Monday,	November	<i>10</i>
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09:30-10:00	Registration for short course (Muiti-Purpose hall, 1F)	
10:00-11:00	Short course A (in Japanese)	
	Introduction to near infrared spectroscopy	
	Satoru Tsuchikawa (Nagoya University, Japan)	
11 00 12 00		
11:00-12:00	Short course B (in Japanese) Pagin phomometries for poor infrared spectroscopy	
	Basic chemometrics for near infrared spectroscopy Takeshi Hasegawa (Tokyo Institute of Technology, Japan)	
	Takesin Hasegawa (Tokyo institute of Teelmology, Japan)	
12:00-13:00	Lunch (on your own)	
10:00-13:00	Symposium registration	
	Poster and exhibition installations (Multi-purpose hell and Room 101/102, 1F)	
	(Multi-purpose hall and Room 101/102, 1F)	
13:00-13:15	Opening address	
	Mutsuo Iwamoto (STAFF, Japan)	
	Chairman of Asian NIR Consortium	
	Yukihiro Ozaki (Kwansei Gakuin University)	
	Chairman of the Japan Council of Near Infrared Spectroscopy	
10 15 10 05	KARL NORRIS AWARD	
13:15-13:25 13:25-14:00	Ceremony for Karl Norris Award 2008 Lecture from the winner of Karl Norris Award 2008	
15:25-14:00	K01 : Near infrared instrument and calibration accuracy	3
	J.S. Shenk	3
	(The Pennsylvania State University, USA)	
14:00-14:35	KEYNOTE LECTURE	0
	K02 : Near infrared in the real world: Twenty years of feed and forage testing in Australia	9
	P. Flinn	
	(Kelspec Services Pty Ltd, Australia)	
	(Chairman of the International Council for Near Infrared Spectroscopy:	
	ICNIRS)	
	BUCHI AWARD	
14:35-14:45	Ceremony for Buchi Award 2008	
14:45-15:10	Lecture by the winner of Buchi Award 2008	10
	K03 : The use of near infrared spectroscopy and chemometrics for determining the shelf-life of products	19
	A.K. Pedro and M.M.C. Ferreira	
	(Unilever Category Technology Centre, Brazil)	
15:10-15:40	Coffee break and exhibition	

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15:40-15:55	COUNTRY REPORTS K04: Near infrared spectroscopy in China Mainland H. Yuan and X. Chu (Beijing University of Chemical Technology, Beijing, China)	31
15:55-16:10	K05 : An overview of research and development of near infrared spectroscopy in Japan Y. Ozaki (Kwansei-Gakuin University, Japan)	39
16:10-16:25	K06 : The status of near infrared spectroscopy in Korea R.K. Cho (Kyung-Pook National University, Korea)	43
16:25-16:40	K07: A review of research and development on the applications of near infrared spectroscopy in Thailand V. Haruthaithanasan, W. Thanapase and S. Kasemsumran (Kasetsart University, Thailand)	45
16:40-17.15	SPECIAL LECTURE K08: Communicating the science of near infrared spectroscopy Graeme Batten (Sea Spec Pty Ltd, Australia) Editor-in-Chief, Journal of Near Infrared Spectroscopy (JNIRS)	55
17:15-17:30	NIR-2009 Invitation to the 14 th International Conference of NIRS in Thailand (NIR-2009) in Bangkok, Thailand Warunee Thanapase (Kasetsart University, Thailand) and Sirinnapa Saranwong (National Food Research Institute, Japan)	
17:30-19:00 17:30-18:15 18:15-19:00	POSTER SESSION 1 (Please stand by your poster) Poster Number P01A-P22A Poster Number P01B-P22B	
19:00-21:00 19:00-19:45 19:45-21:30	BUCHI EVENING (All participants are welcome) Lectures (Room 201, 2F) Party (Room 202, 2F)	
17:30-18:30	Additional function Meeting for the Japan Council of Near Infrared Spectroscopy (JCNIRS) (The organizing committee members: Rijikai) (Room 301, 3F)	

Tuesday, November 11

08:00-08:30	Symposium registration	
08:30-08:40 08:40-09:05	NIR ADVANCE AWARD Ceremony for NIR Advance Award K09: The development of non-invasive methods for assessing skin and hair damages on near infrared diffuse reflectance spectroscopy Y. Miyamae,* Y. Yamakawa, M. Kawabata and Y. Ozaki (Pola Chemical Industries, Yokohama, Japan)	61
09:05-09:20	SESSION I: PHARMACEUTICALS O01: System actualization of online monitoring and controlling using near infrared spectroscopy for the extraction procedure of traditional Chinese medicine H. Yang, H. Song, Y. Shen, H. Ye, X. Zhang, J. Yao, J. Wang, J. Xu, Y. Wang and G. Luo (Tsinghua University, Beijing, China)	66
09:20-09:35	O02: Assessment of diffuse transmittance mode in near infrared quantification: The press effect on low-dose pharmaceutical tablets M. Saeed, J. Oelichmann and G. Betz (University of Bassel, Switzerland)	68
09:35-09:50	O03: A dual wavelength system for process understanding using near infrared, infrared spectra and chemometrics - For the effective process understanding at pharmaceutical process M. Watari and H. Higashiyama (Yokogawa Electric Corporation, Tokyo, Japan)	70
09:50-10:20	Coffee break and exhibitions	
10:20-10:35	SESSION II: WOODS/FABRICS O04: Fiber identification of blended fabrics and determination of blended ratios by the near infrared spectroscopy A. Shigetani, N. Yoshimura and M. Takayanagi (Tokyo University of Agriculture and Technology, Tokyo, Japan)	74
10:35-10:50	O05: Use of visible and near infrared spectroscopy to predict holocellulose content of bamboo, Chinese fir, paulownia and poplar A. Huang, Z. Jiang, G. Li, B. Fei and F. Fu (Chinese Academy of Forestry, Beijing, China)	76
10:50-11:05	O06: Development of a multi-site calibration model for kraft pulp yield prediction in standing trees R. Meder, G. Downes and N. Ebdon (CSIRO Plant Industry, Brisbane, Australia)	78

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11:05-11:20	O07: Near infrared spectroscopic monitoring of the diffusion process of deuterium-labeled molecules in thermal treated wood T. Inagaki and S. Tsuchikawa (Nagoya University, Nagoya, Japan)	80
11:20-12:00 11:20-12:00	POSTER SESSION 2 (Please stand by your poster) Poster Number P01C-P20C	
12:00-13:00	Lunch	
13:00-14:50	Company Presentation C01: BLTEC KK (Unity Scientific) C02: Bruker Optics KK C03: Nihon Buchi KK C04: IM Publications C05: JFE Techno-Research Corporation C06: M&S Techno Systems Inc (Camo) C07: Nireco (Foss NIRSystems) C08: SAIKA Technological Institute Foundation C09: Soma OPTICS C10: Technofleet (ABB) C11: Yokogawa Electric Corporation	84 86 88 90 92 94 96 98 100 102
14:50-15:15	Coffee break and exhibitions	
15:15-15:30	SESSION III: AGRICULTURE O08: Near infrared networking system for improvement of sugarcane production M. Ueno, E. Taira and Y. Kawamitsu (University of Ryukyu, Okinawa, Japan)	108
15:30-15:45	O09: Rapid sample preparation for determination of total nitrogen in soils with near infrared technique R. Rittiron, J. Wangwiwatana, V. Shirakul and A. Juthasukosol (Kasetsart University, Nakhon Pathom, Thailand)	110
15:45-16:00	O10: Use of near infrared spectroscopy for the estimation of the contents of polyphenols in sweetpotato leaves T. Sato, K. Eguchi, T. Hatano and S. Okuno (National Agricultural Research Center for Kyushuu Okinawa Region, Kumamoto, Japan)	112
16:00-16:30 16:30-17:00 17:00-17:45	General meeting for Asian NIR Consortium (in English) General meeting for the Japan Council of Near Infrared Spectroscopy (JCNIRS) (in Japanese) Exhibitions/ Free time	
	(Bus will leave Epochal for Hotel Grand Shinonome at 17.45)	
18:15-20:45	Banquet (Room Asahi, 2F, Hotel Grand Shinonome) All delegates are invited to the banquet	

Wednesday, November 12

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08:30-08:45	SESSION IV: CHEMOMETRICS O11: A new approach in sample and time optimization for selective multiconstituents analyses through near infrared spectroscopy V. Venkataraman and K. Subrahmanyam (Central Electronics Engineering Research Institute, Chennai, India)	116
08:45-09:00	O12: Spectra averaging as a strategy to diminish individual variability of soybean leaves for sensitive monitoring of soybean mosaic virus B.M.Jinendra, K. Tamaki, S. Yoshida, S. Kuroki and R. Tsenkova (Kobe University, Kobe, Japan)	118
09:00-09:15	O13: Improving differentiation of two groups by combining scores from independent spectral ranges S. Lee, Y.A. Woo and H. Chung (Hanyang University, Seoul, Korea)	120
09:15-09:30	SESSION V: INSTRUMENT/IMAGING O14: Calibration transfer between dispersive and Fourier transform near infrared instruments for barley quality assessment M. Sohn, D.S. Himmelsbach and F.E. Barton, II (USDA-ARS, Athens, USA)	124
09.30-09.45	O15: A non-invasive near infrared system for detecting bacterial contaminated platelet product S. Ezuki, S. Saranwong, K. Kawabata, S. Kawano and H. Ohto (Kawasumi Laboratories, Kawasaki, Japan)	126
09:45-10:00	O16: Time-resolved principal component analysis imaging for chlorophyll fluorescence induction H. Kobori amd S. Tsuchikawa (Nagoya University, Nagoya, Japan)	128
10:00-10:15	O17: Bagged self-modeling curve resolution (BSMCR) for near infrared imaging H. Shinzawa, K. Awa, T. Okumura, Y. Ozaki and H. Sato (The Institute of Physical and Chemical Research (RIKEN), Saitama, Japan)	130
10:15-10:45	Coffee break and exhibitions	
10:45-11:00	SESSION VI: CHEMISTRY/ADVANCED TECHNOLOGY O18: Analysis of the O-H band of water/ alcohol mixtures on the basis of partial molar absorption A. Ikehata, Y. Ozaki and S. Kawano (National Food Research Institute, Tsukuba, Japan)	134
11:00-11:15	O19: Investigations on the hydrogen bonds in the H ₂ O molecules adsorbed on oxide surfaces by near infrared spectroscopy M. Takeuchi, G. Martra, S.Coluccia and M. Anpo (Osaka Prefecture University, Osaka, Japan)	136

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11:15-11:30	O20: Near infrared luminescence sensing of amino acids with ytterbium complex probes H. Tsukube, K. Yano and S. Shinoda (Osaka City University, Osaka, Japan)	138
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11:45-12:00	O22: Monitoring of acid pickling in stainless steel production O. Ito, J. Koyama, H. Tanaka and T. Ohara (Yokogawa Electric Corp., Tokyo, Japan)	142
12:00-13:15	Lunch	
13:15-13:30	SESSION VII: FOOD O23: Analysis of milk and liquid milk products with Fourier transform near infrared spectroscopy A. Niemoller, J. Hauser and A. Kok (Bruker Optik GmbH, Ettlingen, Germany)	146
13:30-13:45	O24: Near infrared spectroscopic analysis for rapid detection of milk adulterations and milk constituents S. Kasemsumran, A. Kiatsoonthon, W. Thanapase and Y. Ozaki (Kasetsart University, Bangkok, Thailand)	148
13:45-14:00	O25: Construction of near infrared spectra database for cow's unhomogenized composite milk and development of calibration model for somatic cell count S. Kuroki, R. Santo, M. Fuji, H. Morita, M. Hesti, K. Ikuta and R. Tsenkova (Kobe University, Kobe, Japan)	150
14:00-14:15	O26: Fourier transform near infrared spectroscopy as a rapid test method for quality parameters in edible oils D. Behmer, A. Montasell and S.U. Ui (Bruker Optik GmbH, Ettlingen, Germany)	152
14:15-14:30	O27: Development of portable near infrared spectrometer for measuring total nitrogen contents in fresh rice leaves B. Hong, R.K. Cho, M. Sohn, Y.R. Kwon and H.J. Kim (Kyung-Pook National University, Daegu, Korea)	154
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15:00-15:15	SESSION VIII: FRUIT O28: Online near infrared detection of translucent and gamboge mangosteen S. Teerachaichayut, W. Thanapase, K. Shigefuji, T. Otoi, Y. Nitta, S. Saranwong and S. Kawano (Kasetsart University, Bangkok, Thailand)	158
15:15-15:30	O29: Development partial least squares models of soluble solids content and firmness of 'Fuji' apple at dynamic condition based on Fourier transform near infrared diffuse reflectance J. Wang, X. Sun and D. Han (China Agricultural University, Beijing, China)	160
15:30-15:45	O30: Online sorting system for quality assessment of golden melon using near infrared sensor R.K. Cho, B. Hong, E.Y. Kim, M. Sogn, H.J. Kim, Y.H. Kim, K.P. Chun and Y.P. Lee (Kyung-Pook National University, Daegu, Korea)	162
15:45-16:00	O31: Detection of fruit fly infested mango by near infrared spectroscopy W. Thanapase, S. Saranwong, N. Suttiwijitpukdee, S. Kasemsumran, R. Rittiron and S. Kawano (Kasetsart University, Bangkok, Thailand)	164
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Thursday, November 13

07:30-07.40	Get together at Ninomiya House
07.40-07.50	Walk to Epochal for taking the bus
07:50-09.00	Travel by bus for Kikkoman Factory
09:00-10.30	Study tour at Kikkoman Factory (Noda city, Chiba)
10:30-13.00	Travel by bus for Kirin Beer Village
13:00-14.00	Lunch at Restaurant Beer Port in Kirin Beer Village (Yokohama city, Kanazawa)
14:00-15.30	Study tour at Kirin Factory
15:30-19.00	Travel by bus for Hamamatsu city, Shizuoka
19:00-19.30	Arrive at Shizuoka, Check-in at Hotel Accent Hamamatsu
19:30-21.30	Dinner at Restaurant Nijyu-Maru Hamamatsu (All members are invited)

Friday, November 14

06:30-08.00	Breakfast
08:00-08.15	Check-out from Hotel
08:15-09.30	Travel by bus for Mikkabi Sorting Facility
09:30-11.00	Study tour at Mikkabi Orange Sorting Facility (Mikkabi city, Shizuoka)
11:00-12.00	Travel by bus for Makinohara city
12:00-13.30	Lunch at Makinohara Greenpia (Makinohara city, Shizuoka)
13:30-14.00	Travel by bus for Shizuoka Tea Experiment Station
14:00-15.30	Study tour at Shizuoka Tea Experiment Station (Kikugawa city, Shizuoka)
15:30-20.00	Travel by bus back to Tsukuba - Bus will stop at 1) Kanaya station (nearest JR station, 20 minutes drive from the Tea Experiment Station) 2) Tokyo station

Poster

P01A	Evaluation of pharmaceutical blending homogeneity by means of near infrared spectroscopy N. Sunsandee, A. Somwangthanaroj and N. Navasearttavisootr (Chulalongkorn University, Bangkok, Thailand)	168
P01B	Qualitative investigation of tulobuterol transdermal (TDDS) tapes using near infrared spectroscopy and imaging T. Sakamoto, D. Sasakura, Y. Takada, K. Aida, Y. Fujimaki, T. Matsubara, T. Miura, T. Terahara, T. Kawanishi and Y. Hiyama (National Institute of Health Sciences, Tokyo, Japan)	170
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