ON THE DAY THIS issue goes to press the Winter Olympics open in Sochi, Russia. Most people last went sledging in the park as children and their experience of winter sports since has been limited to a leisurely meander around the temporary ice rink with the family each Christmas. But this time every four years, they became fascinated with the finer points of curling, the aerodynamics of the ski jumpers or the suicidal speeds of sliding sports like luge or skeleton.

I don’t care what the statistics say, lying on a brakeless sled and hurtling down an ice run at 106mph will always feel dangerous to me.

So total respect to those crazy enough – sorry, courageous enough – to be launching themselves down the various expensively-maintained inclines in Sochi for the next few weeks. I wish them all luck (secretly the GB team more than the rest). But each and every variation of the Olympics and Paralympics in the 21st century is about so much more than the athletes, the events, or even the technology behind the achingly meticulous preparations. Every host country tries to outdo the previous to make their games the biggest, best built and, these days, the ‘greenest’ ever. The Sochi games are no exception.

This one cost an estimated $51bn, equivalent to around £30bn, which is three times the original estimate. Where’s all that investment gone? Crispin Andrews starts with an assessment of the stadium buildings, their green credentials, earthquake protection and security surrounding them on p36. Amanda Saint looks at the engineering that went into the supporting transport infrastructure and its environmental impact on p40.

Erecting stadiums is one thing, but dealing with torrential weather, a striking workforce and structural collapses it quite another. Juan Pablo-Conti updates us on work on the World Cup facilities in Brazil (p50) to find out if they are likely to be ready in time for June’s tournament.

If sport isn’t your thing and you’re looking for an antidote we have some refreshing alternatives too. Nick Smith interviews an engineer who made a highly unusual career change, from avionics to jewellery designer on p64. And Christine Evans-Pugh reports on the latest advances in biomimetics – engineering inspired by the natural world (p68).

Also in this issue, a new way of storing energy from intermittent alternative sources (p76), motion control comes on in leaps and bounds (and little hops and jumps) for consumer electronics (p80) and in software reviews (p90) Bryan Betts has some tips for boosting your browser.

Finally, if you are in LinkedIn did you upload your CV, make a few connections and then…wonder what on earth else you do with it? You’re not alone but to get more out of it you have to get a little more involved. And you can start by joining our new LinkedIn Group. Come on, it’s only a couple of clicks away at http://bit.ly/eandt-linked.