



THE 11th ASIAN CONGRESS OF ORAL AND MAXILLO-FACIAL RADIOLOGY

The Pivotal Role of Oral
and Maxillofacial Radiology in Dentistry

November 10-12, 2016

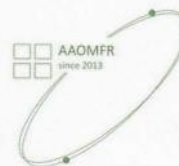
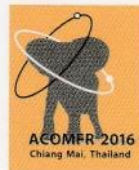
The Empress International Convention Center,
Chiang Mai, Thailand

THE 11th ASIAN CONGRESS OF ORAL AND MAXILLO-FACIAL RADIOLOGY

PROGRAM and ABSTRACT BOOK

The Empress International Convention Center
Chiang Mai, Thailand

November 10-12, 2016



Organized by

Asian Academy of Oral and Maxillo-Facial Radiology &
Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand

Contents

	Page
• President message	5
• Acknowledgement	6
• AAOMFR Board Committee	7
• Local Organizing Committee of the 11 th ACOMFR 2016	8
• General information	10
• Registration fees	11
• Social Program	12
• Abstract submission instructions	13
• Instruction for oral presentations	14
• Instruction for poster presentations	15
• The Empress International Convention Center Floor Plan	16
• Programs	19
• Special Lectures	45
• Oral Presentations	55
• Poster Presentations	123

AAOMFR Board Committee

Executive Board

President:	Karune Verochana	(Chiang Mai, Thailand)
Immediate Past President:	Suhardjo Sitam	(Bandung, Indonesia)
President-Elect:	Sunali Khanna	(Mumbai, India)
IADMFR Directors:	Yoshinori Arai	(Tokyo, Japan)
	Soon-Chul Choi	(Seoul, Korea)
Immediate-Past IADMFR Directors:	Junichi Asaumi	(Okayama, Japan)
	Sharad Sahai	(New Delhi, India)
Secretary General:	Keiji Tanimoto	(Hiroshima, Japan)
Secretary to the Board:	Junichi Asaumi	(Okayama, Japan)
Official Journal Editors:	Min-Suk Heo	(Imaging Science in Dentistry, Korea)
	Junichi Asaumi	(Oral Radiology, Japan)

Regional Directors (2014-2016)

Maafujul Haq Khan, Parimal Chandra Mallick	(Bangladesh)
Jinwu Chen	(China)
Shi-Long Lian	(Chinese Taipei)
Ray Tanaka (<i>Replaced because Dr. Goto moved to Japan</i>)	(Hong Kong SAR)
Sunali Khanna, Sharad Sahai	(India)
Hendra Polii, Fahmi Oscandar	(Indonesia)
Yoshinori Arai, Taisuke Kawai (<i>Replaced Dr. Kaneda in 2015</i>)	(Japan)
Eun-Kyung Kim, Kwang Joon Koh	(Korea)
Subashini Suyambukesan	(Malaysia)
Sangsom Prapayasatok, Wichitsak Cholitgul	(Thailand)

Local Organizing Committee of the 11th ACOMFR 2016

Honorary Consultants

Prof. M. Kevin O Carroll	<i>Faculty of Dentistry, Chiang Mai University</i>
Prof. Pairat Dhiravarangkura	<i>Faculty of Dentistry, Western University</i>
Assist. Prof. Anonknart Bhakdinaronk	<i>Faculty of Dentistry, Naresuan University</i>
Prof. Chainut Chongruk	<i>Faculty of Dentistry, Rangsit University</i>
Prof. Wichitsak Cholitgul	<i>Faculty of Dentistry, Rangsit University</i>
Assoc. Prof. Sittichai Wanachantararak	<i>Faculty of Dentistry, Chiang Mai University</i>

Administrative Committees

President	Assist. Prof. Karune Verochana <i>Faculty of Dentistry, Chiang Mai University</i>
Vice President	Assoc. Prof. Soontra Panmeekiat <i>Faculty of Dentistry, Chulalongkorn University</i>
Secretariat	Assist. Prof. Apirum Janhom <i>Faculty of Dentistry, Chiang Mai University</i>
Committees (From Faculty of Dentistry, Chiang Mai University)	Assoc. Prof. Sangsom Prapayasatok Assist. Prof. Phattaranant May Mahasantipiya Assist. Prof. Varisara Sirimaharaj Dr. Sakarat Pramojane Dr. Patcharawan Silthampitag Dr. Arnon Charuakkra Dr. Wannakamon Panyarak

Scientific Committees

Chairman:	Assoc. Prof. Sangsom Prapayasatok <i>Faculty of Dentistry, Chiang Mai University</i>
Committees:	Assoc. Prof. Suwadee Kositbowornchai <i>Faculty of Dentistry, Khon Kaen University</i> Assist. Prof. Apirum Janhom <i>Faculty of Dentistry, Chiang Mai University</i> Assist. Prof. Sirinun Wisetsin <i>Faculty of Dentistry, Mahidol University</i> Assoc. Surawut Pongsirwet <i>Faculty of Dentistry, Chiang Mai University</i> Assist. Prof. Onanong Silkosessak <i>Faculty of Dentistry, Chulalongkorn University</i> Assoc. Prof. Suchaya Pornprasertsuk-Damrongsri <i>Faculty of Dentistry, Mahidol University</i> Assist. Prof. Weeraya Tantanapornkul <i>Faculty of Dentistry, Naresuan University</i> Dr. Aree Kanjanaprapas <i>Faculty of Dentistry, Prince of Songkla University</i> Dr. Vannaporn Chuenchompoonut <i>Faculty of Dentistry, Chulalongkorn University</i> Dr. Chonatee Chinkrau <i>Faculty of Dentistry, Chiang Mai University</i>

Organizing Committees

- Chairman:** Assist Prof. Phattaranant May Mahasantiapiya
Faculty of Dentistry, Chiang Mai University
- Committees:** Assoc. Prof. Sorasun Rungsiyanont
Faculty of Dentistry, Srinakharinwirot University
- Assist Prof. Raweewan Arayasantiparb
Faculty of Dentistry, Mahidol University
- Assist. Prof. Teekayu Plangkoon Jorns
Faculty of Dentistry, Khon Kaen University
- Assist Prof. Jira Kitisubkanchana
Faculty of Dentistry, Mahidol University
- Dr. Kornkamol Kreetapirom
Faculty of Dentistry, Mahidol University
- Dr. Preeyaporn Srimawong
Faculty of Dentistry, Mahidol University
- Dr. Onnida Wattanarat
Faculty of Dentistry, Chiang Mai University
- Dr. Pisha Pittayapat
Faculty of Dentistry, Chulalongkorn University
- Dr. Wannakamon Panyarak
Faculty of Dentistry, Chiang Mai University
- Dr. Warit Powcharoen
Residency student, Faculty of Dentistry, Chiang Mai University

Media and Social Committees

- Chairman:** Dr. Sakarat Pramojane
Faculty of Dentistry, Chiang Mai University
- Committees:** Dr. Phonkit Sinpitaksakul
Faculty of Dentistry, Chulalongkorn University
- Dr. Piyanuch Karnasuta
Faculty of Dentistry, Rangsit University
- Dr. Wannakamon Panyarak
Faculty of Dentistry, Chiang Mai University
- Dr. Pasupen Kosalagood
Private practice
- Dr. Jongdee Kambungton
Private practice

Finance, Sponsor and Commercial Exhibition Committees

- Chairman:** Dr. Arnon Charuakkra
Faculty of Dentistry, Chiang Mai University
- Committees:** Assist. Prof. Pipop Suttiprapaporn
Faculty of Dentistry, Khon Kaen University

PROGRAM

Time	Wed 9 Nov 2016	Thurs 10 Nov 2016	Fri 11 Nov 2016	Sat 12 Nov 2016
07.00 AM				
08.00 AM		Registration 07.00-16.00	Registration 08.00-12.00	
08.30 AM		Opening Ceremony (Ball Room)		
09.00 AM		Special lecture (1) (Ball Room) "Justification of radiographs : more is not always better" Prof. Paul van der Stelt	Poster presentation Session 1	Poster presentation Session 2
09.30 AM		Special lecture (2) (Ball Room) "Evidence-based dentistry needs high-quality radiology" Prof. Madeleine Rohlin	ROOM B Oral Presentation Session 7	Ball Room Oral Presentation Session 12
09.45 AM		Break	Break	Break
10.30 AM		Special lecture (3) (Ball Room) "Image fusion in dental radiology" Prof. Gang Li	ROOM A Oral Presentation Session 8	Special lecture (8) "Interactive case-based learning" Dr. Onanong Silkossak
10.45 AM		Special lecture (4) (Ball Room) "Ultrasound imaging of the head and neck, how can a radiologist make a difference?" Dr. Rose Ngu	ROOM B Oral Presentation Session 10	Closing Ceremony
11.30 AM			ROOM A Oral Presentation Session 9	
12.15 PM		Lunch	ROOM B Oral Presentation Session 11	
13.00 PM			Lunch	Farewell party 12.00-13.30
13.15 PM		ROOM A Oral Presentation Session 2		
14.00 PM	Registration 13.00-16.00	ROOM B Oral Presentation Session 3	Special lecture (5) (Ball Room) "Forensic Odontology from the Radiologist's Perspective" Prof. Edwin T. Parks	
14.45 PM		Break	Special lecture (6) (Ball Room) "Radiographic assessment of jaw bone quality" Prof. Min-Suk Heo	
15.00 PM		ROOM A Oral Presentation Session 4	Break	
15.15 PM		ROOM A Oral Presentation Session 5	Special lecture (7) (Ball Room) "The role of diagnostic imaging in the evaluation of oral cancer" Dr. Yoshinobu Yanagi	
15.45 PM		Board Room Executive AAOmFR Board Meeting	General Assembly	
16.30 PM				
17.00 PM				
18.00 PM		Welcome Party 18.00-21.00		
21.00 PM			Gala Dinner 18.00-21.00	

Thursday, 10 November 2016

Time	Program	
08.30-09.00	Opening Ceremony	
	Place: Ball Room Chairperson: Assist. Prof. Karune Verochana Co-Chairperson: Assist. Prof. Apirum Janhom	
09.00-09.45	Special Lecture (1) "Justification of radiographs : more is not always better"	Prof. Paul van der Stelt
09.45-10.30	Special Lecture (2) "Evidence-based dentistry needs high-quality radiology"	Prof. Madeleine Rohlin
10.30-10.45	Break	
	Place: Ball Room Chairperson: Prof. Keiji Tanimoto Co-Chairperson: Assist. Prof. Pipop Sutthiprapaporn	
10.45-11.30	Special Lecture (3) "Image fusion in dental radiology"	Prof. Gang Li
11.30-12.15	Special Lecture (4) "Ultrasound imaging of the head and neck, how can a radiologist make a difference?"	Dr. Rose Ngu
12.15-13.15	Lunch	
13.15-15.00	Oral Presentation Session 1: OP01-OP07 Place: Ball Room Theme: Forensic dentistry/ Age estimation Chairperson: Prof. Christina Lindh Co-Chairperson: Dr. Pisha Pittayapat	See details on Page 25, 57-63
	Oral Presentation Session 2: OP08-OP14 Place: Room A Theme: Jaw bone lesions/ CBCT/ CT Chairperson: Prof. Wichitsak Cholitgul Co-Chairperson: Assoc. Prof. Suchaya Pornprasertsuk-Damrongsri	See details on Page 26, 64-70
	Oral Presentation Session 3: OP15-OP20 Place: Room B Theme: Jaw bone lesions/ CBCT/ TMJ Chairperson: Prof. Kivanc Kamburoglu Co-Chairperson: Assist. Prof. Ajiravudh Subarnbhesaj	See details on Page 27, 71-76
15.00-15.15	Break	
15.15-17.00	Oral Presentation Session 4: OP21-OP27 Place: Ball Room Theme: Forensic/Caries/ Periodontal Chairperson: Assist. Prof. Teekayu Plangkoon Jorns Co-Chairperson: Assist. Prof. Raweewan Arayasantiparb	See details on Page 28, 77-83
	Oral Presentation Session 5: OP28-OP34 Place: Room A Theme: Ortho/ Cleft/CBCT/ Implant Chairperson: Prof. Eun-Kyung Kim Co-Chairperson: Dr. Aree Kanjanaprapas	See details on Page 29, 84-90
	Executive AAOMFR Board Meeting: Place - Board room (Floor 1)	
18.00-21.00	Welcome Party	

Time	Program	
08.30-09.30	Poster Presentation Session 1: PP001-057 (Hall areas, Floor2)	See details on Page 125-181
09.30-10.30	Oral Presentation Session 6: OP35-OP38 Place: Ball Room Theme: CT/ CBCT Chairperson: Dr.Menik Priaminiarti Co-Chairperson: Dr. Kornkamol Kreetapirom	See details on Page 30, 91-94
	Oral Presentation Session 7: OP39-OP42 Place: Room A Theme: Digital image/ Pan/ Infection control Chairperson: Prof. Junichi Asaumi Co-Chairperson: Dr. Preeyaporn Srimawong	See details on Page 31, 95-98
	Oral Presentation Session 8: OP43-OP46 Place: Room B Theme: Radiation Biology Chairperson: Prof. Phrabhakaran Nambiar Co-Chairperson: Dr. Piyanuch Karnasuta	See details on Page 32, 99-102
10.30-10.45	Break	
10.45-12.15	Oral Presentation Session 9: OP47-OP52 Place: Ball Room Theme: Endo/ Sinus/ Caries/ Root resorption Chairperson: Prof. Suhardjo Sitam Co-Chairperson: Dr. Pasupen Kosalagood	See details on Page 33, 103-108
	Oral Presentation Session 10: OP53-OP58 Place: Room A Theme: Trauma/ Root fracture/ Survey/ CBCT Chairperson: Assoc. Prof. Suwadee Kositbowornchai Co-Chairperson: Dr. Chonatee Chinkrua	See details on Page 34, 109-114
	Oral Presentation Session 11: OP59-OP62 Place: Room B Theme: Radiation biology/ Ceph/ Bone density Chairperson: Assoc. Prof. Soontra Panmekiate Co-Chairperson: Dr. Lusi Epsilawati	See details on Page 35, 115-118
	AAOMFR Board Meeting: Place - Board Room (Floor1)	
12.15-13.15	Lunch	
	Place: Ball Room Chairperson: Prof. Yoshinori Arai Co-Chairperson: Dr. Phonkit Sinpitaksakul	
13.15-14.00	Special Lecture (5) " Forensic Odontology from the Radiologist's Perspective"	Prof. Edwin T. Parks
14.00-14.45	Special Lecture (6) "Radiographic assessment of jaw bone quality"	Prof. Min-Suk Heo
14.45-15.00	Break	
	Place: Ball Room Chairperson: Professor Li-Min Lin Co-Chairperson: Dr. Arnon Charuakkra	
15.00-15.45	Special Lecture (7) "The role of diagnostic imaging in the evaluation of oral cancer"	Dr. Yoshinobu Yanagi
15.45-16.45	General Assembly: Place - Ball Room	

Standard of age estimation using tooth Coronal - Index (TCI) for the population of Surabaya

E. Astuti¹, Y. Savitri¹, S. Mulyani¹, O. Wahyuni¹, D. Saputra¹, R. Putra¹.

¹Department of Oral and Maxillofacial Radiology, Faculty of Dentistry, Airlangga University, Surabaya, Indonesia

Introduction: Age estimation is one of the individual identification procedures, both living and dead. TCI is a suitable method to apply for forensic purposes and it has been applied in the population of some countries, but it has never been done in population of Surabaya.

Objectives: The study was aimed to test TCI method as a predictor in determining the chronological age in order to create a standard of age estimation in the population of Surabaya, Indonesia.

Materials and methods: Analysis was conducted in 171 orthopantomograms of the population of Surabaya consisted of 80 women and 91 men, aged between 9-79 years. TCI was calculated on the mandibular teeth of left and right premolars, and the first and second molars. To test the bilateral asymmetry, the data were analyzed by paired sample t -test, then followed by a simple linear regression to create a standard of age estimation.

Results: The results indicated that the left mandibular of the first molar in women were the most accurate in estimating the chronological age (SEE + 8.141 years) while in a simple linear regression of men and women (pooled sample) it showed that the bilateral of the first and second molar were the most accurate regions in predicting the chronological age (SEE + 12.135 years).

Conclusions: Based on the results, it has been proven that TCI models can be used to predict the chronological age of the population of Surabaya for forensic purposes.

Keywords: Age estimation, Tooth coronal - index, Orthopantomogram