Sometimes you’re just too close to something to see it clearly. Here at AISC, we live so close to steel that we often become blasé. I received an e-mail the other day from an editor of one of my favorite magazines, Building Design & Construction, asking what was new with steel. We tossed the subject around the office, and frankly, didn’t come up with much.

I called the editor back, and as I told him about the mere pittance of information I had come up with, the conversation became more and more interesting. What was old hat to me was new and exciting to him.

Since he was focusing on materials (titanium cladding, for example), I started out by telling him about ASTM A992. We’ve been preaching about the move to A992 for a couple of years now, but many architects, contractors, and developers are still unaware. Just recently one of the engineers in the AISC Steel Solutions Center saw a spec referencing A50-obviously the “logical” extension of A36.) I promised to send him a white paper on A992 by AISC’s Sergio Zoruba (we’ll be printing it next month) along with a drawing illustrating the strong column/weak beam concept. I also mentioned that there’s a premium on A36!

From there, we talked a bit about Girder Slab Technologies’ asymmetric beam (see “Slab Solution” in the May 2002 issue of MSC). And since that member is castellated, we naturally segued into SMI Steel Products’ Smart-Beam (see www.smisteelproducts.com for more info).

And, of course, along similar lines I told him to check out Corus’ (formerly British Steel) Slimdek and Slimfloor systems (see www.corusgroup.com). While not yet available in this country, these systems should make a dramatic impact when they reach our market.

BD&C is enamored of green construction, so we talked a bit about recyclability (hey, a typical beam in the U.S. is made from 95% recycled material) and I mentioned that steel production uses substantially less energy today. And I reminded him that in any comparison of steel and concrete, it’s important to also consider the energy cost of cement production. (If you’re interested in how steel works within the LEEDS green building rating system, visit www.recycle-steel.org.)

From material we moved to method and I mentioned two innovations that we may start seeing more of (especially in seismic regions): post-tensioned steel buildings and steel shear walls. Post-tensioning for steel is being studied at the University of California-San Diego. The cables are used to resist sideways and extend alongside the beams without touching them (the researchers report the cables might be secured to the steel beams with nothing more than tack welds). AISC-member Herrick Corp. has helped the study with the donation of more than $10,000 of fabricated steel. Steel plate shear walls also show great promise and research is ongoing by Professor Abolhassan Astaneh-Asl and others at the University of California-Berkeley and researchers at the University of British Columbia. (For more information on steel plate shear walls, visit www.aisc.org/steeltips and click on “Seismic Behavior and Design of Composite Steel Plate Shear Walls”.

I thought about talking with him about advances in electronic data interchange (EDI), fabricator early involvement, and AISC-sponsored technical research, but decided to save those for another day…and another editorial.

P.S. — Please join me in welcoming our new assistant editor. Beth S. Pollak comes to us fresh from Northwestern University’s Medill School of Journalism. She can be reached at pollak@modern-steel.com.