11th ADS

جامعة الدمام
UNIVERSITY OF DAMMAM
كلية طب الأسنان
COLLEGE OF DENTISTRY

# Dentistry in Saudi Arabia: Future Challenges

24 - 26 Dhu Al Hijjah 1434
29 - 31 October 2013


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## University of Dammam College of Dentistry Overview

The Kingdom of Saudi Arabia (KSA), throughout its history, has taken utmost pride in the number and variety of its academic programs.

With the passing of each new decade the Kingdom has witnessed the development of new scientific disciplines and the establishment of more colleges and universities. Most of these universities and colleges are vibrant and rich in ideas, contributing not only to our student's education but also to the regional growth and prosperity.

The College of Dentistry at University of Dammam fosters the dissemination of knowledge to all disciplines and promotes development in dental education, treatment, and research. This will translate the values of the university from theory to practice utilizing the assets of openness, respect, commitment, integrity, and intellectual honesty in a milieu of consensus among students, faculty, and the professionals.

**College Vision:**

The College of Dentistry at University of Dammam is to be recognized nationally and internationally for excellence in the tripartite mission of:

- Dental Education.
- Providing Dental and Oral Heath Services.
- Research in the Dental and Oral Health Ethics.

**College Mission:**

The vision of the College of Dentistry is to achieve professional excellence in dentistry in accordance with Islamic morality, expecting to build a generation of highly qualified dentists, who will be able to meet the needs of the community, and thereby overcoming the challenges of the 21st century and beyond.



## Message from the Organizing Committee Chairman

Dear Colleagues,

I am delighted to welcome you to the 11th Annual Dental Symposium, which brings together experts and academics from around the world.

As we enter a new year, it's important to reflect on the challenges and trends brought to dentistry to help us move forward and promote positive change. For this reason, the emphasis this year will be on the future challenges of dentistry in Saudi Arabia.

Dentistry is constantly evolving and attracting more and more international experts and delegates. I strongly believe that this meeting will once again provide an opportunity to advance communication between academics, researchers and professionals. It is during this event that participants from around the world come together and have the chance to network, exchanging useful knowledge in one location.

Once again, I would like to express my profound gratitude to all the participants in today's symposium, especially to the Organizing Committee and the staff of the College of Dentistry who have organized this important event.

I hope that you will find the conference and your stay in Dammam both valuable and enjoyable.

Dr. Fahad Al-Harbi
Dean

## 11th ADS Information
## "Dentistry in Saudi Arabia: Future Challenges"

Over the past few decades Saudi Arabia has witnessed an increased focus on oral health and the social, psychological and developmental consequences of untreated oral disease. Multiple studies spanning this period have clearly identified dental caries and malocclusions as major complications of the lack of oral health awareness among children and young adolescents in Saudi Arabia.

This dental symposium is designed to update practicing dentists (specialists and general practitioners), dental students, graduate students, and dental laboratory technicians on the latest techniques, research and findings related to the various dental issues facing the population in Saudi Arabia.

Topics of interest include the changing face of dentistry in Saudi Arabia, improving oral health awareness, advances in preventive, interceptive and esthetic dentistry for the child and young adolescent patient and understanding how to introduce and apply them in routine dental practice.



## 11Th ADS Organizing Committee Roster

**Dr. Fahad Al-Harbi**
- Organizing Committee Chairman

**Dr. Adel Al Agl**
- Scientific Committee
- Registration Committee

**Dr. Asim Al Ansari**
- Publicity Committee
- Opening and Closing Committee

**Dr. Aws ArRejaie**
- Exhibition Committee
- Hospitality Committee

## 11th ADS
## "Dentistry in Saudi Arabia: Future Challenges"
## Scientific Schedule
## October 29, 2013

| Time | Presentation Title | Presenter |
|---|---|---|
| 8:00 - 9:00 | Current and Future Challenges in Dental Education | Dr. Ronald Dailey |
| 9:00 -10:00 | Caries Risk Assessment – Can We Keep Our Patients From Getting Cavities? | Dr. Bonnie Ann Nelson |
| 10:00 -11:00 | Opening Ceremony | |
| 11:00 -12:00 | Dentistry in the Kingdom of Saudi Arabia: Current and Future Challenges | Prof. Abdullah AlShammery |
| 12:00 -1:00 | Prayer & Lunch Break | |
| 1:00 - 2:00 | Art and Science of Anterior Composite Restorations | Prof. Dr. Juergen Manhart |
| 2:00 - 3:00 | Root Canal Treatment or Single Tooth Dental Implant? | Prof. Mahmoud Torabinejad |
| 3:00 - 3:30 | Prayer & Coffee Break | |
| 3:30 - 4:30 | Esthetic and Function with Posterior Composite Restorations | Prof. Dr. Juergen Manhart |
| 4:30 - 5:30 | 3D Cephalometrics for Orthodontics; Is It Possible? | Prof. Kenneth Abramovitch |
| 5:30-6:30 | Integrating the benefits of Modern Dental Ceramics in Clinical Practice | Mr. Tarek Baba |



## 11th ADS
## "Dentistry in Saudi Arabia: Future Challenges"
## Scientific Schedule
## October 30, 2013

| Time | Presentation Title | Presenter |
|---|---|---|
| 7:30- 8:30 | Academic distress, perceived stress and coping strategies among dental students in Saudi Arabia | Dr. Zeyad AlSowygh |
| 8:30-9:30 | Dental Education: Challenges for the Future | Dr. Louay Jaber |
| 9:30 - 10:30 | Current Trends and Advances in Orthodontics | Dr. Abdullah M. Aldrees |
| 10:30-11:00 | Coffee Break | |
| 11:00 -12:00 | Plastic Periodontal Procedures in the Anterior Zone. Harmonious Interaction with the Restorative Dentist | Dr. Khalid Nazmi Said |
| 12:00 - 1:00 | Prayer & Lunch Break | |
| 1:00-2:00 | Maxillary Sinus Membrane Elevation and Subantral Augmentation: An Update on Techniques and Instrumentation | Dr. Aladdin AlArdah |
| 2:00-3:00 | Management of Accidental Procedures | Prof. Mahmoud Torabinejad |
| 3:00-3:30 | Prayer & Coffee Break | |
| 3:30-4:30 | Predictable Aesthetic with Bonded Porcelain Restorations | Prof. Nadim Z. Baba |
| 4:30 - 5:30 | Computer Guided Surgery | Dr. Aladdin AlArdah |
| 5:30 -6:30 | Dental Adhesives & Composite: Where are we now? | Dr. Hans Malmstrom |

## 11th ADS
## "Dentistry in Saudi Arabia: Future Challenges"
## Workshop Schedule
## October 31, 2013

| Time | Workshop Title |
|---|---|
| | **Maxillary Sinus Membrane Elevation and Subantral Augmentation**<br>**Dr. Aladdin Al Ardah** |
| 8:00 – 9:00 | Introduction, anatomy and pathology of the maxillary sinus |
| 9:00 –10:00 | History and techniques of the maxillary sinus membrane elevation and sub-antrual augmentation |
| 10:00 – 10:30 | Coffee Break |
| 10:30 – 11:30 | Recent research, complications and management, recommendations |
| 11:30 – 11:45 | Q&A |
| 11:45 – 1:00 | Prayer and Lunch Break |
| 1:00 – 5:00 | Hands- On Workshop |

| Time | Workshop Title |
|---|---|
| | **Placing the Esthetic Direct Composite Restoration and Fabricate Fiber Reinforced Bridges Efficiently and Predictably**<br>**Dr. Hans Malsmtrom** |
| 8:00 – 9:00 | Dental adhesives and Composites; an Update of Materials and Techniques |
| 9:00 –10:00 | Anterior composite restoration with invisible margins |
| 10:00 – 10:30 | Coffee Break |
| 10:30 – 11:30 | Fiber Reinforced Bridges are they a Clinically acceptable alternative? |
| 11:30 – 11:45 | Q&A |
| 11:45 – 1:00 | Prayer and Lunch Break |
| 1:00 – 2:00 | Hands-On: Placement of single and multiple esthetic composite restorations |
| 2:00 – 3:00 | Hands-On: Placing a posterior composite restoration efficiently and predictably |
| 3:00 – 4:00 | Hands-On: Fabrication of the Direct Fiber Reinforced Bridge |



## 11th ADS
## "Dentistry in Saudi Arabia: Future Challenges"
## Workshop Schedule
## October 31, 2013

| Time | Workshop Title |
|---|---|
| | **Hands – On: Direct Composite Restorations for Anterior and Posterior Teeth**<br>**Prof. Dr. Juergen Manhart** |
| 8:00 – 9:00 | Strategies and concepts for the use of direct composite in anterior area and posterior area |
| 9:00 –10:00 | Demonstration of Class IV composite restoration |
| 10:00 – 10:30 | Coffee Break |
| 10:30 – 11:30 | Demonstration of Class II composite restoration |
| 11:30 – 12:00 | Q&A |
| 12:00 – 1:00 | Prayer and Lunch Break |
| 1:00 – 5:00 | Hands-On Workshop |

| Time | Workshop Title |
|---|---|
| | **Management of Teeth with Necrotic Pulps and Open Apices**<br>**Prof. Mahmoud Torabinejad** |
| 8:00 – 9:00 | Apexogenesis, Pulp Capping |
| 9:00 – 10:00 | Pulpotomy (Partial and Total) |
| 10:00 – 10:30 | Coffee Break |
| 10:30 – 11:30 | Apexification |
| 11:30 -11:45 | Q&A |
| 11:45 – 1:00 | Prayer and Lunch Break |

| Time | Workshop Title |
|---|---|
| | **Principles of Modern Endodontic Surgery**<br>**Prof. Mahmoud Torabinejad** |
| 1:00 - 2:00 | Indications for Apical Surgery |
| 2:00 - 3:00 | Periapical Surgery Procedures |
| 3:00 - 3:30 | Coffee Break |
| 3:30 - 4:30 | Periapical Surgery Procedures (Continued) |
| 4:30 - 5:00 | Q&A |

## 11th ADS
## "Dentistry in Saudi Arabia: Future Challenges"
## Workshop Schedule
## October 31, 2013

| Time | Workshop Title |
|---|---|
| | **Implant Supported Overdenture: Hands-on course**<br>**Prof. Nadim Z. Baba** |
| 9:00 – 10:00 | Review of the biomechanical design principles of ISO |
| 10:00 – 11:00 | Treatment options and prosthesis design |
| 11:00 – 11:30 | Q&A |
| 11:30 – 1:00 | Prayer and Lunch Break |
| 1:00 – 4:00 | Hands-on Workshop |

| Time | Workshop Title |
|---|---|
| | **Modern Dental Ceramic: A Technical Overview**<br>**Mr. Tariq Baba** |
| 9:00 – 10:00 | Material science and clinical applications of all-ceramic restorations |
| 10:00 – 11:00 | Stain and glaze techniques and their application to all-ceramic restorations |
| 11:00 – 11:30 | Q&A |
| 11:30 – 1:00 | Prayer and Lunch Break |
| 1:00 – 4:00 | Hands-on Workshop |



# Speakers & Abstracts

**Dr. Ronald J. Dailey**

Dr. Ronald J. Dailey received his PhD from University of Southern California, Los Angeles, California in 1994 and his Masters degree in 1975 from Walla Walla College in Washington, USA. He is the current Dean of Loma Linda University, College of Dentistry, California. Dr. Dailey has published several journals and have presented in local and international symposiums. He is a member of the American Dental Education Association (ADEA) since 1975.



## Current and Future Challenges in Dental Education

Dental education is the foundation from which all dentistry is built and sustained. A strong dental education system produces a strong dental profession, resulting in the highest level of oral health care for the public.

The world is experiencing unprecedented change that is impacting dental education and the profession of dentistry. In "Current and Future Challenges in Dental Education," Dr. Dailey describes the significant challenges being experienced by dental education in the USA and how new accreditation standards and the proposed new Integrated Dental National Board Examination are creating opportunities for dental schools to address the changing environment.

**Dr. Bonnie Anne Nelson**

Dr. Nelson is a native of the Pacific Northwest, following her father in his footsteps as a dentist. She graduated from LLUSD in 1988 and finished her Pediatric Dental Certification Program at Oregon Health Sciences University in 1990. She went into private practice as a pediatric dentist in Southwest Washington and practiced there until August of 2001, when she joined the Pediatric Dental faculty at LLUSD. She assumed the position of the Chair of Pediatric Dentistry in February of 2003 and in 2007 she became the Chief of Hospital Dentistry at LLU Medical Center. She loves working with children and student. She works closely with the residents on Hospital dentistry, where they treat medically handicapped and craniofacial patients. Her lectures to residents and pre-doctoral students include topics in preventive dentistry. She works at her private practice at the Loma Linda University, Center for Dentistry and Orthodontics. She enjoys building relationships and watching children grow up with healthy teeth. She spends Monday afternoon at the Craniofacial team, making sure the patients receive dental care. She would love to see a world without dental caries in children.



## Caries Risk Assessment- Can We Keep Our Patients From Getting Cavities?

Caries Risk Assessment is a method which can help us assist our patients to decrease their risk of dental caries. It is multifactorial: bacterial load, diet and eating habits, chemotherapeutics, Oral hygiene. With this tool you will be able to assess your patient and be proactive in caries prevention. Take your practice from a restorative model to a medical model of prevention

## Prof. Abdullah Al Shammery

Prof. Abdullah R. Al Shammery is one of Saudi dental leaders, since 2003 he moved to establish and lead the first private higher education college in dentistry and pharmacy in the kingdom of Saudi Arabia, under the name of Riyadh Colleges of Dentistry and Pharmacy with 4 campuses where he served as the Dean and currently working as a Rector and Professor of Restorative Dentistry.

Prof. Al Shammery finished his undergraduate studies from dental school at Cairo University in 1979 before he carried out his postgraduate education at the University of Minnesota, U.S.A. where he finished Master of Dental Science and certificate in Restorative Dentistry in 1984, and joined KSUDC as a lecturer in Restorative department , then promoted to Assistant Prof, Associate Prof then to full Professor 2000, where he became the first Saudi dentist at the KSA promoted to this position.

Prof. ALShammery served in different academic administration ranks and he was appointed as the first Saudi Dentist to seat as a Dean for the College of Dentistry in King Saud University between 1990 to 1994. Through his great effort, he managed to establish the Saudi Dental Society (SDS) in 1981 where he also served as a president.

Prof. AlShammery published more than 45 publications at international dental references. Remarkably, he had more than 350 national and international speeches at different international and national conferences.



## Dentistry in the Kingdom of Saudi Arabia: Current and Future Challenges

The evolution of Dentistry at the kingdom of Saudi Arabia (28 millions inhabitant) has undeniably stimulated a myriad of interests among dental professionals both in the government and private sectors. But dentistry in KSA is changing faster than most of our expectation, where in 2004 there were only four dental schools (3 Government and 1 Private) and now at 2013 the number is expanded to 24 dental schools (18 Government and 6 Private).

The academic curricula at Saudi dental schools were thoroughly designed and organized in accordance with international standards as in Europe and North America.

This dramatic expansion within less than ten years accompanied with huge expansion of the dental treatment facilities and manpower at both government and private sectors, where the total number of dentists who practice at the kingdom is estimated at 9231 coming from 74 nationalities according to SCHS statistic, but Saudi dentist not more than 17% from the total number.

When we evaluate the prevention programs, there are several prevention programs organized and monitored by different agencies, but there is a lack of a national prevention dental programs monitor by a central national office, in a country with 94% prevalence of dental caries among the children's and 91% suffering from gum disease.

## Prof. Dr. Juergen Manhart

Professor Manhart graduated from the Dental School of the Ludwig-Maximilians-University (LMU), Munich, in 1994. He is a nationally and internationally renowned lecturer in the field of esthetic and restorative dentistry (composites, ceramics, esthetic post systems and treatment planning).

In 1994 Prof. Manhart started working as a clinical dentist and scientist in the Department of Restorative Dentistry, LMU. In 1997 conferment of the title Dr. med. dent. (PhD; summa cum laude). From 1997 to 1998, he completed a postdoc program for dental biomaterials, esthetic dentistry and interdisciplinary treatment planning as an Adjunct Assistant Professor in the Dental School of the University of Texas, Houston. Prof. Manhart currently holds the position as a Professor in the Department of Restorative Dentistry at the LMU Dental School. He is a member of the German Society of Oral & Maxillofacial Sciences, German Society for Restorative and Conservative Dentistry, and the German Academy of Esthetic Dentistry.

Since 1994, Prof. Manhart studies and teaches adhesive and esthetic dentistry. He authored 1 book, several book chapters, and has published more than 200 articles in most of the leading dental journals. He is principal investigator in many clinical trials and in vitro studies and researches the clinical longevity of dental restorations. Prof. Manhart is lecturing extensively, he delivered more than 450 continuing education presentations and hands-on courses all over the world. He has been an invited speaker at numerous congresses and symposia.



### Art and Science of Anterior Composite Restorations

For the restoration of anterior teeth, esthetics plays a dominant role for most of the patients. The impairment of the integrity of anterior teeth and identifiable restorations constitute mostly a severe problem. For the dentist, these situations are a great challenge and commitment, as an esthetic perfect restoration is mandatory due to the exposed position of these teeth. Today, direct composite restorations in the anterior region allow satisfying highest esthetic demands. The realization of anterior composite restorations with excellent function and perfect esthetic appearance paralleled by an excellent longevity makes high demands on the restorative material and on the dentist's treatment skills. To obtain reproducible and most notably predictable results with a high degree of naturalness, a profound knowledge of the technical and esthetical basics as well as an understanding of the correct layering technique with composite pastes of different shades and translucencies is necessary.

### Esthetic and Function with Posterior Composite Restorations

The demand for direct placement esthetic restorations is still increasing. Patients refuse amalgam restorations mostly because of alleged adverse health effects and unesthetic appearance. Even cast gold inlays and onlays are, despite excellent material properties and biocompatibility, more and more often declined, because of esthetic considerations. In return to the decreasing use of metallic conservative restorations, the frequency of direct resin-based restorations in the heavy loaded posterior region is drastically rising. The realization of posterior restorations with optimum function and esthetic appearance paralleled by an excellent longevity makes high demands on the restorative material and on the dentist's treatment skills.

For posterior composite restorations, besides appropriate cavity geometry, a meticulous bonding procedure plays an important role for longevity. A layering technique that is anatomically oriented and appropriate for the material involved together with a correct matrix technique allows an effective finishing procedure and avoids time-consuming removal of excess material. The operator should be aware of potential sources of error to place routinely high quality composite restorations during daily clinical practice.

## Prof. Mahmoud Torabinejad

Prof. Torabinejad is a professor of endodontics and director of the advanced specialty education program in endodontics at Loma Linda University School of Dentistry. He practices two half-days, has made over 200 national and international presentations in more than 40 countries. He has authored four textbooks and more than 300 publications. A recent review reported that Professor Torabinejad is the #1 author of citation classics in the field of endodontics (Fardi et al,. J Endod 37:1182, 2011). He is the top-cited author in endodontic journals with authorship in 16 articles of the top 100 list. A search on Scopus (www.Scopus.com; 16 July 2013) revealed that his body of research has generated >7,250 lifetime citations. He received the AAE Ralph F. Sommer Award 1986, the AAE Louis I. Grossman Award 1993, and he received the Philanthropist Award from the AAE Foundation 1997. He was the recipient of the Loma Linda University Centennial Van Guard Award for Healing 2006.

Prof. Torabinejad received the Distinguished Research Award from the dental school 2008. In recognition of his significant pioneering contributions to health sciences, he received the Loma Linda University distinguished investigator award in 2013. He is a past president of the California Association of endodontics and past president of the American Association of Endodontists and its Foundation.



## Root Canal Treatment Or Single tooth Dental Implant?

Advances in endosseous implants have had a significant effect on treatment planning in dentistry. The purpose of this presentation is to discuss factors involved in decision-making regarding selection of root canal treatment or dental implants. Indications and contraindications as well as the criteria used to determine the outcomes of root canal treatment and dental implants will be reviewed. In addition, success rates and the factors affecting the success of each treatment modality will be discussed. The discussion is based on current systematic reviews and available evidence.

## Management of Accidental Procedures

Root canal therapy, like other disciplines of dentistry, sometimes is associated with unwanted and unforeseen circumstances; these are collectively called procedural accidents. The mishaps can occur during diagnosis, access preparation, cleaning and shaping, obturation and post preparation. Knowledge of etiologic factors involved in procedural accidents is essential for their prevention. Methods of recognition, treatment and their effects on success and failure of endodontics are discussed. The levels of evidence for clinical efficacy of various techniques to correct these accidents are discussed during this presentation.

## Prof. Kenneth Abramovitch

Prof. Abramovitch received his DDS in 1980 from McGill University in Montreal, Canada, and his MS in Oral Diagnostic Sciences in 1986 from the University of Texas Health Science Center at San Antonio. He is a Diplomate of the American Board of Oral and Maxillofacial Radiology and a Diplomate of the American Board of Oral Medicine.

He has published 22 scientific abstracts and contributed over 50 articles to refereed or peer reviewed journals. He has been an invited speaker at over 120 national, international, state and local professional meetings. In addition, he has presented over 150 hours of accredited continuing dental education programs. Prof. Abramovitch currently serves as vice president and chief examiner of the American Board of Oral and Maxillofacial Radiology.

Prior to joining the faculty at Loma Linda University, he resigned as a professor with tenure after 26 years of service at The University of Texas Health Science Center at Houston, School of Dentistry. Prior to his appointment in Texas, he was also a member of the Faculty of Dentistry at Dalhousie University in Halifax, Nova Scotia, Canada. Until his appointment at LLUSD, Prof. Abramovitch also maintained a private referral-based specialty practice limited to oral radiology and oral medicine that served the greater Houston Texas, USA metropolitan area beginning in 1991.



## 3D Cephalometrics for Orthodontics; Is it Possible?

Cone beam computed tomography (CBCT) is a frequently requested diagnostic task for cephalometric and orthognathic patient evaluations. Although CBCT provides excellent 2D and 3D patient visualization, many of the 2D cephalometric landmarks used for orthodontic evaluations cannot be applied to 3D renderings. A methodology based on anatomic landmarks present and identifiable on the 3D volumetric renderings may be a more appropriate foundation for an objective and reproducible orthognathic evaluation of patient CBCT data. This presentation will evaluate the factors at large and a present a possible methodology for future cephalometric and orthognathic evaluations from the volumetric data obtained from CBCT scanning.

**Dr. Louay Jaber**

Dr. Louay Jaber hold a DDS degree from University of Damascus, a master degree in dental biology from University of Montreal, a second master degree in oral and maxillofacial pathology from University of Maryland, a PhD degree from Queens University in Canada and in the year 2000, he completed his postdoctoral fellowship from the National Institutes of Health in USA. Dr. Jaber has over twelve years of academic experience with several scientific publications and presently his consultant at King Abdulaziz Medical City/National Guard Health Affairs in Riyadh.



## Dental Education: Challenges for the Future

Dental colleges are extensively implementing significant changes in the methods of training and qualifying dental practitioners. This is mainly due to educational accreditation standards as well as cultural and economic pressures. Accordingly, dental colleges are being asked by professional accreditation agencies to educate their dental students as effective members of the health care team, thus preparing students to become critical thinkers and lifelong learners. Also included is the establishment of competencies for general dentistry that must be reflective of an evidence-based definition, and therefore provide for a patient-centered and humanistic environment for learning.

During the past decade, dental educators have been busy introducing new teaching and testing methods. Every change has been called for to address some of the acute problems faced in dental education, however, the reasons for any such change in the first instance has not been profoundly challenged. It is suggested that dental educators should reconsider what kind of dentists they envisage to graduate, and whether the capabilities of their dental graduates are meeting the requirements of global standards. Accordingly, more productive scientifically-based research of the current landscape in dental education may be more helpful to enhance the future professional abilities of "Millennial Generation" dentists.

**Dr. Khalid Nazmi Said**

Dr. Said graduated from Jordan University of Sciecne and Technology in 1994 and obtained his Certificate of Periodontics 2000 and Masters in Oral Science 2001 University of Iowa. He is a Diplomat e of the American Board Of Periodontology 2001.

Dr. Khalid Nazmi Said is currently working as a Consultant and Division Head, of Periodontics, King Abdulaziz Medical City (KAMC) and Assistant Professor, College of Dentistry, King Saudi Bin Abdulaziz University for Health Sciences (Riyadh). He is also the Director of residency training programs in Periodontics and Prosthodontics at KAMC.



## Plastic Periodontal Procedures in the Anterior Zone Harmonious Interaction with the Restorative Dentist

This presentation covers and reviews periodontal surgical procedures that are becoming necessary for successful esthetically oriented dental practice. This includes soft tissue grafting, use of lasers to modify the shape or the color of the gingiva, and esthetic crown lengthening surgery. The presentation sheds some light on clinical tips to improve the outcomes of the procedures discussed.

**Dr. Aladin Al-Ardah**

Dr. Aladdin Al-Ardah is a Diplomate of the American Board of Oral Implantology/Implant Dentistry, Fellow American Academy of Implant dentistry, an Assistant Professor in the Graduate Program in Implant Dentistry and Coordinator of the Internship/Externship program in Implant Dentistry at Loma Linda University, School of Dentistry. He completed a three year full time residency in implant dentistry in 2004, and obtained his Masters degree. Dr. Aladdin is a consultant and expert in the fields of advanced implant surgery, bone regeneration and implant prosthodontics. He has trained residents and fellows in the latest techniques in oral implant surgery and implant prosthodontics at the Center for Implant Dentistry at Loma Linda University.

He has received professional honors from the American Academy of Implant Dentistry Western District in 2002 and Certificate of Appreciation-American Academy of Implant Dentistry in 2007 and 2008 in addition to honors from Penang International Dental College in 2009. In 2012 he received the Robert James Achievement Award in recognition to his commitment to furthering education in the field of implant dentistry.

Dr. Aladdin has published in multiple peer reviewed journals and text books and has lectured nationally and internationally on advanced implant surgery, bone regeneration and implant prosthodontics.



## Maxillary Sinus Membrane Elevation and Subantral Augmentation: An Update on Techniques and Instrumentation

Maxillary sinus membrane elevation and sub-antral augmentation has been first described in 1977, and since then it has been a utilized technique used to gain the needed osseous volume in the posterior maxilla for implant placement following pneumatization of the maxillary sinus. Two main approaches have been described; the trans-alveolar approach and the lateral approach. Although the surgical procedure is well documented and the outcomes are predictable, complications exist, and with an occurrence rate ranging between 0.0-58.3% as reported in the literature, sinus membrane perforation remains one of the most common complications related to subantral augmentation.

The lecture will be an update on techniques and instrumentation on maxillary sinus membrane elevation and subantral augmentation highlighting the latest instrumentation and Loma Linda University research and recommendations aiming to minimize the occurrence of complications.

## Computer Guided Surgery

Cone beam CT, virtual computer planning and 3D modeling have become integral aids in planning and executing implant treatment modalities. This technology allows the implantologist to virtually plan and execute the treatment before actually performing on the patient thus allowing to better anticipate the possible complications, visualize anatomical structures, better implant positioning, accurate implant size selection and in some scenarios have an accurate provisional fabricated shortening the time spent chairside during the surgical procedure.

**Prof. Nadim Z. Baba**

Prof. Nadim Baba received his DMD degree from the University of Montreal in 1996. He completed a Certificate in Advanced Graduate Studies in Prosthodontics and a Masters degree in Restorative Sciences in Prosthodontics from Boston University School of Dentistry in 1999. Prof. Baba currently serves as a Professor in the Department of Restorative Dentistry at Loma Linda University School of Dentistry. He is a Diplomate of the American Board of Prosthodontics and a Fellow of the American College of Prosthodontics. Prof. Baba is an active member of various professional organizations including the Academy of Prosthodontics, the American Academy of fixed Prosthodontics and the International College of Prosthodontists. Prof. Baba has received several honors and awards during his career including: The David J. Baraban Award from Boston University, the Claude R. Baker Faculty award for Excellence in Teaching Predoctoral Fixed prosthodontics in 2009 from the AAFP, and the California dental Association Arthur A. Dugoni Faculty award in 2010. He is also the Regional Director Pacific of the American College of Prosthodontics. He is the author of numerous publications and has lectured nationally and internationally.



## Predictable Aesthetic with Bonded Porcelain Restorations

Porcelain veneers are routinely used by as a way to make esthetic changes for teeth that are discolored, worn, chipped, or misaligned. Porcelain veneers are considered to be strong and to have great esthetics and a long-term prognosis. This presentation will give guidelines to achieve these results by explaining case selection, treatment plan and procedures step by step. Understand the philosophy of esthetic dentistry. Understand the indications and contraindications of veneers. Learn teeth preparation for veneers, temporization and cementation to achieve predictable results.

## Dr. Hans Malmstrom

Dr. Hans S. Malmström, DDS, is the chair of the Division of General Dentistry, director, of the Advanced Education in General Dentistry (AEGD) Program, and director of Continuing Dental Education at the University of Rochester Eastman Institute for Oral Health, New York. He received his dental training at the University of Gothenburg, Sweden, in 1981 and completed a two-year General Practice Residency Program at the University of Connecticut School Of Dental Medicine in 1984.

Dr. Malmström organized, and directed the Annual Participation Hands-On Esthetic Dentistry Program. He has published 32 articles and over 40 abstracts for various dental publications. He is a member of the International Association of Dental Research, the Academy of Osseo-Integration, the American Association of Dental Research, the American Academy of Cosmetic Dentistry, and the American Dental Association. Dr. Malmström is the former president of the Postgraduate General Dentistry Section of the American Association for Dental Schools. He was a consultant to the Veterans Administration from 1985 to 1992 in Atlanta, Georgia, and served on the advisory board for public health in Georgia.

Dr. Malmström was appointed program director of the Eastman Institute for Oral Health's one- and two-year AEGD Program in 1992. Under his leadership, the program has become predominately a two and three year program, with emphasis on research, esthetic dentistry and implants.



## Dental Adhesive & Composites: Where Are We Now?

The lecture is a review of where we are regarding composite materials clinical performance, how to select materials and techniques for best esthetic and long term success. The different adhesives and composite materials physical properties will also be discussed.

The audience will have a better understanding of how to place a composite restoration with good long term success rate. Increase their knowledge in regards to different composite materials structure and physical properties. Know which material to choose for the different procedures.

## Mr. Tarik Baba

Mr. Tarik Baba is a graduate of Collège Edouard Monpetit in Montreal, Canada in 1996 with a degree in Dental Technology. Mr. Baba has a total of fifteen years in the field of dental technology, as a technician and manager of a full service dental laboratory.

### Integrating the Benefits of Modern Dental Ceramics in Clinical Practice

Clinicians have access today to a notable array of new technology, tools and materials to utilize in their increasingly esthetic oriented dental practices. A wide variety of all-ceramic systems have been introduced to offer the dentist and their patients unsurpassed esthetics with clinical performance is marketed as rivaling that of metal-ceramic restorations. These systems are now increasingly reliable and enable cost-effective production of individual crowns. This presentation will review the different commercially available all-ceramic systems. Materials will be discussed with respect to design criteria and clinical applications. Numerous treatment situations will be used to illustrate the use of porcelain laminate veneers; all-ceramic inlays, onlays, and partial coverage crowns, and complete coverage all-ceramic crowns.



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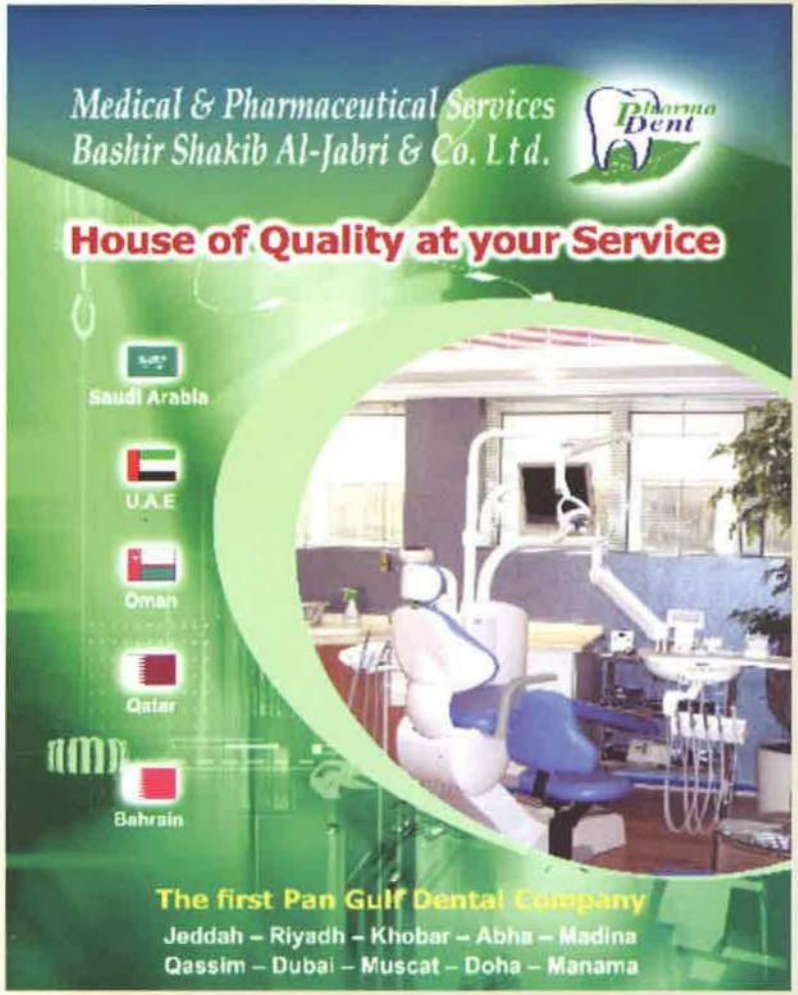


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# Workshop Abstracts

## Modern Dental Ceramic: A Technical Overview

This workshop will guide participants through a complete understanding of the material science and clinical applications of all-ceramic restorations and low-wear rate porcelain.

Attendees will learn about stain and glaze techniques and their application to all-ceramic restorations. Participants will be guided through the process of understanding surface texture, axial contour enhancement, cutback and layering techniques, color science and shade, occlusal morphology, esthetic color effects, optimizing marginal fit and modifiers.

Upon completion of the workshop:

- Participants will get an opportunity to hand layer, grind and glaze one single central using an easy layering technique that optimizes the porcelain assortment to give each restoration a natural look.
- Participants will get an opportunity to adjusted a fully pressed crown, finalize it with texture, characterize it, and stain and glaze.
- Participants will get an opportunity to adjust and finalize a full contour crown made of zirconium oxide.



## Placing the Esthetic Direct Composite Restoration and Fabricate Fiber Reinforced Bridges Efficiently and Predictably

This is a combined lecture and hands-on seminar that will review materials, techniques for placement of anterior esthetic composite restorations with invisible margins, posterior composite restoration as well as techniques of restoring the deteriorated dentition with direct bonded composite restorations. In addition, the use of composite to fabricate fiber reinforced bridges will be described. The different adhesives and composite materials physical properties will be discussed to select the appropriate adhesive and composite resin material for different procedures.

The participants will have an opportunity to work on models to restore single tooth Class IV fractured tooth with invisible margins, efficiently and predictably restore #6-11 when tooth structure is significantly deteriorated with composite material, place posterior composite restoration in Class II lesions using new matrices system for tight inter-proximal contact and fabricate a fiber reinforced bridge.

## Maxillary Sinus Membrane Elevation and Subantral Augmentation

Maxillary sinus membrane elevation and sub-antral augmentation has been first described in 1977, and since then it has been a utilized technique used to gain the needed osseous volume in the posterior maxilla for implant placement following pneumatization of the maxillary sinus. Two main approaches have been described; the trans-alveolar approach and the lateral approach. Although the surgical procedure is well documented and the outcomes are predictable, complications exist, and with an occurrence rate ranging between 0.0-58.3% as reported in the literature, sinus membrane perforation remains one of the most common complications related to subantral augmentation.

The workshop will emphasize and include hands on techniques for both the lateral window approach and the trans-crestal approach in elevating the maxillary sinus membrane using Dentium implants and Dentium Advanced Sinus Kit, DASK, which was introduced to facilitate both approaches for subantral augmentation.



## Principles of Modern Endodontic Surgery

When routine endodontic procedures fail, endodontic surgery is an alternative to extraction and placement of a crown, a bridge or an implant. The main cause for root canal failure is the presence of bacteria within the root canal system. Studies have shown a significant percentage of failed root canals heal following re-treatment. The presenter in this lecture will discuss when to retreat and when to perform surgical endodontics.

Various types of endodontic surgeries including and their indications for calcified canals, irretrievable filling materials, symptomatic cases, procedural accidents requiring surgery, presence of non removable post, unusual canal anatomy, horizontal apical fracture, and exploratory surgery will be discussed. Outcome of endodontic surgery is discussed based on systematic literature reviews and compared to non surgical retreatment and single tooth implants.

## Hands-On: Direct Composite Restorations for Anterior and Posterior Teeth

In the seminar, strategies and concepts for the use of direct composites in anterior and posterior teeth are presented in a very practically oriented way. The lecturer will perform video-transmitted live-demonstrations (step-by-step) of anterior and posterior composite restorations that show detailed the different treatment indications and allow to adopt these concepts in the own clinical practice for the management of routine restorations as well as esthetic highly complex cases.

After the live-demonstrations, the participants will have the opportunity to practice by themselves a Class IV and a Class II composite restoration on a model under the supervision of the course director.



## Implant Supported Overdenture: Hands-On Course

Implant-supported overdenture therapy is becoming a commonly accepted method of providing tooth replacement therapy for the edentulous mandible. This simulation hands-on course will provide laboratory steps needed to reline and/or the intraoral refitting of existing dentures with the overdenture attachments. The emphasis of this course will be on free-standing overdenture attachments (Locator™, Zest Attachments). The indications, complications and maintenance issues will be discussed. The hands-on exercises will allow participants to measure soft tissue height, select and install appropriate Locator™ abutment, Retrofit an existing mandibular denture using the Locator™ attachment system and Reline a mandibular denture using a direct pick-up technique.

### Management of Teeth with Necrotic Pulps and Open Apices

When the tooth apex is immature, conventional root canal treatment cannot be performed. The factors involved in treatment planning for teeth with necrotic pulps and open apexes as well as treatment techniques for various treatment modalities apexification, apical plug, and regenerative endodontics will be discussed.



# Acknowledgements

The Organizing Committee acknowledges the assistance of the College of Dentistry Faculty, Staff, Printing Press, Public Relations and all 11th ADS Sponsor.

## Certificate of Attendance Distribution

Certificate of Attendance for the Symposium will be distributed on Wednesday – October 30, 2013, ONLY upon receipt of the completed evaluation form.

Certificate of Attendance for the Workshop will be distributed after each respective workshop – October 31, 2013, ONLY upon receipt of the completed evaluation form.

## Information about the CME's

This Symposium is accredited by the Saudi Council for Health Specialties. The number of the CME Credits is 15 Hours for the symposium, Council Eligibility Number **37467/2013**:

| Workshop Title | SCFHS Eligibility # |
|---|---|
| Maxillary Sinus Membrane Elevation and Subantral Augmentation | **37468/2013** |
| Placing the Esthetic Direct Composite Restoration and Fabricate Fiber Reinforced Bridges Efficiently and Predictably | **37468/2013** |
| Hands-On: Direct Composite Restorations for Anterior and Posterior Teeth | **37468/2013** |
| Management of Teeth with Necrotic Pulps and Open Apices | **37468/2013** |
| Principles of Modern Endodontic Surgery | |
| Hands-On: Implant Supported Overdenture | |
| Modern Dental Ceramic: A Technical Overview | |