hee Dong Park (Director, Information Display R&D Center, Korea)*

## Friday, May 14, Meeting Room 311

8:30-9:20 P04 *Session Chair: Michael A. Kriss, IS&T*  
**Hardcopy Technologies and the Carbon Footprint**, *Koji Hirakura (ISJ President and Ricoh Director, Japan)*

9:20-10:10 P05 *Session Chair: Zhigang Fan, Xerox*  
**History and Outlook of Industrial Inkjet Printing**, *Werner Zapka (Manager, Advanced Application Technology XAARJet AB, Sweden)*

**10:10-10:25** **Tea Break**

10:25-11:15 P06 *Session Chair: Wenfang Shi, USPS*  
**The Evolution of UV Photopolymerization in Global Industrial Manufacturing Markets and the Promising Outlook for the Future of the Technology**, *David Harbourne (President, Fusion UV Systems, Inc., USA)*

11:15-12:05 P07 *Session Chair: Lei Yan, RS&GIS*  
**Mobile Image Capture, Consumption, and Applications**, *Qian Lin (Director, Multimedia Interaction and Understanding Lab, HP Labs, USA)*

# 5. Oral Presentation Session

Thursday, May 13

**Track A: Digital Imaging and the Related Technologies**

**13:30-17:15, Meeting Room 302 A**

*Session Chairs: Qian Lin, HP Labs; Phil Green, LCC; Lei Yan, RS&GIS*

13:30-14:00 OA 001 (Keynote Speech)

**High Resolution Technologies of Digital Imaging and its Achievements in Remote Sensing**, *Lei Yan, Yunfei Lu (Peking University, China)*

14:00-14:15 OA 002 (#266)

**Performance Evaluation of Rollers for Charging, Development and Transfer in Electrophotography**, *Ming-Kai Tse and Inan Chen (Quality Engineering Associates (QEA), Inc., USA)*

14:15-14:30 OA 003 (#233)

**Colour Management for Cholesteric Displays: Creation and Usage of ICC Colour Profiles**, *Gregory High<sup>1</sup>, Phil Green<sup>1</sup>, David Coates<sup>2</sup> and Chris Hughes<sup>2</sup> (<sup>1</sup>London College of Communication and <sup>2</sup>Magink Display Technologies, UK)*

14:30-14:45 OA 004 (#58)

**Liquid Crystals -their High Potential in FET Applications**, *Hiroaki Iino<sup>1,2</sup>, Kyohei Nakano<sup>1</sup>, and Jun-ichi Hanna<sup>1,2</sup> (<sup>1</sup>Tokyo Institute of Technology and <sup>2</sup>JST-CREST; Japan)*

14:45-15:00 OA 005 (#67)

**Morphological Image Analysis for Analysis for Automated Surface Quality Inspection of Moving Steel Plates**, *Dadong Wang<sup>1</sup>, Ke Xu<sup>2</sup> and Jinwu Xu<sup>2</sup> (<sup>1</sup>CSIRO Mathematics ;Australia and <sup>2</sup>University of Science and Technology Beijing, China)*

15:00-15:15 OA 006 (#218)

**Real-time Enhancing Method for Night Scene of Vehicular Camera Based on Multi-scale Retinex**, *Wang-Jun Kyung<sup>1</sup>, Ho-Gun Ha<sup>1</sup>, Cheol-Hee Lee<sup>2</sup>, and Yeong-Ho Ha<sup>1</sup> (<sup>1</sup>Kyungpook National University and <sup>2</sup>Andong National University; Korea)*

**15:15-15:30**

**Tea Break**

15:30-15:45 OA 007 (#279)

**An Image Processing Pipeline for Mobile Document Capture**, *Jian Fan, Qian Lin and Jerry Liu (Hewlett-Packard Labs; USA)*

15:45-16:00 OA 008 (#45)

**A Novel Tamil Character Recognition Using Chain Code Method**, *S.Selvakumar Raja and Mala John ( Anna University ;India)*

16:00-16:15 OA 009 (#46)

**Exact Representation of Glyph Contours and Its Application in Text Vectorization**, *Tao He, Jie Feng, and Bingfeng Zhou (Peking University; China)*

16:15-16:30 OA 010 (#6)

**Forensic Application of Spectral Imaging: Fingerprint Detection Using Visible Absorption and Luminescence**, *Wei Huang, Guiqiang Wang, Xiaojing Xu, Tao Yu, Zhicheng Yang (Ministry of Public Security; China)*

16:30-16:45 OA 011 (#199)

**Preparation and Characterization of Microcapsules with Compact Wall Structure for Electrophoretic Displays**, *Runying Dai, Peipei Yin, Sheng Liu, Gang Wu, and Hongzheng Chen (Zhejiang University; China)*

16:45-17:00 OA 012 (#13)

**Color Balance Method for Digital Orthographic Maps Based on Neural Network**, *Zhaohui Cao and Shi Ruizhi*



(Zhengzhou Institute of Surveying and Mapping; China)

17:00-17:15 OA 013 (#112)

**The Research on the Anti-counterfeiting Technology Using Moire Based on Conventional Printing**, *Taolin Ma, Xiang Li, and Lei Liu (Wuhan University; China)*

**Joint Track B&C**  
**Color Science & Technology/Evaluation Methods**  
**Digital and On-demand Printing/Publishing Technologies and Systems**

**13:30-17:45, Meeting Room 302 B**

*Session Chairs: Ming Ronnier Luo, University of Leeds; Jun Zeng, HP labs; Liqian Ma, Lucky Film;  
Ralf Habermann, Hosokawa Alpine Aktiengesellschaft*

13:30-14:00 OB 001 (Keynote Speech)

**Full Spherical HDR Photography and Its Application in Computer Graphics, the Automotive Industry and the Entertainment Markets**, *Gerhard Bonnet (CEO, Spheron vr AG; Germany)*

14:00-14:15 OB 002 (#42)

**Effect of Environmental Factors on Perception of Image Attributes**, *M. J. Murdoch<sup>1</sup>, M. van Etten<sup>1</sup>, and I. E.J.Heynderickx<sup>1,2</sup> (<sup>1</sup>Philips Research Laboratories and <sup>2</sup>Delft University of Technology; The Netherlands)*

14:15-14:30 OB 003 (#115)

**Real-Time Tone-Mapping of High Dynamic Range Image using Gazing Area Information**, *Toshiaki Mikami, Keita Hirai, Toshiya Nakaguchi, and Norimichi Tsumura (Chiba University; Japan)*

14:30-14:45 OB 004 (#167)

**Evaluation of Hue Uniformity for Uniform Colour Spaces Using Unique Hue Data**, *Kaida Xiao, Sophie Wuerger, Chenyang Fu, and Dimosthenis Karatzas (University of Liverpool; UK)*

14:45-15:00 OB 005 (#40)

**An Alternative Method to Sensor Spectral Characterization**, *Heng Zhang<sup>1,2</sup>, Shuxue Quan<sup>2</sup>, and Huaping Liu<sup>1</sup> (<sup>1</sup>Oregon State University and <sup>2</sup>Broadcom Corporation; USA)*

15:00-15:15 OB 006 (#170)

**More Effective Quality Control With Delta bef Color Difference Formula**, *Sergey Bezryadin and Pavel Burov (Unified Color Technologies; USA)*

**15:15-15:30**

**Tea Break**

15:30-15:45 OB 007 (#29)

**Investigations in the Influence of Rounded Toner Particles on the Image Quality Parameters**, *Ralf Habermann, and Beat Zobrist (Hosokawa Alpine Aktiengesellschaft; Germany and Zobrist Engineering & Consulting; Switzerland)*

15:45-16:00 OB 008 (#119)

**Color Estimation Method of Rouge Applied to Lip Based on Optical Properties**, *Rie Ohtsuki<sup>1,2</sup>, Rie Hikima<sup>1</sup>, and Shoji Tominaga<sup>2</sup> (<sup>1</sup>Kanebo COSMETICS INC and <sup>2</sup>Chiba University; Japan)*

16:00-16:15 OB 009 (#153)

**Subjective Evaluation Experiment and Data Analysis of Color Difference for Digital Images**, *Meng Xie, Haoxue Liu, and Min Huang (Beijing Institute of Graphics Communication; China)*

16:15-16:30 OB 010 (#135)

**Study on Original Image Gamut and Gamut Mapping Adaptability in Digital Printing**, *Guangxue Chen<sup>1</sup> and Xiaozhou Li<sup>1,2</sup> (<sup>1</sup>South China University of Technology and <sup>2</sup>Shandong Institute of Light Industry; China)*

16:30-16:45 OB 011 (#131)

**A Polynomial Regression Algorithm for RGB-XYZ Conversion**, *Xia Zhang and Guangwei Liu (Wuhan University; China)*

16:45-17:00 OC 001 (Keynote Speech)

**Requirements for Digital Colour Reproduction**, *Phil Green (Reader in Color Imaging, LCC; UK)*

17:00-17:15 OC 002 (#19)

**Operations Modeling and Analysis of Commercial Print Services**, *Jun Zeng, I-Jong Lin, and Tzipi Netz (Hewlett-Packard Co.; USA and Hewlett-Packard Indigo Ltd.; Israel)*

17:15-17:30 OC 003 (#80)

**An Intelligent Data Transmission and Monitoring System for Film Printer**, *Lina Wang<sup>1</sup>, Heping Yang<sup>2</sup>, Wen Luo<sup>1</sup> (<sup>1</sup>Beihang University and <sup>2</sup>Beijing Film and Video Laboratory; China)*

17:30-17:45 OC 004 (#165)

**Fundamental Performance Limits in Image Fusion**, *Erwin Gilmore and Mohammed Chouikha (Howard University; USA)*

### **Track D: Novel Imaging and Related Functional Materials**

**13:30-16:45, Meeting Room 303 A**

*Session Chairs: Graham J. Galliford, Galliford Consulting & Marketing; David Harbourne, Fusion UV Systems, Inc.; Fushi Zhang, Tsinghua University*

13:30-14:00 OD 001 (Keynote Speech)

**Development of Photographic Science and Technology for Advanced Devices**, *Tadaaki Tani (Former ICIS President; Japan)*

14:00-14:15 OD 002 (#234)

**How Many Pixels Does it Take to Make a Good 4"x6" Print? Pixel Count Wars Revisited**, *Michael A. Kriss (IS&T; USA)*

14:15-14:30 OD 003 (#51)

**Supramolecular Third-order Nonlinear Optical Switches Based on the Photo-controllable Assemblies of Phthalocyanines**, *Zihui Chen and Fushi Zhang (Tsinghua University; China)*

14:30-14:45 OD 004 (#56)

**Photoinduced Discharge Mechanism of High Gamma Photoreceptor and Electrophotographic Performance**, *Kuniki Seino, Hideaki Hirahara, Takaaki Konuma, Ichiro Yoshida, and Shozo Kaieda (Afit Corporation; Japan)*

14:45-15:00 OD 005 (#264)

**Study of Methoxyphenylquinoxalines (MOPQs) as Photoinitiators in the Negative Photo-resist**, *Lida Sun, Xuesong Jiang, and Jie Yin (Shanghai Jiao Tong University; China)*

15:00-15:15 OD 006 (#240)

**Fabrication of Photonic Recording Materials From Liquid Crystals and a Polymer Template**, *Jinbao Guo, Hao Wu, and Jie Wei (Beijing University of Chemical Technology; China)*

**15:15-15:30**

**Tea Break**

15:30-15:45 OD 007 (#90)

**Photo-Generation and Transport of Charges in Single-layer Organic Photoconductors for Electrophotography**, *Yasushi Tanaka<sup>1</sup>, Mitsuru Narita<sup>1</sup>, Yoichi Nakamura<sup>1</sup>, Seizou Kitagawa<sup>1</sup>, and Inan Chen<sup>2</sup> (<sup>1</sup>Fuji Electric Systems Co., Ltd.; Japan and <sup>2</sup>Quality Engineering Associates (QEA) Inc.; USA)*

15:45-16:00 OD 008 (#249)

**Latest Developments in Chemically Prepared Toner**, *Graham J. Galliford (Galliford Consulting & Marketing; USA)*

16:00-16:15 OD 009 (#250)

**Morphological Studies of a Dicholesteryl Compound Forming Glassy Liquid Crystal Behavior**, *Xiaoming Dong, Jinbao Guo, and Jie Wei (Beijing University of Chemical Technology; China)*

16:15-16:30 OD 010 (#128)

**Synthesis and Photopolymerization of Silicon-containing Vinyl Ether Monomers**, *Shizhuo Xiao and Yingquan Zou (Beijing Normal University; China)*

16:30-16:45 OD 011 (#230)

**Retinal Vessel Center Line Tracking Using Bilateral Filter and Canny Edge Detector**, Chuang Miao, Zhenhua Chai, Xiaolin Sun, Zhao Y. Duan, Ling G. Wang and Samuel H. Chang (Jilin University; China)

## Friday, May 14

### Track A: Digital Imaging and the Related Technologies

13:30-16:35, Meeting Room 302 A

Session Chairs: Juntira Komatatitaya, King Monkut's University of Technology Thonburi;  
Dadong Wang, CSIRO; Wei Xue, The Graduate School of Beijing Institute of Technology

13:30-13:50 OA 014 (Invited Speech)

**Green Rendering for Printing**, Zhigang Fan, Michael Furst, and Warren Kleiman (Xerox Corporation; USA)

13:50-14:05 OA 015 (#68)

**Accelerated Gemological Image Analysis for Opal Grading**, Dadong Wang<sup>1</sup>, Leanne Bischof<sup>1</sup>, Bryan Dai<sup>1</sup>, Ryan Lagerstrom<sup>1</sup>, Graham Hornabrook<sup>2</sup>, and Peter Sutton<sup>2</sup> (<sup>1</sup>CSIRO Mathematics and <sup>2</sup>Opal Producers Australia Limited; Australia)

14:05-14:20 OA 016 (#66)

**Continuous Tone Image with Phthalate Derivatives-based Three Primary Color Electrochromic Cell**, Yuichi Watanabe, Satomi Tanaka, Kazuki Nakamura, and Norihisa Kobayashi (Chiba University; Japan)

14:20-14:35 OA 017 (#91)

**Textile Inkjet Print Quality of Polymer Pretreatment on Cotton**, Yutthana Lila and Juntira Komatatitaya (King Monkut's University of Technology Thonburi; Thailand)

14:35-14:50 OA 018 (#166)

**Numerical Simulation of Dielectric Barrier Discharges in Electrophotography**, Napoleon Leoni<sup>1</sup> and Bhooshan Paradkar<sup>2</sup> (<sup>1</sup>Hewlett Packard Laboratories and <sup>2</sup>UCSD; USA)

14:50-15:05 OA 019 (#65)

**Creation of Luminescent Eu(III) Complex with Remarkably Sharp Emission Band for Achieving Novel Lasing Medium**, Kazuki Nakamura<sup>1</sup>, Yasuchika Hasegawa<sup>2</sup>, and Norihisa Kobayashi<sup>1</sup> (<sup>1</sup>Chiba University and <sup>2</sup>Nara Institute of Science and Technology; Japan)

15:05-15:20 OA 020 (#124)

**Modeling BRDF of Silk Fabric by Modifying Phong Reflection Model**, Chawan Koopipat, Boonyakiat Chaiteprasith and Suda Kiatkamjornwong (Chulalongkorn University; Thailand)

15:20-15:35 Tea Break

15:35-15:50 OA 021 (#10)

**3-Dimensional Imaging Technique Based on 2-Dimensional Plane**, Ruizhi Shi<sup>1</sup>, Jing An<sup>1,2</sup>, Xiao Zhou<sup>1</sup>, Yanlin Wang<sup>2</sup> (<sup>1</sup>Zhengzhou Institute of Surveying and Mapping and <sup>2</sup>72946 Troops; China)

15:50-16:05 OA 022 (#57)

**World's First Charge Roller System Implemented in High-End Digital Commercial Printing Engine**, Omer Gila<sup>1</sup>, Michael H. Lee<sup>1</sup>, Seongsik Chang<sup>1</sup>, Bill Holland<sup>1</sup>, Eric Hanson<sup>1</sup>, Boaz Tagansky<sup>2</sup> and Gadi Oron<sup>2</sup> (<sup>1</sup>Hewlett-Packard Labs; USA and <sup>2</sup>Hewlett-Packard Indigo; Israel)

16:05-16:20 OA 023 (#30)

**Research on Color Uniformity of Tiled Multiple Projectors Display System**, Zhen Liu<sup>1</sup>, and Mingwei Yu<sup>2</sup> (<sup>1</sup>University of Shanghai for Science and Technology and <sup>2</sup>Nanjing Forestry University; China)

16:20-16:35 OA 024 (#263)

**A Vehicle License Plate Recognition Algorithm Using Bilateral Filter and Wavelet Transform**, Yao Li, Yan Hou, Zhenhua Chai, Hang Yang, Mingying Zhang, Qi Li and Samuel H. Chang (Jilin University; China)

## Track B:Color Science & Technology/Evaluation Methods

13:30-17:15, Meeting Room 302 B

Session Chairs: *Sergey N. Bezryadin, Unified Color Technologies; Youn Jin Kim, Daejin University; Zhen Liu, University of Shanghai for Science and Technology*

13:30-14:00 OB 012 (Keynote Speech)

**Advances in Colour and Vision Science by the CIE**, *Ming Ronnier Luo (University of Leeds; UK)*

14:00-14:15 OB 013 (#176)

**Measurement of the Optimum Surround Lightness: the Case of Reflective Stimuli**, *Ye Seul Baek<sup>1</sup>, Youn Jin Kim<sup>2</sup>, Hong Suk Kim<sup>1</sup> and Seung Ok Park<sup>1</sup> ( <sup>1</sup>Daejin University and <sup>2</sup>Samsung Electronics Company; South Korea)*

14:15-14:30 OB 014 (#222)

**Frequency Domain Design for Electro-Photography Screens**, *Mani Fischer, and Doron Shaked (Hewlett Packard Laboratories;Israel)*

14:30-14:45 OB 015 (#217)

**Color Correction for Projected Image on Colored-screen Using Correction Matrix Based on Camera**, *Dae-Chul Kim, In-Su Jang, Tae-Hyoung Lee, and Yeong-Ho Ha (Kyungpook National University; Korea)*

14:45-15:00 OB 016 (#267)

**Design of Test Targets for Objective Image Quality Evaluation**, *Ming-Kai Tse (Quality Engineering Associates (QEA), Inc.; US A)*

15:00-15:15 OB 017 (#181)

**How Sensitive Are We to the Variation in “Reflection Optical Density?”**, *Ari Kim<sup>1</sup>, Youn Jin Kim<sup>2</sup>, Hong- Suk Kim<sup>1</sup>,and Seung Ok Park<sup>1</sup>(<sup>1</sup>Daejin university and <sup>2</sup>Samsung Electronics Company; South Korea)*

15:15-15:30

Tea Break

15:30-15:45 OB 018 (#16)

**Fingerprint Image Restoration Base on Image Fusion**, *Yongqiang Wang, Zhicheng Yang, Zhihui Li, and Xiaojing Xu (Ministry of Public Security; China)*

15:45-16:00 OB 019 (#154)

**Research on Digital Image’s Color-Difference by Altering Lightness and Chroma I : Analysis of Subjective Color-Difference Data Set**, *Haixue Liu, Meng Xie, Min Huang, and Cuihua Wang (Beijing Institute of Graphics Communication; China)*

16:00-16:15 OB 020 (#76)

**Basic Linearization Control Method Matching Solid Density Standard for Printing Process**, *Shide Liu Qun Sun, Geng Xie, and Shuangjun Chen (Information Engineering University; China)*

16:15-16:30 OB 021 (#171)

**Bef Format for Image Data Transmission**, *Sergey Bezryadin and Pavel Burov (Unified Color Technologies; USA)*

16:30-16:45 OB 022 (#207)

**Computation of Color Appearance of Images Based on Color Vision**, *Xiaoxia Wan and Dehong Xie (Wuhan University; China)*

16:45-17:00 OB 023 (#161)

**Spectral Representation of Different Color Data Sets Applying LabPQR Interim Color Space Compared to Principal Component Analysis**, *Saeideh Gorji Kandi (Institute for Color Science and Technology; Iran)*

17:00-17:15 OB 024 (#28)

**Structural Modification and Photochromic Study of Naphthopyran Compounds**, *Qinghua Meng, Deyin Huang, Zhen Wang, and Dingliang Fu (Shanghai Jiao Tong University; China)*

## Track C: Digital and On-demand Printing/Publishing Technologies and Systems

13:30-16:30, Meeting Room 303 A

Session Chairs: Michael A. Kriss, IS&T; Wolfgang Schmidt, Felix Schoeller Service GmbH&Co.KG;  
Jingkun Xu, Jiangxi Science and Technology Normal University

13:30-13:45 OC 005 (#132)

**Halftoning Method and Reproduction of Color Gamut in Digital Image Output**, Guangxue Chen, Qifeng Chen, Baoling Tang, Jinglei Tai, and Gang Chen (South China University of Technology; China)

13:45-14:00 OC 006 (#216)

**Fast Inverse Halftoning**, Zachi Karni, Daniel Freedman, and Doron Shaked (HP-Labs; Israel)

14:00-14:15 OC 007 (#142)

**Quality Assessment Method of Halftone Image Based on Structural Similarity**, Yaohua Yi, Yuchao Wu, Qiumei Yang, and Chao Kong (Wuhan University; China)

14:15-14:30 OC 008 (#235)

**Spectral Model of an Electro-photographic Printing System**, Michael A. Kriss (IS&T; USA)

14:30-14:45 OC 009 (#11)

**Relationship between Image Tone Distribution and Printing Press Ink Supply**, Ruizhi Shi and Xiao Zhou (Zhengzhou Institute of Surveying and Mapping; China)

14:45-15:00 OC 010 (#138)

**Study on MTF-Based Image Quality Detection Method for Inkjet printing**, Xiaomeng Cui, Guangxue Chen, Yan Zhang and Jin Yan (South China University of Technology; China)

15:00-15:15 OC 011 (#87)

**Research on the Visualization Process of Ink Droplets Infiltrating and Diffusing in the Substrate in Inkjet Imaging System**, Qifeng Chen, Guangxue Chen, Baoling Tang, and Jinglei Tai (South China University of Technology; China)

15:15-15:30

Tea Break

15:30-15:45 OC 012 (#220)

**Qualification of Quality Measures**, Hila Nachlieli and Doron Shaked (Hewlett-Packard Laboratories; Israel)

15:45-16:00 OC 013 (#27)

**Synthesis of Hyperbranched Polymeric Dyes Used in Ink-jet Ink**, Qinghua Meng, Deyin Huang, and Shaoyu Zheng (Shanghai Jiao Tong University; China)

16:00-16:15 OC 014 (#38)

**Particle-substrate-charge Interactions Observed Using Evansescent Waves**, Henryk Birecki, and Thomas C. Anthony (Hewlett Packard; USA)

16:15-16:30 OC 015 (#34)

**Grey Comprehensive Assessment Apply in Synthetic Evaluation of Photographic Paper's Ink Jet Printing Quality**, Xue Li and Yunzhi Chen (Tianjin University of Science & Technology; China)

## Track D: Novel Imaging and Related Functional Materials

13:30-16:45, Meeting Room 303 B

Session Chairs: Norihisa Kobayashi, Chiba University; Rong Bao, Fusion UV Systems Inc.;  
Shuyun Zhou, Technical Institute of Physical Chemistry, CAS  
Yuxia Zhao, Technical Institute of Physical Chemistry, CAS

13:30-13:45 OD 012 (#226)

**A Novel Silver Sulfide Nano-structured Sensitizer and its Chemical Sensitizations in the Silver Halide Imaging System**, Zhi Li, Tong Zheng, Yao Shi, Wangjing Ma, Peicheng Duan, and Xinmin Yang (Technical Institute of Physics and Chemistry, CAS; China)

13:45-14:00 OD 013 (#269)

**Novel Coumarin/Benzylidene Cyclopentanone Dyes for Two-Photon Polymerization**, Yuxia Zhao and Feipeng Wu (Chinese Academy of Sciences; China)

14:00-14:15 OD 014 (#262)

**Research Progress in Treatment of Image Disease**, Yuhu Li, Yajun Zhou, Shukun Shen, Xiaoli Qin, and Chenxi Zuo (Shaanxi Normal University; China)

14:15-14:30 OD 015 (#242)

**Preparation of Functionalized Multi-Walled Carbon Nanotubes and Their Applications for Fabricating Flexible Electronic Circuits**, Huihui Wang and Jie Wei (Beijing University of Chemical Technology; China)

14:30-14:45 OD 016 (#130)

**Molecular Glass Materials for UV Positive Photoresist**, Jinxing Yu, Na Xu, and Liyuan Wang (Beijing Normal University; China)

14:45-15:00 OD 017 (#243)

**Effect of Monomer Structures and Polymerization Temperature on Characteristics of Polymer Stabilized Isotropic Liquid Crystal**, Rui Li, Jinbao Guo, and Jie Wei (Beijing University of Chemical Technology; China)

15:00-15:15 OD 018 (#141)

**The Synthesis and Imaging Study of a Series of Novel Photoactive Polymers with Diazoketo Groups in Their Side Chains**, Lu Liu and Yingquan Zou (Beijing Normal University; China)

15:15-15:30 Tea Break

15:30-15:45 OD 019 (#163)

**A New ICAM-based HDR Image Display Algorithm**, Zhen Liu<sup>1</sup>, Ming Zhu<sup>2</sup>, and Dandan Yang<sup>2</sup> (<sup>1</sup>University of Shanghai for Science and Technology; <sup>2</sup>Nanjing Forestry University; China)

15:45-16:00 OD 020 (#145)

**Silicon-Containing Vinyl Ether Resists for Nanoimprint Lithography**, Yuan Fang and Yingquan Zou (Beijing Normal University; China)

16:00-16:15 OD 021 (#241)

**Microencapsulation of Liquid Crystals for Thermochromic Materials by Interfacial Polymerization**, Nan Ji, Jinbao Guo and Jie Wei (Beijing University of Chemical Technology; China)

16:15-16:30 OD 022 (#172)

**Synthesis and Characterization of UV-sensitive Monomers Containing Chalcone Moieties**, Zhengkai Si, Qing Zhang, Minzhao Xue, Qiaorong Sheng, and Yangang Liu (Shanghai Jiaotong University; China)

16:30-16:45 OD 023 (#143)

**Electropolymerized PEDOT: PSS Films Derived From Isopropanol Solution and Its Application in Organic Electroluminescent Devices**, Xiaona Liu, Jun Yan, Lingchuan Meng, Feng Teng, Shuyun Zhou, and Ping Chen (Chinese Academy of Sciences; China)

## Saturday, May 15

### Track A: Digital Imaging and the Related Technologies

08:30-11:15, Meeting Room 302 A

Session Chairs: Eric G. Hanson, Hewlett-Packard co.; Zhanglin Zhou, Hewlett-Packard Company; Bingfeng Zhou, Peking University

8:30-9:00 OA 025 (Keynote Speech)

**The Transformation of Commercial Printing by Digital Printing Processes**, Eric Hanson (Director, Commercial Printing Engine Lab, HP Labs Former President of IS&T; USA)

9:00-9:15 OA 026 (#271)

**Non-Linear Edge-adaptive Image Zooming Method based on Radial Basis Function**, Jungho Yoon<sup>1</sup>, Sang-Ah Lee<sup>1</sup>, and Yeon Ju Lee<sup>2</sup> (<sup>1</sup>Ewha W. University and <sup>2</sup>KAIST; S. Korea)



9:15-9:30 OA 027 (#169)

**An Environmentally Benign General Deinking Approach**, Hou T. Ng, Manoj K. Bhattacharyya, Laurie S. Mittelstadt, and Eric G. Hanson (Hewlett-Packard co.; USA)

9:30-9:45 OA 028 (#47)

**A Method for Calculating Similarity among Glyphs Using Cross Correlation**, Tao He<sup>1</sup>, Jie Feng<sup>1</sup>, Bingfeng Zhou<sup>1</sup>, Zhigang Fan<sup>2</sup>, and Francis Kapo Tse<sup>2</sup> (<sup>1</sup>Peking University; China and <sup>2</sup>Xerox Corporation; USA)

9:45-10:00 OA 029 (#26)

**Novel Digital Media with Electronic Inks**, Zhang-Lin Zhou<sup>1</sup>, Jong-Souk Yeo<sup>2</sup>, Jeff Mabeck<sup>2</sup>, Gregg Combs<sup>2</sup>, Dick Henze<sup>1</sup> and Tim Koch<sup>2</sup> (<sup>1</sup>Hewlett-Packard Laboratories and <sup>2</sup>Hewlett-Packard Company; USA)

10:00-10:15

Tea Break

10:15-10:30 OA 030 (#109)

**The Design and Application of the Digital Printing Test Target**, Taolin Ma, Qun Zhan, and Xiaoyan Lu (Wuhan University; China)

10:30-10:45 OA 031 (#203)

**Print Color Control and Quality Standardization Measuring System**, Zhen Liu<sup>1</sup> and Shengwei Yang<sup>2</sup> (<sup>1</sup>University of Shanghai for Science and Technology and <sup>2</sup>Nanjing Forestry University; China)

10:45-11:00 OA 032 (#137)

**Research on Dot Compensation Method of Digital Image**, Haiwen Wang<sup>1,2</sup>, Guangxue Chen<sup>1</sup>, and Jie Li<sup>3</sup> (<sup>1</sup>South China University of Technology, <sup>2</sup>Zhejiang University of Science and Technology, and <sup>3</sup>College of Quzhou; China)

11:00-11:15 OA 033 (#274)

**Implementing Colour Appearance and Local Adaptation in Digital Photography**, Iain Gibson\*, Phil Green (London College of Communication; UK)

## Track B: Color Science & Technology/Evaluation Methods

08:30-10:45, Meeting Room 302 B

Session Chairs: Zhigang Fan, Xerox; Akin Ecer, Technalysis, Inc.;

Liyuan Wang, Beijing Normal University

8:30-8:45 OB 025 (#7)

**Computer Simulation of Mixing of Toners in EP Processes**, Akin Ecer, V. Rubek and K. Arican (Technalysis, Inc.; USA)

8:45-9:00 OB 026 (#15)

**Emissive Semi-Interpenetrating Polymer Network for OLED Displays**, Lihua Zhao, Zhanglin Zhou, James Brug, Sity Lam, Gary Gibson and Richard Elder (Hewlett-Packard Company; USA)

9:00-9:15 OB 027 (#182)

**Active Paper Surface Components and Their Relationship to Promoting Ink-Paper Adhesion**, Manoj K. Bhattacharyya<sup>1</sup>, Sivapackia Ganapathiappan<sup>1</sup>, Hou T. Ng<sup>1</sup>, Bruce Jackson<sup>2</sup>, Stanley D. Morse<sup>2</sup>, Marc Aronhime<sup>2</sup>, and Eric G. Hanson<sup>1</sup> (<sup>1</sup>Hewlett-Packard co.; USA and <sup>2</sup>HP-Indigo R&D; Israel)

9:15-9:30 OB 028 (#78)

**Color Electronic Paper Based on Particle Control Technologies**, Takashi Kitamura (Chiba University; Japan)

9:30-9:45 OB 029 (#146)

**Application of Artificial Neural Network in CCD Device Characterization for Press Colors**, Ge Guo and Yanfang Xu (Beijing Institute of Graphic Communication; China)

9:45-10:00 OB 030 (#44)

**Research on Dot Reproduction Characteristics in CTcP and CTF Platemaking Processes**, Wenyan Jiang<sup>1</sup>, Lili Si<sup>1</sup> and Dongyin Zhao<sup>2</sup> (<sup>1</sup>Zhejiang University of Science and Technology and <sup>2</sup>Zhejiang IMGS Printing CO., LTD; China)

10:00-10:15

Tea Break

10:15-10:30 OB 031 (#114)

**Influence of Coating Paper Properties on Sharpness of Ink-jet Printing Image**, *Jinglei Tai, Guangxue Chen, Qifeng Chen, and Baoling Tang (South China University of Technology; China)*

10:30-10:45 OB 032 (#113)

**Study of Anti-Counterfeit Background Lines Model**, *Taolin Ma, Haiyan Zhou, and Congcong Zhao (Wuhan University; China)*

### **Track E: Digital Imaging and the Related Functional Materials**

**08:30-11:00, Meeting Room 303 A**

*Session Chairs: Ming-Kai Tse, Quality Engineering Associates (QEA), Inc.; Makoto Omodani, Tokai University; Xuanming Duan, Technical Institute of Physical Chemistry, CAS*

8:30-8:45 OE 001 (#270)

**Fatigue on Electronic Paper, Display, and Paper with Free and Fixed Handling Styles**, *Makoto Omodani and Sonomi Inoue (Tokai University; Japan)*

8:45-9:00 OE 002 (#197)

**Preparation and Study of Photoswitchable Fluorescence Nanoparticles Based on Spirobenzopyran**, *Liang Ming, Qing Zhang, Minzhao Xue, Qiaorong Sheng, and Yangang Liu (Shanghai Jiaotong University; China)*

9:00-9:15 OE 003 (#208)

**Modified Error Diffusion Algorithm for Edge Enhancement Based on Local Contrast of Input Images**, *Xiaoxia Wan, Dehong Xie and Jinlin Xu (Wuhan University; China)*

9:15-9:30 OE 004 (#257)

**Imaging Performance of the Thermal CTP Plate**, *An Yang, Weimin Zhang, and Jialing Pu (Beijing Institute of Graphic Communication; China)*

9:30-9:45 OE 005 (#225)

**Miniemulsion Polymerization and Characterization of Spirobenzopyran-based Photochromic Nanoparticles**, *Qing Zhang, Liang Ming, Lingyan Gu, Qiaorong Sheng, Minzhao Xue, and Yangang Liu (Shanghai Jiaotong University; China)*

9:45-10:00 OE 006 (#258)

**Syntheses and Application of Novel Acid Proliferation Generators: Resocin[4]arene as Core**, *Wenguang Wang, Ling Liu, Weimin Zhang, and Jialing Pu (Beijing Institute of Graphic Communication; China)*

**10:00-10:15**

**Tea Break**

10:15-10:30 OE 007 (#261)

**Progress of Multi-Photon Polymerization toward Micro/Nanostereolithography**, *Xianzi Dong, Feng Jin, Weiqiang Chen, Zhensheng Zhao and Xuanming Duan (Chinese Academy of Sciences; China)*

10:30-10:45 OE 008 (#259)

**A New Spectral Clustering Analysis Method Based on First Derivative**, *Xiaoxia Wan and Qiang Liu (Wuhan University; China)*

10:45-11:00 OE 009 (#92)

**Synthesis of New Hybrid Monomers Containing Vinyl Ether and (Methyl) Acryloyl Groups**, *Cuimei Diao and Yingquan Zou (Beijing Normal University; China)*



# 6. Interactive Presentation Session

Saturday, May 15 13:30-16:30 p.m.

Track A: Color Science and Technology for Digital Imaging Systems

PA001 #121

**Quantifying Smoothness of the LUTs-based Color Transformations**, Zhaohui Wang, Anna Aristova, and Jon Yngve Hardeberg, *Gjøvik University College (Norway)*

PA002 #2

**Comparison of Preferred Flesh Color between Japan and China**, Ying Fan, Pei Deng, Nokazu Aoki, and Hiroyuki Kobayashi, *Chiba University (Japan)*

PA003 #185

**G7 Methodology in the Application of Offset Printing**, Tao Meng<sup>1</sup>, Xudong Wang<sup>2</sup>, Wan Zhang<sup>1</sup>, and Haoxue Liu<sup>1</sup>; <sup>1</sup>Beijing Institute of Graphic Communication and <sup>2</sup>C&C Joint Printing Co., (China)

PA004 #53

**Digital Imaging Giving a Taste of the Silver Halide Photography**, Miaomiao Liu, Nokazu Aoki, and Hiroyuki Kobayashi, *Chiba University (Japan)*

PA005 #54

**Angle Estimation based on Image Pyramid and Gray Projection**, Ying Mai, Hongying Zhao, and Lei Yan, *Peking University (China)*

PA006 #33

**Solid-state Fluorescence Properties of Free-standing poly(Phenoxy-alkyl-bridged Dicarbazole)Film**, Shuai Chen, Jingkun Xu, Baoyang Lu, fangfang Kong and Xuemin Duan, *Jiangxi Science and Technology Normal University (China)*

PA007 #133

**Data Dissemination and Visualization Browsing of Digital Map Based on Web**, Guangxue Chen<sup>1</sup>, Xiaozhou Li<sup>1,2</sup>, Xiaomeng Cui<sup>1</sup>, and Haiwen Wang<sup>1,3</sup>; <sup>1</sup>South China University of Technology, <sup>2</sup>Shandong Institute of Light Industry and <sup>3</sup>Zhejiang University of Science and Technology (China)

PA008 #136

**Improvement of Rational Tangent Screening Algorithm**, Haiwen Wang<sup>1,2</sup>, Guangxue Chen<sup>1</sup>, and Jie Li<sup>3</sup>; <sup>1</sup>South China University of Technology, <sup>2</sup>Zhejiang University of Science and Technology and <sup>3</sup>College of Quzhou (China)

PA009 #149

**Research into Digital Watermark Algorithm Based on Wavelet Domain**, Guangxue Chen, Baoling Tang, Qifeng Chen, Jinglei Tai, and Gang Chen, *South China University of Technology (China)*

PA010 #152

**Mosaic Information Format Conversion of RS Image and Application**, Jieli Song, Hui Wang, Xuelian Sui, Fan Zhang, *Youth Committee of CSIST (China)*

PA011 #247

**A Study on Processing Fingerprint Images**, Zong-xuan WU and Shigeru KITAKUBO, *Nippon Institute of Technology (Japan)*

PA012 #110

**Research of Dot Percentage Detection Method Based on Digital Image Processing**, Zhihui Li, Wanyou Tang, and Zhiguo Yu, *Tianjin University of science & Technology (China)*

PA013 #111

**The Application of HDRI Technology in Forensic Photography**, Chunbing Zhou and Peng Sun, *China Criminal Police University (China)*

PA014 #69

**Generation of Digital Screen with Special Effect and Screening of Image**, Yang Jin<sup>1,2</sup>, Zhen Liu<sup>3</sup>, Wuguang Zhu<sup>3</sup>; <sup>1</sup>Beijing Institute of Graphic Communication, <sup>2</sup>Nanjing Forestry University, <sup>3</sup>University of Shanghai for Science and Technology, and <sup>4</sup>The Commercial Press (China)

PA015 #70

**Study on Generation of Threshold-Array with Line Directions based on Space Filling Curve for Line-art Screening**, Yang Jin<sup>1,2</sup>, Zhen Liu<sup>3</sup>, Lei Zhang<sup>2</sup>, and Dongping Pan<sup>2</sup>; <sup>1</sup>Nanjing Forestry University, <sup>2</sup>Beijing Institute of

- Graphic Communication and <sup>3</sup>University of Shanghai for Science and Technology (China)  
PA016 #39
- Dynamic Analysis and Technique Study on Stainless Steel Electrolytic Polishing Used for Flexible Display**, Jian Leng, Wei Xue, Zhinong Yu, Dongpu Zhang, and Yuqiong Li, Beijing Institute of Technology (China)  
PA017 #36
- Electrosyntheses of Polyacrylate Functionalized Polyfluorene Network Films with Good Fluorescence Properties**, Zhaojin Zhu<sup>1,2</sup>, Jiong Wang<sup>1,2</sup>, Jingkun Xu<sup>1</sup>, and Meishan Pei<sup>2</sup>; <sup>1</sup>Jiangxi Science Technology Normal University and <sup>2</sup>University of Jinan (China)  
PA018 #202
- Effect of Dye Amount on the Image Density Property of Heat Sensitive Microcapsule Material**, Xiaowei Li, Bing Bai, Weidong Lai, Xiaodong Tian, and Guangsheng Fu, Hebei University (China)  
PA019 #32
- Fluorescent Oligopyrenes via Electropolymerization**, Baoyang Lu, Yuzhen Li, and Jingkun Xu, Jiangxi Science and Technology Normal University (China)  
PA020 #43
- Research of Digital Image Acquisition and Transmission of CCD Camera Based on GigE Interface**, Weiqiong Cao<sup>1,2</sup>, Lei Yan<sup>1</sup>, Qiyuan Chen<sup>2</sup>, and Bo Li<sup>1</sup>; <sup>1</sup>Peking University and <sup>2</sup>Beijing Institute of Technology (China)  
PA021 #212
- Image Quality Quantification on Mobile Camera**, Phichit Kajondecha, King Mongkut's University of Technology Thonburi (Thailand)  
PA022 #35
- Electrosynthesis of an Excellent Green-light-emitting Polyfluorene Derivative**, Jiong Wang<sup>1,2</sup>, Zhaojin Zhu<sup>1,2</sup>, Jingkun Xu<sup>1</sup>, and Meishan Pei<sup>2</sup>; <sup>1</sup>Jiangxi Science Technology Normal University and <sup>2</sup>University of Jinan (China)  
PA023 #268
- Nonreproducible Protective Images**, Yury Sergeevich ANDREEV, Moscow State University of Printing Arts (Russia)  
PA024 #213
- Analysis of Printed Quality in Print On Demand Industry in Thailand**, Phichit Kajondecha, Nitus Tipsotnaiyana, and Sakulthip Santichaianant, King Mongkut's University of Technology Thonburi (Thailand)  
PA025 #88
- Research on Detection and Evaluation Method of Print Quality Based on the CCD Information**, Weiguo Bai<sup>1,3</sup>, Chunli Qiu<sup>2</sup>, Jian Zhang<sup>2</sup>, and Yan Yan<sup>3</sup>; <sup>1,3</sup>Nanjing Forestry University and <sup>2</sup>Jiangsu Kingstar Technology Co.,Ltd. (China)  
PA026 #3
- An Integrated Education Using Photography**, Keiko SUZUKI, Nokazu AOKI, and Hiroyuki KOBAYASHI, Chiba University (Japan)  
PA027 #140
- Automatic Image Alignment in a Vein Contrast Enhancement System**, Yong Zhang, St. Jude Children's Research Hospital (USA)  
PA028 #31
- Electrochemical Fabrication of Novel Fluorescent Poly (pyrene-co-3-methylthiophene) Films**, Congcong Liu, Ruirui Yue, Xingcong Wang, Yuzhen Li, Jingkun Xu, and Guodong Liu, Jiangxi Science and Technology Normal University (China)  
PA029 #122
- Skills and Methods for Scanning Digitization of Papery Maps**, Xia Hong, Geng Xie, Qing Zhai, Huping Cui and Jie Zhang, Information Engineering University (China)  
PA030 #95
- Analysis to the Ba-Al-S:Eu Single Sputtering Target Fabricated by Powder Sintering**, Dongpu Zhang, Wei Xue, Zhinong Yu, Jian Leng, Wuyu Wang and Xiaoke Shi, Beijing Institute of Technology (China)  
PA031 #17
- Nano-print to Plate Technology**, Haihua Zhou and Yanlin Song, Chinese Academy of Sciences (China)  
PA032 #160
- The Effects of PVA Dosages on Performances of Color Ink-jet Printing**, Yunzhi Chen, Lina Guo, and Ting Zhu, Tianjin University of science and technology (China)  
PA033 #157
- A Study of Piezoresistive Effect of Pressure-sensitive Conductive Composite Materials**, Wen Zhao, Luhai Li, Zhiqing

*Xin, Xiaojun Tang, and Peng Du, Beijing Institute of Graphics Communication (China)*

PA034 #22

**Facile Electrosyntheses of Conducting Copolymers with Tunable Fluorescence Properties**, Ruirui Yue, Yuzhen Li, Xingcong Wang, Baoyang Lu, Guodong Liu, and Jingkun Xu, Jiangxi Science and Technology Normal University (China)

PA035 #41

**The Effect of a Tertiary Amine Oxide on the Performance of a Thermo-sensitive Polymer Film**, Zhongxiao Li, Wukun Fan, and Jialing Pu, Beijing Institute of Graphic Communication (China)

PA036 #52

**Investigation on Impression of Flesh Colors in Japan and China**, Pei Deng, Nokazu Aoki, and Hiroyuki Kobayashi, Chiba University (Japan)

PA037 #148

**Application of Digital Watermarking on Security Printing**, Baoling Tang, Guangxue Chen, Haisheng Chen, Qifeng Chen, and Jinglei Tai, South China University of Technology (China)

PA038 #246

**Extracting the Regions of Cumulonimbi from Satellite Images**, Yoshinori OGAWA and Shigeru KITAKUBO, Nippon Institute of Technology (Japan)

PA039 #37

**Electrosyntheses of a Novel Blue-Light-Emitting Polynaphthalene Film**, Guang Zhu, Yuzhen Li, Baoyang Lu, Yao Huang, Shuai Chen, and Jingkun Xu, Jiangxi Science and Technology Normal University (China)

PA040 #20

**Characteristic of A New Inhibitational /Accelerational Phenolic Resin Used to the Thermosensitive CTP Performance**, Xuzheng Sha, and Yingquan Zou, Taixing City Orient Industrial Company (China)

PA041 #150

**Using a Digital Camera for Measuring Viewing Parameters on Image Appearance**, Chenyang Fu and M Ronnier Luo, University of Leeds (UK)

PA042 #151

**Effects of Coating Components on Image Water Resistance for Eco Ink-jet Paper**, Zhiqiang Fang, Gang Chen, Jiajun Zhen, Xinsheng Chai, and Guangxue Chen, South China University of Technology (China)

## **Track B: Digital and On-demand Printing/Publishing Technologies and Systems**

PB001 #87

**Research on the Visualization Process of Ink Droplets Infiltrating and Diffusing in the Substrate in Inkjet Imaging System**, Qifeng Chen, Guangxue Chen, Baoling Tang, and Jinglei Tai, South China University of Technology (China)

PB002 #72

**Quality Control of Newspaper Color Advertisements Using Color Patches Printed in the Newspaper**, Masaya Shibata<sup>1</sup>, Nokazu Aoki<sup>2</sup>, and Hiroyuki Kobayashi<sup>2</sup>; <sup>1</sup>The Niigata Nippo and <sup>2</sup>Chiba University (Japan)

PB003 #215

**Optimization and Design of Laser Dense Fiber of Thermal CTP**, Jing Fan<sup>1</sup>, Jiefang Xing<sup>1</sup>, Yanwen Bai<sup>2</sup>, and Kangying Cheng<sup>2</sup>; <sup>1</sup>Nanjing Forestry University and <sup>2</sup>Shanghai Basch Printing Equipment Int'l Trading Co., Ltd.(China)

PB004 #209

**Up-scaling Method of Images Based on Fractal Theory**, Liqin Cao, Pingxiang Li, and Liangpei Zhang, Wuhan University (China)

PB005 #159

**A New Spectral Reflection Model with Ink Spreading in Inkjet Hardcopy of Halftone Image**, Xiaoxia Wan, Zhen Liu and Xinguo Huang, Wuhan University (China)

PB006 #63

**Preparation of Silver Electro-conductive Inkjet Inks**, Jun Natsuki and Takao Abe, Shinshu University (Japan)

PB007 #134

**Research on the Coating's Aging Performance of the Ink-jet Printing Paper**, Gang Chen, Zhiqiang Fang, Jiajun Zhen, Yanliang Wu, and Guangxue Chen, South China University of Technology (China)

- PB008 #85  
**Evaluation on the Color Reproduction Capability of Digital Printers**, Lingjun Kong and Zhongmin Jiang, University of Shanghai for Science and Technology (China)
- PB009 #127  
**Investigation on Generating Technology of Ink Presetting Based on 1-bit Tiff Image**, Kai Li<sup>1</sup>, Shujuan Zhou<sup>2</sup>, and Guoneng Li<sup>1</sup>; <sup>1</sup>Zhejiang University of Science and Technology and <sup>2</sup>Hainan Huasen Printing Co., Ltd. (China)
- PB010 #183  
**Polymeric Coagulant in Industrial Radiographic Film**, Shuqiang Liu and Xiaomeng Shi, Tianjin Media Imaging Materials Co., Ltd. (China)
- PB011 #156  
**The Application of the Digital Image Processing Technology in the Ink Control System**, Zhiguo Yu, Wanyou Tang and Zhihui Li, Tianjin University of Science & Technology (China)
- PB012 #1  
**The Importance of Digital Intermediate and Its Production**, Shanbao Weng<sup>1</sup> and Huiyu Fu<sup>2</sup>, <sup>1</sup>Shanghai Film Technology Plant, and <sup>2</sup>Shanghai Second Polytechnic University (China)
- PB013 #193  
**Synthesis of Novel Prepolymers for Aqueous Alkalisoluble Negative Photoresist**, Ning Chen, Ren Liu, Pengfei Liu, Chun Xun, Shengwen Zhang, and Xiaoya Liu, Jiangnan University (China)
- PB014 #139  
**A Simple Gamut Mapping Method Based on BP Neural Network**, Lei Zhao<sup>1</sup> and Baoling Tang<sup>2</sup>; <sup>1</sup> Hangzhou Dianzi University, and <sup>2</sup> South China University of Technology (China)

### Track C: Novel Imaging and Related Functional Materials

- PC001 #99  
**Rewritable Polarization Optical Memories and Optoelectronic Properties of a New Isomeric Diarylethene**, Congbin Fan, Shouzhi Pu, Gang Liu, Weijun Liu and Shiqiang Cui, Jiangxi Science & Technology Normal University (China)
- PC002 #62  
**Hybrid Photochromic Trigger**, V.N.Zakharov, I.K.Kudryavtsev, and L.A. Aslanov, Moscow State University (Russia)
- PC003 #94  
**Study on Preparation and Printing Performance on Water-based Pressure Sensitive Adhesive Ink-jet Ink**, Peng Du, Luhai Li, Xiaojun Tang, Zhiqing Xin, Wen Zhao, and Pingxiu Ni, Beijing Institute of Graphic Communication (China)
- PC004 #102  
**Synthesis, Properties and Holographic Optical Recording of a Photochromic Diarylethene Having a Pyrrole Unit**, Gang Liu, Shouzhi Pu, Congbin Fan, and Weijun Liu; Jiangxi Science & Technology Normal University (China)
- PC005 #162  
**Preparation and Application of Cu and Cu<sub>2</sub>O Nanoparticles as Stabilizer-free Metal Nano-ink for Printable Electronics**, Mitsuo Kawasaki, Kyoto University (Japan)
- PC006 #164  
**Spectral Properties and Structures of the J-Aggregates of Cyanine Dye**, Tao Meng<sup>1</sup>, Linghua Kang<sup>2</sup>, Hui Zhou<sup>1</sup>, Ao Zhang<sup>1</sup>, Xiaowei Li<sup>3</sup>, and Jing Zou<sup>2</sup>; <sup>1</sup>Beijing Institute of Graphic Communication, <sup>2</sup>China Lucky Film Co., and <sup>3</sup>Hebei University (China)
- PC007 #117  
**Photochromic Properties and Application for Optical Recording of a Photochromic Diarylethene Bearing a Indole Group**, Anyin Chen<sup>1,2,3</sup>, Shouzhi Pu<sup>1</sup>, Peijian Yan, Zhanggao Le<sup>2</sup>, and Gang Liu<sup>1</sup>; <sup>1</sup>Jiangxi Science & Technology Normal University, <sup>2</sup>Sichuan University of Arts and Science and <sup>3</sup>East China Institute of Technology (China)
- PC008 #177  
**Sensitivity and Sensitization of Silver Bromide Grains of Octahedral Sharp Doped with Oxalate Ions**, Wangjing Ma<sup>1</sup>, Zhi Li<sup>1</sup>, Peicheng Duan<sup>1</sup>, Yanyan Zhao<sup>1</sup>, Xinmin Yang<sup>1</sup>, and Wei Ju<sup>2</sup>; <sup>1</sup> Chinese Academy of Sciences and <sup>2</sup>New Material Institute of Shandong Academy of Sciences (China)

- PC009 #178  
**Sensitization of Cubo-octahedral Silver Bromide Emulsion Doped with Oxalate**, Wangjing Ma, Yao Shi, Yanyan Zhao, Peicheng Duan, and Xinmin Yang, Qiuyan Li, Chinese Academy of Sciences (China)
- PC010 #179  
**The Mechanism of Silver Forming in AAO Template by Photography**, Wei Ju<sup>1</sup>, Jinpei Li<sup>2</sup>, Wangjing Ma<sup>2</sup>, Fangzhi Zhang<sup>1</sup>, QiuHong Mu<sup>1</sup>, and Hua Liu<sup>2</sup>; <sup>1</sup>New Material Institute of Shandong Academy of Sciences and <sup>2</sup>Chinese Academy of Sciences (China)
- PC011 #104  
**A Novel Diarylethene with Photochromic and Optical Storage Properties**, Weijun Liu, Shouzhi Pu, Congbin Fan, Gang Liu, and Shiqiang Cui, Jiangxi Science & Technology Normal University (China)
- PC012 #198  
**High-mobility Organic Field-effect Transistors Based on Soluble Small Molecules Dispersed Polymers**, Shogo Wakuta<sup>1</sup>, Hideyuki Hatta<sup>1</sup>, Masashi Yoshikawa<sup>1</sup>, Takashi Nagase<sup>1,2</sup>, Takashi Kobayashi<sup>1,2</sup>, Masaaki Ikeda<sup>3</sup>, Kazuo Takimiya<sup>4</sup>, and Hiroyoshi Naito<sup>1,2</sup>; <sup>1,2</sup> Osaka Prefecture University, <sup>3</sup> Functional Chemicals R&D Laboratories Nippon Kayaku Co., Ltd., and <sup>4</sup> Hiroshima University (Japan)
- PC013 #106  
**Synthesis, Properties and Application in Holographic Recording of a New Asymmetrical Diarylethene**, Renjie Wang, Shouzhi Pu, Congbin Fan, Hongying Xia, and Shiqiang Cui, Jiangxi Science & Technology Normal University (China)
- PC014 #239  
**Synthesis and Properties of a Photochromic Diarylethene Having Two Fluorine Atoms**, Liqin Wang, Shouzhi Pu, Gang Liu, Congbin Fan, and Shiqiang Cui, Jiangxi Science & Technology Normal University (China)
- PC015 #144  
**The Effects of Phthalazine on Photothermographic Materials Based on Silver Benzotriazole**, Yao Shi, Zhi Li, and Wangjing Ma, Chinese Academy of Science (China)
- PC016 #129  
**Preparation and Properties of a Few Kinds of Sulfonium Salt Photoacid Generators**, Juan Liu, Zheng Wang, and Liyuan Wang, Beijing Normal University (China)
- PC017 #108  
**Synthesis, Photochromic Property and Application for Optical Recording of A New Asymmetrical Diarylethene**, Peijian Yan, Shouzhi Pu, Gang Liu, and Weijun Liu, Jiangxi Science & Technology Normal University (China)
- PC018 #93  
**Study of the Synthesis and the Characteristic of Diazo-resins used in the Negative PS Plate**, Jianguo Wang, Liangju Kuang, and Yingquan Zou, Beijing Normal University (China)
- PC019 #126  
**Electrochemical Polymerization of a New o-Phenoxy-hexyl Dicarbazole and Fluorescence of its Cross-linking Network Polymer**, Yao Huang, Guang Zhu, Shuai Chen, Yuzhen Li, and Jingkun Xu, Jiangxi Science & Technology Normal University (China)
- PC020 #101  
**A New Photochromic Diarylethene for Polarization Optical Recording Based on a Five-membered and Six-membered Aryl Unit**, Hui Li, Shouzhi Pu, Gang Liu, and Weijun Liu, Jiangxi Science & Technology Normal University (China)
- PC021 #237  
**Preparation and Photo-curing Property of the Optical-thermal Sensitive Microcapsule Material**, Weidong Lai, Xiaowei Li, Xinzhen Li, and Guangsheng Fu, Huaibei Coal Industry Teachers College (China)
- PC022 #49  
**Poly (3-hexylthiophene)-Based Field-Effect Transistors with Silsesquioxane Gate Insulators**, Kenji Tomatsu<sup>1</sup>, Takashi Hamada<sup>1,4</sup>, Takashi Nagase<sup>1,4</sup>, Saori Yamazaki<sup>1,4</sup>, Takashi Kobayashi<sup>1,4</sup>, Shuichi Murakami<sup>2,4</sup>, Kimihiro Matsukawa<sup>3,4</sup>, and Hiroyoshi Naito<sup>1,4</sup>; <sup>1</sup> Osaka Prefecture University, <sup>2</sup> Technology Research Institute of Osaka Prefecture, <sup>3</sup> Osaka Municipal Technical Research Institute and <sup>4</sup> Japan Science and Technology Agency (Japan)
- PC023 #105  
**Synthesis and Optoelectronic Properties of a Photochromic Diarylethene Having a Pyrrole Moiety**, Wenjuan Miao, Shouzhi Pu, Congbin Fan, and Gang Liu, Jiangxi Science & Technology Normal University (China)



- PC024 #214  
**The Effect of Azobenzene-Substituted Phthalocyanine Structures on Their Photo-Controllable J-aggregate Formation**, Xinyu Zhou, Cheng Zhong, Lihong Niu, Huaping Huang, Zihui Chen, and Fushi Zhang, Tsinghua University (China)
- PC025 #184  
**Colorimetric Characteristics of Green Organic Light-emitting Diodes with Varied Thickness of Emission Layer**, Youn Goo Kim, Du Yeong Lee, Jung-Hyun Seo, and Kyeong-Kap Paek, Daejin University (Korea)
- PC026 #116  
**Synthesis of A New Photochromic Diarylethene with Hexatomic Ring Aryl for Optical Storage**, Shiqiang Cui, Shouzhi Pu, Gang Liu, and Weijun Liu, Jiangxi Science & Technology Normal University (China)
- PC027 #147  
**Study of a Novel Photochromic Diarylethene Dimer with Stable Colored State Only**, Jiayang Yi, Guangfei Tan, Zihui Chen, and Fushi Zhang, Tsinghua University (China)
- PC028 #100  
**Syntheses and Properties of an Unsymmetrical Photochromic Diarylethene with a Dimethylamino Group**, Duohua Jiang, Shouzhi Pu, Weijun Liu, and Wenjuan Miao, Jiangxi Science & Technology Normal University (China)
- PC029 #231  
**Nano-patterns Based on Novel Cadmium Phthalocyanines via Controllable Assembling and Disassembling**, Fang Dong, Dongfeng Zheng, Zihui Chen, Peng Zhao, and Fushi Zhang, Tsinghua University (China)
- PC030 #244  
**Photodegradation Dynamics of Polyfluorene Thin Films Studied by Means of Photoluminescence Spectroscopy**, Masanori Nakagawa, Takashi Kobayashi, Takashi Nagase, and Hiroyoshi Naito, Osaka Prefecture University (Japan)
- PC031 #229  
**Improvement on Spatial Resolution and Photosensitivity of Red-sensitive Photopolymer for Holographic Applications**, Yi Hao, Jianhua Zhu, Guixi Wang, Qianqian Chen, and Qirui Chen, Sichuan University (China)
- PC032 #8  
**Crosslinked Microparticle Preparation in Supercritical Carbon Dioxide with Photopolymerization**, Zhun Meng, Pengzong Liang, Yong He, and Jun Nie, Beijing University of Chemical Technology (China)
- PC033 #107  
**A Novel Photochromic Diarylethene Based on Five and Six Aryl Units for Polarization Optical Recording**, Taofeng Wang, Shouzhi Pu, Shiqiang Cui, and Gang Liu, Jiangxi Science & Technology Normal University (China)
- PC034 #14  
**The Research and Preparation of UV Curing Super Abrasion Resistant Optical Coatings**, Jianbo Lü and Jingmin Zhao, China Lucky Film Group Corporation (China)
- PC035 #191  
**Electric-Field-Induced Aggregation of Photosensitive Micelles to Secondary Assembly Films and Study for its Photoimaging Properties**, Ren Liu, Fenlei An, Chunlin Wang, Shengwen Zhang, and Xiaoya Liu, Jiangnan University (China)
- PC036 #103  
**Synthesis, Properties and Application in Optical Memory of a Photochromic Diarylethene Bearing Fluorine Atoms**, Ming Liu, Shouzhi Pu, Gang Liu, Congbin Fan, and Shiqiang Cui, Jiangxi Science & Technology Normal University (China)
- PC037 #64  
**Zoom-imaging of the Mural Painting in the Royal Tomb of Amenophis III**, Masao Inui<sup>1</sup>, Machiko Sato<sup>1</sup>, Masaru Kato<sup>1</sup>, Takao Kikuchi<sup>2,3</sup>, and Sakuji Yoshimura<sup>2,3</sup>; <sup>1</sup>Tokyo Polytechnic University, <sup>2</sup>Cyber University and <sup>3</sup>Waseda University (Japan)
- PC038 #89  
**High-Speed and High-Quality Pixels Transformation Method for Binary Image Base on Projection**, Ken Kanamatsu, Nokazu Aoki, and Hiroyuki Kobayashi, Chiba University (Japan)
- PC039 #251  
**Influence of Inhibitor on the Curing Rate of UV-curable Flexo Ink**, Yanni Yan, Beiqing Huang, Xianfu Wei, and Xiaoxue Jia, Beijing Institute of Graphic Communication (China)
- PC040 #252  
**Study on the Influence of Monomers on the Characteristics of Water-base UV Varnish**, Xiaofang Wang, Xianfu Wei, and Beiqing Huang; Beijing Institute of Graphic Communication (China)

- PC041 #256  
**The Crosslinked Properties of Inorganic Oxide Photoreceptor and its Xerographic Performance**, Weimin Zhang, Weiye Xia, and Jialing Pu; *Beijing Institute of Graphic Communication (China)*
- PC042 #190  
**Photopolymerization Characteristics of Hyperbranched Photosensitive Polysiloxane Urethane Acrylates**, Fang Sun and Shengling Jiang, *Beijing University of Chemical Technology (China)*
- PC043 #192  
**Influence of Photoinitiator on the Stability of UV Flexo Ink**, Xiaoxue Jia, Beiqing Huang, Yanni Yan, Xiaochun Ren, and Xianfu Wei, *Beijing Institute of Graphic Communication (China)*
- PC044 #194  
**The Effect of Monomer on UV Inkjet Ink's Dynamic Viscoelasticity**, Wan Zhang, Xianfu Wei, Beiqing Huang, and Pingxiu Ni, *Beijing Institute of Graphic Communication (China)*
- PC045 #195  
**The Effect of Photoinitiator on the Curing Rheological Behavior of the UV-curable Inkjet Ink**, Pingxiu Ni, Xianfu Wei, Beiqing Huang, and Wan Zhang, *Beijing Institute of Graphic Communication (China)*
- PC046 #196  
**Influence of Pigment on the Property of UV Ink**, Beiqing Huang, Xianfu Wei, Yanni Yan, Xiaoxue Jia, and Xiaochun Ren, *Beijing Institute of Graphic Communication (China)*
- PC047 #232  
**Resolution Limitation Analysis in Image Processing**, Zhihui Li<sup>1,2</sup>, Yongqiang Wang<sup>2</sup>, Silong Peng<sup>1</sup>, Xiaojing Xu<sup>2</sup>, and Bo Xuan<sup>1</sup>; <sup>1</sup>Chinese Academy of Sciences and <sup>2</sup> Ministry of Public Security (China)
- PC048 #253  
**The Study on Luminescence Property of Blue Fluorescent Inkjet Ink**, Lijuan Liang, Beiqing Huang, Xianfu Wei, and Furong Wang, *Beijing Institute of Graphic Communication (China)*
- PC049 #254  
**Influence of the Pigment Dispersion on the Printability of Water-based Plastic Gravure Ink**, Yingjie Xu, Xianfu Wei, Beiqing Huang, and Xiaoxue Jia, *Beijing Institute of Graphic Communication (China)*
- PC050 #260  
**Novel Photoinitiators for Microfabrication of Two-Photon Induced Polymerization**, Weier Lu, Xianzi Dong, Weiqiang Chen, and Xuanming Duan; *Chinese Academy of Sciences (China)*
- PC051 #265  
**The Effect of DSLR Factor-setting upon Image Resolution**, HongChen Yang, Wei Zhang and Xianli Do, *China Criminal Police University (China)*
- PC052 #61  
**A Precision Coating System Involved Elastohydrodynamic**, Yunjian Liu, Chengjun Xing, Chaoli Peng, and Jiuying Yan, *China Luckyfilm Group co., (China)*
- PC053 #277  
**The Synthesis and Mesophase of Benzoate-based Liquid Crystal Copolymer**, Chunxiu Zhang, Jialing Pu\*, Yanan Li, and Sun sha, *Beijing Institute of Graphic Communication (China)*
- PC054 #278  
**The Studies on Synthesis and Mesophases of Polysiloxane Liquid Crystals Using Benzoate and Chiral Molecules as Side Chains**, Chunxiu Zhang, Jialing Pu\*, Hao Wu, and Sun sha, *Beijing Institute of Graphic Communication (China)*
- PC055 # 262  
**Research Progress in Treatment of Image Disease**, Yuhu Li, Yajun Zhou, Shukun Shen, Xiaoli Qin, and Chenxi Zuo, *Shaanxi Normal University (China)*
- PC056 #77  
**Printed Electronics and Ink Jet Printing**, Luhai Li, Zhiqing Xin, Wen Zhao, Peng Du, Zeng Dan, and Bu Luo, *Beijing Institute of Graphic Communication(China)*

## 7. Instructions

● If you have any questions, please contact the on-site volunteers who could be identified with orange label or the Secretariat of ICIS2010 Organizing Committee. The list of Contact Person is as follows:

Participants from out of the mainland of China, please contact Ms. Melody Guan.

Ms. Melody Guan

Cell-Phone: (+86) 15901192007

Participants from the mainland of China, please contact Ms. Guiping Niu, Ms. Yan Wu and Ms. Yunxia Zhou

Ms. Guiping Niu

Cell-Phone: (+86) 13801298703

Ms. Yan Wu

Cell-Phone: (+86) 15810352975

Ms. Yunxia Zhou

Cell-Phone: (+86) 13811052381

The Secretariat of ICIS2010 Organizing Committee will be in Main Lobby of CNCC on May 12, L3 South Foyer on May 13, Meeting Room 208 A on May 14 and 15.

● Pick-up will be arranged from North Start Huiyuan Service Apartments --Yayuncun Hotel to China National Convention Center. Please get together by 07:45 every morning during May 12-16, 2010 at the lobby of North Start Huiyuan Service Apartments --Yayuncun Hotel.