

Thursday 14 Nov 2019

**BACK TO THE FUTURE
FROM FOSSIL CHEMICAL FEEDSTOCKS
TO RENEWABLES ONES.**

**Personal Perspectives on the Development of
Useful Transition Metal-Mediated Reactions**

Kenneth M. Nicholas

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Transition metal-promoted reactions have played a central role in both laboratory and industrial chemical processes for over a hundred years. In keeping with 2019's International Year of the Periodic Table and National Chemistry Week's celebration of Marvelous Metals I will highlight three projects from our research group that illustrate the changing focus and opportunities in the development of transition metal-promoted reactions over the past 50 years: 1) the stabilization and reactivity of coordinated carbocations; 2) the activation and chemical conversion of abundant and climate-changing carbon dioxide; and 3) the deoxygenation and refunctionalization of renewable polyols.

6:00 pm Reception

6:30-7:30 pm Dinner

7:30-8:30 pm Presentation

Oklahoma State University

Edmond Low Library, Oklahoma State University

Peggy Helmerich Browsing Room, 2nd Floor, East Side

map: <https://parking.okstate.edu/parking-map>

Buffet Menu Catered by the Rib Crib

Boneless Chicken

Brisket

Cowboy Beans

Potato Salad

Peach of Blackberry Cobbler

Ice Tea and Lemonade.

Cost

\$16 members

\$5 students

RSVP Deadline

Tuesday, Nov 12th, 5 pm

Contact: Allen Apblett

allen.apblett@okstate.edu

Park in lot 31



OSU campus map
QR code



OSU parking map
QR code

RSVP is NOT required to attend the presentation.

Kenneth Nicholas Biographical Sketch

Kenneth M. Nicholas of the University of Oklahoma's Department of Chemistry and Biochemistry has been selected as the 2019 recipient of the Oklahoma Chemist Award for his outstanding contributions to the discovery, fundamental understanding and applications of chemical reactions promoted by transition metal compounds. With a primary focus on examining the reactivity of metal-coordinated molecules his research group's studies have centered on: 1) the stability and reactivity of metal-coordinated unsaturated organic species; 2) carbon dioxide activation/conversion promoted by transition metals; 3) the metal-promoted nitrogenation of hydrocarbons; 4) bio-inspired transition metal catalysis; and 4) the catalytic deoxygenation and refunctionalization of renewable chemical resources. Prof. Nicholas and his co-workers have published approximately 200 peer-reviewed journal articles and book chapters and 3 U.S. Patents. Dr. Nicholas has supervised and

mentored approximately 60 undergraduate research assistants, 16 MS degree recipients, 26 PhDs. and 38 postdoctoral research fellows, almost all of whom have enjoyed successful careers in industry, medicine, government or academia. Dr. Nicholas has been recognized for his teaching and research accomplishments by the A.P. Sloan Foundation, the University of Oklahoma Regents, by the American Chemical Society's A.C. Cope Scholar Award (for research excellence in organic chemistry), and as a George Lynn Cross Research Professor, the highest research award at OU. Dr. Nicholas earned a BS in Chemistry from Stony Brook University (NY), his PhD in Chemistry from U. Texas (Austin), did postdoctoral work at Brandeis University, and was on the faculty at Boston College (1973-1984) before joining the Department of Chemistry and Biochemistry at the University of Oklahoma in 1984.

DRIVING DIRECTIONS TO THE EDMON LOW LIBRARY

Directions from Tulsa via Cimarron Turnpike

- Take Hwy 64 to the Cimarron Turnpike - toll gate (manned - \$0.75)
- Take the OSU "Y" turnoff (approximately 20 miles) - toll gate (unmanned - \$0.50)
- Continue on the turnpike. It will curve left into Stillwater and become Washington Street.
- Drive thru four traffic lights (Richmond Rd, The Links Apartments, & Airport and Lakeview Rds)
- Just before the next traffic light, go right at the "Y" (do not go through the light). This will keep you on Washington.
- Pass through two more traffic lights (Will Rogers Elementary School and McElroy Street).
- At the next traffic light, take right to Hall of Fame going west.
- Turn left (south) into Monroe Street at the first traffic light on Hall of Fame.
- When you reach the intersection of Monroe Street and Farm Road, take left to the parking lot #31 and park somewhere. This is a large lot and no parking hang tag is necessary after 5 PM.
- From the parking lot, you will walk south east in between two buildings towards the tower which is the Edmon Low Library.

Directions from Tulsa via State Highway 51

- Travel through Stillwater to Duck Street.
- Turn right (north) onto Duck Street
- From Duck street, take left (west) onto the Hall of Fame
- Turn left (south) into Monroe Street from Hall of Fame.
- When you reach the intersection of Monroe Street and Farm Road, take left to the parking lot #31 and park somewhere. This is a large lot and no parking hang tag is necessary after 5 PM.
- From the parking lot, you will walk south east in between two buildings towards the tower which is the Edmon Low Library.

Directions from Oklahoma City via I-35 North

- Take the Stillwater Exit and turn right on State Highway 51 (you are approximately 17 miles west of Stillwater).
- As you enter the edge of Stillwater, turn left (north) at 4th traffic light, which is Western.
- As you round the curve, it becomes Hall of Fame.
- When you reach the intersection of Monroe Street and Farm Road, take left to the parking lot #31 and park somewhere. This is a large lot and no parking hang tag is necessary after 5 PM.
- From the parking lot, you will walk south east in between two buildings towards the tower which is the Edmon Low Library

