

- 2 Bond Strength of Orthodontic Brackets Using Four Different Cements. A. ROMEO\*, M. TOLEDANO, R. OSORIO, B. HIGUERA, and F. GARCIA-GODOY (University of Barcelona and University of Granada, Spain; and UTHSC, San Antonio, TX, USA).
- 1413 Effects of Water and Saliva Contamination on Bond Strength of Orthodontic Glass-ionomer Cements. M. MATSUMOTO\*, S.B. HONG, N. MATSUO, S. ARITA, T. ITOH, Y. INOUE, T. FUKUSHIMA, and K. MIYAZAKI (Fukuoka Dental College, Japan).
- 1414 Bonding of Hybrid Ionomers to Modified Orthodontic Band Materials. V.A. MENNEMEYER\*, J.M. POWERS, P.N. NEUMAN, and D. LI (Houston Biomaterials Research Center, University of Texas-Houston Dental Branch, USA).
- 1415 Orthodontic Bonding: A Comparative Study of Shear Bond Strengths. H.P.Y. THEAN\*, C.L. CHEW, S.H. TEOH, and K.T. TSAI (National University of Singapore).
- 1416 Surface Contamination on Bond Strengths of Brackets Luted with Glass-polyalkenoate. T. WONGSRIMONGKOL\*, A.H.L. TJAN, W.L. SCHLENKER, and A. BÉRESS (Loma Linda University, CA, USA).
- 1417 Effects of Surface Treatment on Bracket's Bond Strength Using Glass-polyalkenoate. A. BÉRESS\*, A.H.L. TJAN, W.L. SCHLENKER, and T. WONGSRIMONGKOL (Loma Linda University, CA, USA).
- 1418 Type II Resin-modified Glass Ionomer as Occlusal Sealant: Two-year Clinical Update. M.M. WINKLER\*, E. DeSCHEPPER, J. DEAN, B.K. MOORE, N. EWOLDSSEN, and M.A. COCHRAN (School of Dentistry, Indiana University, Indianapolis; and Nebraska Dental School, Lincoln, USA).
- 1419 Retention Rate of Glass Ionomer in Primary and Permanent Molar. Y.-Y. CHEN\* (Department of Dentistry, The 812th Military Hospital, Keelung, Taiwan, ROC).
- 1420 Two-year Clinical Performance of Four Sealants. T.A. MORROW\*, W.G. CHRISTENSEN, C.I. CORDNER, D.K. HEIN, S.L. SMITH, and R.P. CHRISTENSEN (Clinical Research Associates, Provo, UT, USA).
- 1421 Sealing of Primary and Permanent Teeth with Helioseal. F.V. VRBIČ\* (Department of Stomatology, Medical Faculty, University of Ljubljana, Slovenia).
- 1422 Retention of Dual-cure Dental Sealant: One-year Follow-up. J.M. SOH, I.C. PUNWANI\*, and R.J. DOOLEY (University of Illinois at Chicago, USA).
- 1423 A Clinical Study of Air Abrasion in Sealant Retention. M. BOYD, P. SCHNEIDER\*, R.J. MUSSELMAN, and C. DUMMETT, Jr. (School of Dentistry, Louisiana State University, New Orleans, USA).

Seq#: 149 Friday, 11:15 am - 12:45 pm  
Poster Session, Hall E1/E2

**Dental Materials II—Ceramics and Cements -  
CAD/CAM, Inlays and Veneers**

**Chairperson: D. Rekow**

- 1424 Bonding of Resin Cements for Luting CAD/CAM Ceramic Restoration. K. KAMADA\*, K. YOSHIDA, H. MATSUMURA, and M. ATSUTA (School of Dentistry, Nagasaki University, Japan).
- 1425 Milling Disc Wear Effects on Fracture Resistance of Cerec CAD/CAM Restorations. A.L. DAVID\*, S.B. DAVID, and L. GETTLEMAN (University of Louisville, KY; and NYU College of Dentistry, New York City, USA).
- 1426 Effect of Wall Seal with a Low-viscosity Resin on Cavity Adaptation of CAD/CAM Restoration. S. NAKAMURA\*, Y. NARA, and H. TANAKA (School of Dentistry, Nippon Dental University, Tokyo, Japan).
- 1427 Margin Adaptation of Idealized Ceramic Inlays—An *in vitro* Study. G. DELCAMPO\*, V.B. DHURU, H. MURDOCH, and W.W. NAGY (School of Dentistry and College of Engineering, Marquette University, Milwaukee, WI, USA).
- 1428 Marginal Adaptation and Fit of Ceramic Overlays *in vitro*. J. MUNACK\*, M. SCHUCKAR, and W. GEURTSSEN (Department of Conservative Dentistry and Periodontology, Medical University Hannover, Germany).
- 1429 Marginal Adaptation of Ceramic Veneers to Dentin *in vitro*. M. CHRISTGAU, K.-H. FRIEDL, G. SCHMALZ, K.-A. HILLER, U. RESCH, and N. BADER\* (Dental School, University of Regensburg, Germany).
- 1430 Porcelain Veneers: A Four-year Clinical Evaluation. P. KIHN\*, D.M. BARNES, and L. BLANK (Dental School, University of Maryland, Baltimore, USA).

- 3071 10:15 *In vitro* Studies of CNC Cell Fate during Mandibular Morphogenesis. Y. CHAI\*, P. BRINGAS, and H.C. SLAVKIN (Center for Craniofacial Molecular Biology, School of Dentistry, University of Southern California, Los Angeles; and NIDR/NIH, Bethesda, MD, USA).
- 3072 10:30 Evidence of a Deletion in Mouse Cleidocranial Dysplasia. R. SIMJEE\*, S. MUNDLOS, and B.R. OLSEN (Harvard School of Dental Medicine and Medical School, Boston, MA, USA).
- 3073 10:45 Novel X-linked Inheritance Pattern in Craniofrontonasal Syndrome. G.J. FELDMAN\*, D.E. WARD, N.H. ROBIN, A.L. ARONSON, E.H. ZACKAI, D. SAAVEDRA, V. PROUD, L.J. ROBB, V. KALOUSTIAN, E. JABS, J.C. CAREY, A. MUNNICH, M.M. COHEN, Jr., R.A. PRICE, and M. MUENKE (Department of Genetics, CHOP, Philadelphia, PA, USA).
- 11:00 Discussion

**Seq#: 298** Sunday, 8:30 am - 11:15 am  
Oral Session, Room 231A/B

**Dental Materials I—Adhesion and Bonding - Microleakage**

**Chairpersons: J. Dunn and J. Chain**

- 3074 8:30 Microleakage of Four Luting Agents Used in Fixed Partial Denture. E.K. YNGA\*, M. SARAVIA, and L. CARBAJAL (School of Dentistry, Universidad Peruana Cayetano Heredia, Lima, Peru).
- 3075 8:45 Microleakage of Two Dentin Bonding Systems in Class V. K. FLORES, P. INJOQUE, and M. SARAVIA\* (Hospital Militar Central; Ejercito Peruano, Clinical Dental, Lima, Peru).
- 3076 9:00 Proximo-cervical Microleakage of Dentin Adhesive/Composite Restorations in Class II Cavities. M.F.L. NAVARRO\*, M. SCHUCKAR, J. MUNACK, and W. GEURTSSEN (Bauru Dental School, São Paulo University, Brazil; and Department of Conservative Dentistry and Periodontology, Medical University Hannover, Germany).
- 3077 9:15 *In vivo* Leakage of an Adhesive System with and without NaOCl as Pretreatment. A. VICHI\*, M. FERRARI, and C.L. DAVIDSON (University of Siena, Italy; and ACTA, University of Amsterdam, The Netherlands).

- 3078 9:30 Quantitative Microleakage of Compomers and a Tri-cure Glass-ionomer Cement. J.B. CHAIN\*, M.C. CHAIN, W.R. LACEFIELD, and C.M. RUSSELL (CAPES, CNPq/UFSC-Brazil; University of Alabama at Birmingham; and Medical College of Georgia, Augusta, USA).
- 3079 9:45 Bond Strength, Microleakage of One-component Dentin Bonding Agent. X.Y. YU and A. MATTHEWS\* (Den-Mat Corporation, Santa Maria, CA, USA).
- 3080 10:00 Microleakage and Bonding of Amalgam to Dentin with Dentin Adhesives. J.R. DUNN\*, F. BERRY, C. CRESSEMAN, K. LAU, and J. WILLARSEN (School of Dentistry, Loma Linda University, CA, USA).
- 3081 10:15 Sealant Microleakage after Air Abrasion, Phosphoric or Nitric Acid Etching. W.S. EAKLE\* and K.S. ADAIR (University of California, San Francisco, USA).
- 3082 10:30 Influence of Storage Media on Microleakage in One-bottle Bonding Systems. B.T. SCHNEIDER\*, L.G. WATANABE, M.A. BAUMANN, and G.W. MARSHALL (University of California, San Francisco, USA; and University of Cologne, Germany).
- 3083 10:45 Microleakage of Two Flowable Composites Placed after Microabrasion Preparation. M. ESQUILIN, M. CANNON\*, and R. COOLEY (Northwestern University, Chicago, IL, USA).
- 3084 11:00 Microleakage of Two Adhesive Systems after Load and Thermal Stress. M.H.S. SOUZA, Jr.\* and A.M. GONÇALVES (Bauru Dental School, University of São Paulo, Brazil).

**Seq#: 299** Sunday, 8:30 am - 11:15 am  
Oral Session, Room 330B/C

**Dental Materials II—Ceramics and Cements - Ceramic Bond Strength and Treatment Effects**

**Chairpersons: J. Geis-Gerstorfer and K. Chung**

- 3085 8:30 Proposed ISO 'Bond Strength' Test: Residual Stress and Fracture Behavior Analysis. J.R. KELLY, M.L. MYERS\*, and P.H. DeHOFF (NIST, Gaithersburg, MD; MCG School of Dentistry, Augusta, GA; and UNC Charlotte, NC, USA).
- 3086 8:45 Influence of Sintering Material and Cement on the Bond Strength of All-ceramic Resin-bonded Bridges. S. KISTLER\*, P. POSPIECH, P. RAMMELSBURG, and W. GERNET (Ludwig-Maximilians-University of Munich, Germany).