



## John J. Uicker Jr.

July 11, 1938 - April 25, 2023

Professor Emeritus John J Uicker Jr died April 25th in Madison, WI from lung cancer. He was born July 11, 1938 in Derry, NH to Elizabeth (Flint) and John Uicker Sr and was raised in Detroit, MI. He was 84 years old.

John completed his undergraduate degree in mechanical engineering at the University of Detroit and his master's and PhD at Northwestern University. He served two years in the Army as captain of the Metrology and Calibration Center at Frankford Arsenal. In 1967, he accepted a teaching position with the University of Wisconsin - Madison in the Mechanical Engineering Department, where he dedicated over 40 years to his students and the profession. In his time there, he advanced connections between the Mechanical Engineering Department and industry, and founded and directed their Computer Aided Engineering Center (CAE). He was awarded the Ralph R Teetor Education Award in 1969 and the Byron Bird Award in 1985. He was the first of three UW Madison professors to earn a Fulbright Fellowship at Cranfield Institute of Technology (1979). His teaching and research specialties have been in solid geometric modeling and the modeling of mechanical motion and their application to computer-aided design and manufacture; these include the kinematics, dynamics, and simulation of articulated rigid-body mechanical systems.

John was known nationally and internationally for his contributions to machine design and kinematic research on spatial linkages and robotics. He was a pioneering researcher on matrix methods of linkage analysis and was the first

to derive the general dynamic equations of motion for rigid-body articulated mechanical systems. He created a number of design automation and modeling programs, including the Integrated Mechanisms Program for computer-aided design and analysis of multi-body mechanical systems in three dimensions. More than 100 industrial and educational organizations worldwide utilized this system, which was the first of its kind. He was also the author of several textbooks. His textbook, *Theory of Machines and Mechanisms*, is a landmark and he has a record of distinguished service to the machine design community. He was a founding member of the US Council for the Theory of Machines and Mechanisms and of IFToMM, the International Federation. He has been the recipient of many awards for his work, including twice for historically significant publications and three times for outstanding research publications.

Memberships in American Society of Mechanical Engineers (ASME) and the Pi Tau Sigma engineering honor society started at U of D and continued through John's lifetime. He also joined Sigma Xi during his second year at Northwestern and was an honorary member of Tau Beta Pi. Professional memberships also included American Society for Engineering Education (ASEE), and EU Academy of Sciences. He was elected ASME Fellow in 2007. His service on national committees of ASME and the Society of Automotive Engineers (SAE), as editor for the *Mechanism and Machine Theory* journal, and his Uicker Education Fund to support undergraduates in Mechanical Engineering at UW Madison demonstrate his dedication to the profession. After retiring from active teaching in 2008, John enjoyed spending time with his children and grandchildren, including family trips with them all over the country. When at home, puzzles of any kind, as well as card games with his kids and visitors, filled his time when he wasn't still updating his textbooks. John is survived by his children, Theresa (Chris) Zenchenko of Evansville, WI; John (Paula) Uicker of Dearborn, MI; Joe Uicker of Madison, WI; Dottie (Dean) Winger of Eagle River, WI; Barbara (Mark) Peterson of Orland Park, IL; and Joan (Kevin) Horne of Sugar Grove, IL; seven grandchildren, Josh,

Andrew, Rose, Joe, Nicoleta, Alina, and Maddie; siblings, Joe Uicker, Jim (Suzanne) Uicker, Tom Uicker, Mary Fran Uicker IHM, Liz (Nick) Cantu, and Peggy (Mike) O'Neil; and countless friends and colleagues. He was predeceased by his parents, three siblings, the mother of his children, and a daughter-in-law. John's family would like to offer a special thank you to the Oak Park Madison East Assisted Living for the excellent care they provided these past few months and to the Agrace Hospice nurses who helped to support us and control his pain. He is now at peace.

A visitation and rosary service will be held at Ramsey Funeral Home, 425 State St, Harbor Beach, MI at 5-8pm on Sunday, May 7th. Immediate family may gather at the funeral home at 10am Monday, May 8th. Funeral Services will be held at Our Lady of Lake Huron Catholic Church in Harbor Beach on Monday at 11:30am, followed by burial with military honors in the family plot at St. Anthony's Cemetery on Helena Rd, just one mile from the summer home he helped his parents build. A memorial gathering to celebrate John's 85th birthday will be held in the University of Wisconsin Madison Mechanical Engineering building, room 2188, on July 11 at 3-6pm. In lieu of flowers, donations may be made to the UW Foundation with the note 'Uicker Education Fund for Mechanical Engineering' and mailed to the UW Foundation, U.S. Bank Lockbox, Box 78807, Milwaukee, WI 53278-0807 or online at <http://supportuw.org/giveto/UickerFund>. For online condolences visit [www.ramseyfuneralhome.net](http://www.ramseyfuneralhome.net).

# Cemetery Details

**St. Anthony's Church Cemetery**

## Previous Events

### Rosary Service

MAY 7. 5:00 PM - 8:00 PM (ET)

Ramsey Funeral Home, Inc  
425 State St  
Harbor Beach, MI 48441  
(989) 479-3407  
<https://www.ramseyfh.com>

### Funeral Service

MAY 8. 11:30 AM (ET)

Our Lady of Lake Huron Catholic Church  
413 S 1st St  
Harbor Beach, MI 48441  
(989) 479-3393

### Memorial Gathering

JUL 11. 3:00 PM - 6:00 PM (CT)

Department of Mechanical Engineering  
1513 University Ave  
Madison, WI 53706  
(608) 265-8438



# Tribute Wall



“ *John J. Uicker Jr.*

October 04, 2023 at 01:24 PM



“ *Sentiments of Serenity Spray was purchased for the family of John J. Uicker Jr..*



July 10, 2023 at 10:33 AM



“ *I am so sorry for your loss. My thoughts and prayers are with your family at this difficult time.*  
*Your cousin, Barbara Roth*

**Barbara Roth** - May 06, 2023 at 03:43 PM



“ *Divine Peace Bouquet was purchased for the family of John J. Uicker Jr..*



May 05, 2023 at 10:32 AM



“ *Simply Elegant Spathiphyllum was purchased for the family of John J. Uicker Jr..*



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May 04, 2023 at 01:28 PM



“ *82 files added to the album John Uicker Jr and family*



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**Dottie Winger** - May 02, 2023 at 09:25 PM