At the custom shade appointment, I used my Custom Shade Chart* to record the patient's tooth shape, contour, prep color, mamelons and occlusion. I also drew a color map of the tooth and used the custom porcelain shade tabs in the LSK121 Chairside Shade Guide to determine shade: CS6 and MY2 for the incisal third, Y12 for the gingival third and Y13 for the middle.

I pressed a GC LiSi LT Press Ingot to create the coping and applied GC Initial LiSi veneering ceramic in shade A-1 to begin building up the cervical area. I used food coloring to highlight my porcelain applications. Toward the incisal area, I applied a 1:1 mixture of B-1 + E-59 enamel color.

I applied EOP-2 from the body area to the incisal and EOP-3, a subtle translucent blue, to the mesial corner. The red is GC Initial Dentin.

Restorative Problem/Treatment Plan:
A male patient in his mid-30s wanted a new, more esthetic crown on tooth #8 which had previously been endodontically treated and crowned. Since this was an anterior restoration, shade matching—especially to tooth #9—was critical. The patient presented with a dark stump color on his prepped tooth; to achieve the best esthetics, the dentist, Dr. Robert Kruerer, Evanston, IL, and I decided to use the new GC LiSi LT Press Ingot.

GC America Launches GC Initial™ LiSi Press
GC Initial LiSi Press is a new high-strength lithium disilicate ingot featuring HDM (High Density Micronization) technology; this proprietary technology uses equally dispersed lithium disilicate micro-crystals—rather than traditional, larger-size crystals—to fill the entire glass matrix. As a result, the material is strong, esthetic and stable without distortion or drop in value, even after multiple firings.

It has a flexural strength of 450 MPa and virtually no reaction layer when divested, and offers low abrasion and wear resistance and rich, warm and bright colors with excellent fluorescence. GC Initial LiSi Press is optimized for use with GC Initial™ LiSi veneering ceramic and GC Initial™ Lustre Pastes NF.

For more information, call 800-323-7063, email gca_sales@gcamerica.com or visit www.gcamerica.com.

How to Use GC Initial™ LiSi Press Ceramic for a Single Anterior Crown
Luke Kahng, CDT, demonstrates how he uses the new GC Initial LiSi Press Ceramic Ingot for a color-critical case.

Step 1
At the custom shade appointment, I used my Custom Shade Chart* to record the patient's tooth shape, contour, prep color, mamelons and occlusion. I also drew a color map of the tooth and used the custom porcelain shade tabs in the LSK121 Chairside Shade Guide to determine shade: C56 and M2 for the incisal third, Y12 for the gingival third and Y13 for the middle.

Step 2
I pressed a GC LiSi LT Press Ingot to create the coping and applied GC Initial LiSi veneering ceramic in shade A-1 to begin building up the cervical area. I used food coloring to highlight my porcelain applications. Toward the incisal area, I applied a 1:1 mixture of B-1 + E-59 enamel color.

I applied EOP-2 from the body area to the incisal and EOP-3, a subtle translucent blue, to the mesial corner. The red is GC Initial Dentin.

*To download the Custom Shade Chart or for more information on the LSK121 Chairside Shade Guide, visit LMTmag.com/articles/how-to-maximize-custom-shade-matching-results.
I applied a purple, transneutral color to the mesial 1/3 and distal 1/3 areas, as well as TM-02 (a subtle white color and translucency) on top of the red.

I applied TM-03 (rose colored) with TM-05 (grey) and a very subtle Cervical Translucency 22 (green) to create a light orange mamelon effect.

To add the white/beige coloring to the mesial area, I used a mixture of E-59 (a creamy white color) and E-60 (clear tan).

To mimic tooth #9, I created a crack line using a sharp knife to cut into the porcelain and filled it with white stain.

For the final buildup, I applied the same mixture of E-59 and E-60 used in Step 5. The mesial area of adjacent tooth #9 was more translucent than the distal area, so I used more GC Initial Clear Fluorescence enamel in the mesial area here so it would match. I then baked the crown, added contour and texture, and glazed it.

To add the white/beige coloring to the mesial area, I used a mixture of E-59 (a creamy white color) and E-60 (clear tan).

The crown was tried in the mouth and I checked the surface texture and color with saliva/hydration. The interproximal contact was purposefully wide in order to create the same symmetry between teeth #8 and #9.

Luke Kahng, CDT, is the Owner of LSK121 Oral Prosthetics in Naperville, IL. In addition to being a board member for several dental publications, he has published more than 100 articles in major dental and laboratory journals. Kahng also lectures internationally, offering hands-on seminars to dental technicians and clinicians alike.