



Professor İhsan Mungan (1936 – 2012)

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<http://multi-science.atypon.com/doi/abs/10.1260/0266-3511.27.4.iii?journalCode=ijss>
https://tr.wikipedia.org/wiki/İhsan_Mungan

İhsan Mungan was a member of the editorial board of the International Journal of Space Structures for many years. The following article was published in the Journal of the IASS: International Journal of Space Structures, Vol. 27, No. 4, 2012. (Only the first page of that article is available for free, and the authors of it are not identified on that first page. It is possible that Professors John F. Abel, Görün Arun, Wilfried Krätzig and René Motro are the authors.)

First page of the In Memorium article:

With the untimely death of İhsan Mungan from complications of pancreatic cancer, the IASS has lost a tireless actor in the field of shell and spatial structures. After nearly forty years involvement at every level of the Association – Working Group member (especially WG 3 on Cooling Towers), symposium and colloquium organizer, reviewer for the Journal of the IASS, member of the Executive Council, Vice President, and finally member of the Advisory Board – he was awarded an Eduardo Torroja Medal in 2009. His acceptance lecture at the Jubilee Symposium was a retrospective of his research on the buckling of shell structures, one of his great passions.

At the time of his passing, Mungan was Professor Emeritus of Mimar Sinan University, Istanbul. He was still actively working and teaching as the Director of the Graduate School of Haliç University, Istanbul. Characteristic of his energy and dedication to his profession, he continued to teach and supervise research throughout his illness up until weeks before his death. Even while hospitalized for his last month, he continued writing an autobiography he entitled, “An Engineer’s Adventure in Art,” a work that he completed just a day or two before he passed.

Born in Mardin, Turkey, Ihsan Mungan graduated from Istanbul Technical University, Faculty of Civil Engineering, Reinforced Concrete Branch in 1959. He obtained his PhD in 1965 at the Technical University of Munich under the supervision of Hubert Rüsçh with a thesis on the buckling of cylindrical shells under various stress states. For this thesis he developed an innovative experimental technique of carrying out shell buckling experiments in a water-enclosed environment. This ingenious approach slowed down the buckling progression from the “micro-second” range to the “second” range, making the detailed deformation history more readily observable. Next, during 1965-1971, he worked as an assistant professor in Middle East Technical University, Ankara, Turkey.

Mungan then moved to Germany to work as a researcher at the Ruhr University Bochum during 1971-1985 in the chair of Wolfgang Zerna. In the 1970s Mungan’s research extended his earlier work on stress states for buckling of cylindrical shells to shells of negative Gaussian curvature such as reinforced concrete cooling tower shells. He developed a design formula for the wall thickness of such towers considering the buckling behavior. He extended the research on cooling tower shells to include the effect of rings and meridional stiffeners, and in the 1980s turned (more not available for free; authors of th “In Memoriam” article were not identified on this first page.)

Selected Publications:

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Mungan, I., “Experimentelle Beuluntersuchungen und Stabilitätsnachweise für Kühlturmschalen,” Konstruktiver Ingenieurbau Berichte 1977, Heft 29/30, S. 75–80.

Ihsan Mungan, “Buckling Stresses of Stiffened Hyperboloidal Shells”, ASCE Journal of the Structural Division, Vol. 105, No. 8, August 1979, pp. 1589-1604

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Zerna, W. und Mungan, I., “Über das Beulen von Kühlturmschalen mit Versteifungsringen,” Beton- und Stahlbetonbau 76 (1981), H. 2, S. 33–36.

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Mungan, Ihsan, “A conceptual approach to shell buckling with emphasis on reinforced concrete shells”, Universidad Politécnica de Valencia, Congresos UPV, Symposium of the International Association for Shell and Spatial Structures – IASS, 2009-11-25, ISBN 978-84-8363-461-5, pp. 39-50.