

*Hal Iyengar's three decades at SOM*

# From Chicago's Sears Tower to Spain's Guggenheim Museum



By Tonya Weger

**W**ith a career spanning more than three decades, Srinivasa (Hal) Iyengar can reflect on his accomplishments of having a hand in some of the world's most well-known buildings. Iyengar's portfolio includes the Sears Tower and John Hancock Center of Chicago, as well as more recent creations such as the Guggenheim Museum in Bilbao, Spain and the Broadgate Building in London.

During his long-running career at Skidmore, Owings & Merrill LLP (SOM), Iyengar moved from Project Engineer to Senior Structural Engineer, and eventually to General Partner and Director of structural engineering. During his tenure, he garnered a reputation as a man who often pushed the limits by turning visions of ultra-high structures into reality. He also has gained the recognition of his peers: In 1995 ASCE presented him with a lifetime achievement award (and honorary membership in 1999) and AISC presented him with its lifetime achievement award earlier this year.

Even now, in his retirement, he is reaching for the sky through design and implementation of new buildings.

As a senior consultant to SOM's Structural Engineering Department, Iyengar is continuing his long-running stint with the company – something his associates are convinced is due to his love of building. “I don't think he'll ever really retire,” SOM associate partner Robert Sinn said.

*For many, Hal Iyengar will always be best known for his work on the John Hancock Building (left) and the Sears Tower, both in Chicago.*



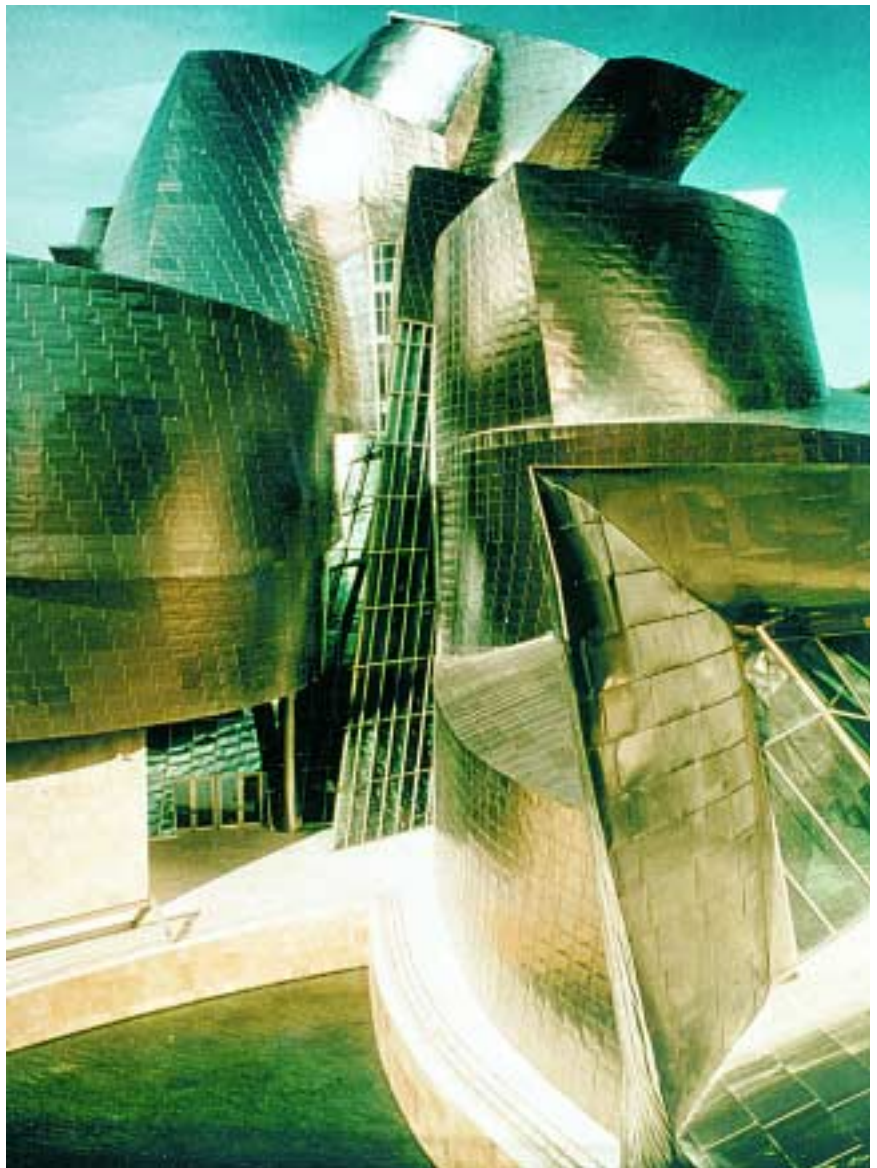
*Srinivasa (Hal) Iyengar*

SOM Director D. Stanton Korista agreed. “You won’t find Hal out on the golf course. Instead, he’ll be thinking up new ways to make buildings. That’s what he does.”

Splitting residency between Evanston, IL and Sanibel Island, FL, Iyengar continues to design. He is currently working on Chicago’s Millennium Park band shell with Frank O. Gehry, with whom he previously on the Guggenheim museum in Bilbao, Spain. Iyengar will also be a primary consultant on Chicago’s plan to recapture the world’s tallest building title, a 2,000’ structure that will stand at Dearborn and Madison Streets, if plans are seen to fruition.

### **Design Innovations**

Along with the late Fazlur Khan, with whom he began working with in 1960 at the start of his professional career, Iyengar created new concepts for high-rise building structural systems. These included the bundled-tube design of the Sears Tower and the diagonal truss tube of the John Hancock Center. The Hancock was completed in 1970, while the 110-story Sears Tower – the world’s



*Chicago’s McCormick Place Convention Center expansion and the Guggenheim Musuem in Bilbao, Spain, are radically different, yet both set the standard for their type of facility.*





*The Hotel del las Artes at Vila Olimpica in Barcelona, Spain expressed many of Iyengar's design philosophies.*

tallest building at that time – reached completion three years later. The landmark skyscrapers, like many of Iyengar's works, have been praised for being highly innovative, yet practical.

Those buildings, said Iyengar, were perhaps his most exciting to work on. "Both evolved very quickly. That doesn't happen these days," said Iyengar, who moved to the United States from India to study engineering but considers himself a Chicagoan. "Given that and working with Faz, I would say that was the most exciting thing." At that time, Khan and Iyengar were doing things that no one had before, not to mention going much higher.

"It was a time when it was a new thing to build towering structures," Sinn said, "World War II was over and things were on the rise. Faz and Hal were the innovators. The buildings were like nothing ever built."

### **Fluid Designs**

In terms of materials, Iyengar loves the adaptability of steel. "Steel has strength and can have very bold lines, but, especially lately, can be used for a more fluid look," Iyengar said. The Hancock Building is an example of the former, while Bilbao's Guggenheim set a new standard for steel aesthetics. The structural system uses curvature to resist wind loads, without attempting to control the building's overall nature. "It is an remarkable building, unlike anything before," Iyengar said.

Judging which project was the most innovative of his career is difficult for Iyengar, but if pressed he cites the Broadgate Exchange House in London with its innovative bridge concept design. Fire-engineering methods were utilized to completely expose the building's steel exterior structure, which stretches over an active railway right-of-way at Liverpool Street station. The con-

struction process, he said, was much more of an evolving process. "We had to lift the building and that was a challenge," Iyengar explained. "With Broadgate we were really pushing."

### **Stubborn Professionalism**

Sinn remembers flying to England to celebrate the building's progress only to have Iyengar insist upon halting operations due to structural complications. "It wasn't ready and Hal knew that. He said 'I won't go along with this. Do what you want, but I won't,'" said Sinn with a grin that showed just how typical this was of Iyengar's character. "And everybody listened to him because they respected him so much."

The trip wasn't a waste; they celebrated regardless. "Hal was loving the moment. He had his camera out and was taking pictures," Sinn added. "He had this big smile on his face."

Iyengar wasn't being difficult. It was a matter of priority, and the building was his primary goal, not some PR-driven party. "Hal is professionalism and integrity," associate partner John J. Zils said. "Anything he did was because he knew what was best for the project. He would never do anything if it wasn't absolutely necessary."

But Iyengar's practically is matched by his passion for the work. "You've got to have passion," he exclaimed.

Iyengar never was a big fan of the ins and outs of corporate must-do operations. "I think he really likes being able to concentrate solely on his work without having to think about the paperwork," Zils said. "He's adjusted better than I even thought possible to the down time after being in such a fast-paced environment for so long. But I think this gives him just what he wants. It's really been a great thing."

Of being a consultant at SOM and being able to spend some quiet time

in mildly serene Florida, Iyengar said, "I'm having my cake and I'm eating it too."

For one thing, he keeps up with technology, learning the latest in computer innovations. "There are a lot of things we used to do that the computer does now," Iyengar said. "Times are changing, and it's important to stay up with them."

And meshing the past with the present, Iyengar may become an avatar of sorts, as teaching could be on his horizon. "I would like to instruct on a seminar basis," he said, adding that his preference would be the University of Illinois, where he received a Master's in Civil and Structural Engineering and began working toward his Ph.D. before joining SOM.

"I'm also taking the time to do the things I should be doing, like writing and traveling to see structures I've never seen before."

Meanwhile, as Iyengar winters at his Sanibel Island home, the scene is one of laid-back comfort and tropical, southern charm. While the world may be colored by Iyengar's contemporary artistry and design, his island get-away looks nothing like the modern structures he creates. "I've never really had the time to build my own home, although that's every architect's dream," he said. "I suppose I never felt home was a strong component of my life."

No surprise there. For Hal Iyengar, a view has more to do with the towering structures he continues to influence.

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*Iyengar considers the Broadgate Exchange House in London as his most innovative.*