## Timber engines for growth

Julius Natterer is one of the planet's leading wood engineers. From his base at the Lausanne Institute of Technology, Switzerland, Natterer and his team are at the cutting edge of the new generation of ground-breaking wood sourced materials



Looking up at Hannover Expo's ExpoDeck

big man shuffles hurriedly along the corridor, followed by a patient shaggy labrador, which seems to spend most of its time under the assistant's desk. This is the Laboratory IBOIS, nestled within Lausanne's Institute of Technology, a warren-like and immaculately clean concrete campus fifteen minutes by tram ride from the centre of the Swiss lakeside city. It is a world-renowned department. Downstairs are the workshops where any number of innovative wood projects are in various stages of completion; one of the nerve centres of wood in construction research in Europe today, and the man, Julius Natterer, has been one of the most renowned timber engineers on the continent for over the last two decades. In that time he has built the department into a creative hub for wood engineering innovation, with a world-class reputation. For instance, Richard Harris, head of wood engineering at Buro Happold, says Natterer's research is the best in Europe, if not the world. In the corridors all around are instances of projects that have either been completed or are in the midst of completion. The irony,

acknowledged by a PHD research student who shows me round, is that all this research is happening inside a building firmly built from steel and concrete.

The offices of IBOIS do not reveal the full picture apparent at ground level. Take the lift down to that ground floor and a door opens into the world of wood research which is a 360 degree eye-opener. All over the workshops are projects, mainly concerned with hybrid wood-cement, wood-glass, wood-plastic work which is ongoing and, in various instances, already in use. There is much load bearing as well as ultrasonic equipment used to determine the trunk quality of uncut trees. There is a small core of post-graduates buzzing around, who appear to hold Professor Natterer in almost deified regard. 'Natterer', says one, 'is a very unusual professor.' What becomes clear is that he is a live wire, with an impatient short fuse when it comes to completing the projects that will add to the broad range of timberbuilt engineering and technologies he has initiated. The bottom line for all these projects is sustainable integrity, whether realised or not.