



**18<sup>th</sup> ICC** • International  
JULY 14 - 19, 2024 • Congress on Catalysis



LYON • FRANCE

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# **OBITUARY (2016-2024)**



# Jacques BARBIER (1941 – 2024)



Professor  
Poitiers University  
(France)

- *Professor at the Laboratory of Catalysis in Organic Chemistry of Poitiers which is now the Institute of Chemistry, Media and Materials (IC2MP)*
- *Main topic: development of multimetallic catalysts by surface redox reaction, Electro-assisted catalysis - Study of metal-support interaction.*
- *Author of > 300 publications, 50 patents*
- *President of the Eco-Industries Network*
- *Dr Honoris Causa from U. Autonome (Mexico) and U. Santa Fe (Argentina)*

# Bernard BIGOT (1950 – 2022)



*Professor  
Ecole Normale Supérieure de Lyon  
(France)*

- *Specialist in Theoretical Chemistry applied to heterogeneous catalysts*
- *Head of IRCELYON (1998 – 2002)*
- *President of « Maison de la chimie » **support of ICC2024 !** (2006-2022)*
- *Director-General of the ITER organization (2015-2022)*

# GEOFFREY C BOND (1927 – 2022)



*Professor  
Brunel University  
(United Kingdom)*

- *Professor of Applied Chemistry and Head of Department*
- *Especially well known for his seminal book «Catalysis by Metals» (1962)*
- *Pioneering research in the areas of heterogeneous catalysis using metals, vehicle exhaust catalysts, isotopic tracing and elucidation of reaction mechanisms*
- *> 300 publications in the field of catalysis*

# Michel CHE (1941 – 2019)



Professor  
Sorbonne Université  
(France)

- *Professor at Laboratoire de Réactivité de Surface, Sorbonne Université, Paris, France*
- *President-founder of the European Federation of Catalysis Societies. Chairman of the 1<sup>st</sup> Europacat conference (Montpellier 1993).*
- *President of the International Association of Catalysis Societies (1996-2004).*
- *Development of a molecular approach of catalyst preparation through the concept of Interfacial Coordination Chemistry.*
- *François Gault Lectureship (2004). Royal Society of Chemistry 2014 Faraday Lectureship prize.*

# Sigmund CSICSERY (1929 - 2022)



*Senior researcher  
Chevron  
(United States of America)*

- *Senior research associate for the Chevron Research Company in Richmond, California, for 24 years*
- *Expert in heterogeneous catalysis; petroleum chemistry and processing; the synthesis, characterization, and use of molecular sieves; shape selective catalysis; and catalyst testing.*
- *President of the California Catalysis Society and director of the North American Catalysis Society.*
- *Member of the Hungarian Academy of Sciences*
- *Awarded the prestigious Gábor Dénes Award in 2020–2021.*

# W. Nicholas DELGASS (1942–2021)



Professor  
Purdue University  
(USA)

- *Recognized internationally for his work in bringing together new analytical tools, catalyst characterization methods, catalyst chemistry and design, and reaction engineering into the analysis of chemical reaction systems and their mechanisms.*
- *Nick Delgass served the profession admirably and with great impact for more than four decades. Editor-in-Chief of Journal of Catalysis. His teaching and mentoring are truly legendary, he won virtually every teaching award at Purdue. His recent research awards include the 2012 R.H. Wilhelm Award in Chemical Reaction Engineering, AIChE; 2011 (Inaugural) Award for Distinguished Service in the Advancement of Catalysis, North American Catalysis Society.*
- *Ph.D. in Chemical Engineering, Stanford University (1969), and post-doctorate, University of California at Berkeley (1969).*
- *Dearest friend, mentor, and colleague. His generous spirit, keen intellect, and above all his kindness will remain with us eternally.*



# IVO GIOVANNI DALLA LANA (1926 – 2018)



*Professor  
University of Alberta,  
Edmonton (Canada)*

- *Professor, University of Alberta, Edmonton, Canada*
- *Sulfur chemistry and S recovery technology (modified Claus reaction); IR spectroscopy studies applied to several industrial catalytic reactions; ethylene polymerization in slurry reactors*
- *Extraordinary citizen of the Canadian Catalysis community; essential role in the formation of the Catalysis Division of the Chemical Institute of Canada in 1971 and Canadian Catalysis Foundation*
- *1988 Vice-Chair of the 9th ICC in Calgary, Canada*
- *1995 Catalysis Medal Award by the Catalysis Division of the Chemical Institute of Canada*



# Burtron H. DAVIS (1934 – 2018)



*Professor  
University of Kentucky  
(United States of America)*

- *Associate Director and Interim Director of Center for Applied Energy Research, University of Kentucky,*
- *Highly successful career of research and scholarship, widely recognized as the ultimate authority on Fischer-Tropsch synthesis*
- *> 850 publications,*
- *ACS Fellow, ACS's Energy and Fuels Division's Distinguished Researcher Award in Petroleum Chemistry, presented to the Distinguished Service award by the NACS, and the "Distinguished West Virginian Award" by then-Governor Earl Ray Tomblin*
- *Henry H. Storch Award in Fuel Science in 2002 by ACS*

# Laurent DELANNOY (1971 – 2024)



*Associate Professor  
Sorbonne Université  
(France)*

- *Associate Professor at Laboratoire de Réactivité de Surface, Sorbonne Université, Paris, France*
- *Supported transition metal (including Au) catalyst synthesis for selective hydrogenation reactions (butadiene and acetylene)*
- *His colleagues and friends will remember Laurent as an excellent scientist, a remarkable teacher and, above all, as a modest, benevolent, altruistic, generous and incredibly kind man.*

# Bernard DELMON (1932 – 2020)



Professor  
Université catholique de Louvain  
(Belgium)

- *Founding editor of Catalysis Today + Applied Catalysis, + Studies in Surface Science and Catalysis*
- *Member of the Académie Royale de Belgique and of the Belgian Academy Council for the Applications of Science*
- *Active in (mainly) partial oxidation and HDT; Remote control mechanism via spillover species*
- *Dr Honoris Causa from U. Patras (Greece) and U. Santiago de Chile (Chile)*
- *Alexander von Humbolt Research Award (1995)*

# Daniel DUPREZ (1945 – 2022)



*Research Director  
Poitiers University  
(France)*

- *Research Director at the Laboratory of Catalysis in Organic Chemistry of Poitiers which is now the Institute of Chemistry, Media and Materials*
- *President of the Catalysis Division of the Société Chimique de France from 2006 to 2012*
- *Main topic: development of the concept of surface mobility in catalysis. Application to different fields of which the automotive pollution control catalysis*
- *> 300 publications, 20 reviews and book chapters*

# Stefan ERNST (1960 – 2019)



*Professor  
TU Kaiserslautern  
(Germany)*

- *Since 1997, Stefan Ernst has been Professor of Chemical Technology at TU Kaiserslautern*
- *Outstanding contributions to the synthesis of zeolites and their application in industrial catalysis*
- *Served on the board of the International Zeolite Association (IZA), was chair of the catalysis commission of IZA and was active in the commission of the German Catalysis Society (GeCatS), DECHEMA and the German Zeolite Association.*

# Maria FLYTZANI-STEPHANOPOULOS

(1950-2019)



Professor  
Tufts University  
(USA)

- *"Miretta" was recognized for pioneering contributions in environmental catalysis and single-atom catalysis.*
- *10 patents, > 180 technical papers, member of the National Academy of Engineering, fellow of the American Association for the Advancement of Science and the American Institute of Chemical Engineers.*
- *Awards include the Giuseppe Parravano Memorial Award for Excellence in Catalysis Research, a Career Advancement Award from the National Science Foundation, the Henry J. Albert Award from the International Precious Metals Institute in 2008, and ACS Catalysis Lectureship Award for the Advancement of Catalytic Science in 2019.*
- *Ph.D. from the University of Minnesota (1978).*
- *Miretta was the editor of the journal Applied Catalysis B: Environmental.*

# Pio FORZATTI (1947-2021)



Professor  
Politecnico di Milano  
(Italy)

- *Widely recognized for his pioneering works on NO<sub>x</sub> abatement and higher alcohols synthesis.*
- *Winner of the prestigious “Pino Medal” awarded by the Italian Chemical Society.*
- *Pio spent all his career at Politecnico di Milano, Italy, where he founded and promoted the Laboratory of Catalysis and Catalytic Processes (LCCP).*
- *In his extensive research activity, he authored/co-authored over 300 publications and received several Elsevier most-cited author awards.*
- *He will be remembered a keen mentor of many generations of PhDs and young researchers.*



# Jose Luis GARCIA FIERRO (1948 – 2020)

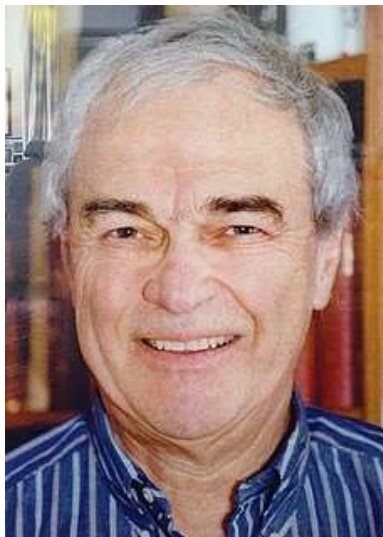


Professor  
Spanish National Council for  
Scientific Research  
(Spain)

- *Recognized scientist in diverse areas of heterogeneous catalysis and solid-state chemistry. A reference in the application of XPS technique for the characterisation of catalytic surfaces*
- *Pioneered in Spain the developments of catalytic technologies in C1 chemistry*
- *> 1200 papers, 37 patents, editor and/or co-author of a total of 10 books*
- *Award on Hydrogen production from Renewable Energies (2004), Senior Research Award of the Iberoamerican Federation of Catalysis Societies (FISOCAT)( 2008), Medal of the King Saud University, Saudi Arabia (2008), Senior Research Award “Miguel Catalan”, Madrid (2008) and Honoris Causa Doctorates from the University of Patras, Greece (2009), the University of Concepción, Chile (2014), and the San Marcos University, Peru (2017).*



# Robert Karl GRASSELLI (1931 – 2018)



*Distinguished Affiliated Professor  
Technical University of Munich  
(Germany)*

- *Innovative industrial chemist, renowned for his seminal contributions to the design, development, and commercial exploitation of novel solid catalysis.*
- *Instrumental in developing a fundamentally new method of producing the polymer precursor, acrylonitrile (use microcrystalline bismuth molybdate in one-step process).*
- *Inventor in 160 U.S. patents*
- *US National Academy of Engineering (1995).*
- *American Chemical Society E. N. Morley Medal (1999); the E. V. Murphee Award for Industrial and Engineering Chemistry (1984)*

# Robert GRUBBS (1942 – 2021)



Professor  
Caltech

*(United States of America)*

- *Professor of Chemistry at the California Institute of Technology in Pasadena*
- *Organometallic chemistry and synthetic chemistry, particularly the development of novel catalysts for olefin metathesis*
- *Member of the National Academy of Engineering, the National Academy of Sciences, fellow of the American Academy of Arts and Sciences and a member of the Royal Society of Chemistry*

***Nobel Prize in Chemistry in 2005***



# Masaaki HANEDA

(1968 – 2024)



Professor  
Nagoya Institute of Technology  
(Japan)

- *Full Professor, Advanced Ceramics Research Center, Department of Life Science and Applied Chemistry, Nagoya Institute of Technology*
- *Expert in Catalysis for environmental protection, especially, abatement of pollutants from automotive exhaust gases*
- *Regular Guest Professor in France*  
**Topic committee member of ICC 2024 (T24)**
- *> 185 publications. Member of editorial board of Applied Catalysis B: Environmental.*
- *Awards: “Noguchi Memorial Award for Encouragement of Research and Development” 2007; “Researcher Award for Creative Work” from the Nagai Foundation for Science & Technology 2017*



# Masatake HARUTA (1947-2022)



*Emeritus Professor  
Tokyo Metropolitan University  
(Japan)*

- *Widely known as the ultimate authority on gold nanoparticle-supported catalysts.*
- *> 350 publications and received many national and international awards.*
- *Awarded by the prestigious Henry J. Albert Award by International Precious Metals Institute and the Catalysis Society of Japan Award in 2002. In 2010, he earned the Chemical Society of Japan Award. In 2014, he was awarded Spiers Memorial Award by Royal Society of Chemistry and became a fellow. And he also received the Thomson Reuters Honor Award in 2012.*
- *B.S. degree in Industrial Chemistry Nagoya Institute of Technology, PhD from Kyoto U.*
- *He established the Research Center for the Chemistry of Gold at TMU and started a venture company, Harta Gold, and dedicated his life to the research of ultra-fine gold particle-supported catalysts.*



# Wilhelm KEIM (1934-2018)



- Studied chemistry at the Münster and Saarbrücken University. PhD degree from Max-Planck-Institut für Kohlenchemie in Mülheim an der Ruhr, under Karl Ziegler.
- Leader at Shell Development Company
- Professor at the RWTH Aachen, director of the Institute for Technical and Petrol chemistry
- One of the key figures in the development of the SHOP – process (Shell higher olefin process).
- Numerous prestigious honours

*RWTH Aachen University  
(Germany)*



# Emile KUNTZ (1942 – 2023)



Research director  
Lyon University  
(France)

- *Chemist Engineer Escil, Rhone-Poulenc (1965-77)- Emeritus Research Director at CPE Lyon (1995-2017)*
- *Discovery of organometallic bi-phasic catalysis in water (TPPTS ligand), pioneer in « green chemistry »*
- *Organometallic chemistry - Homogeneous catalysis in biphasic systems- Hydroformylation*
- *Award Chéreau-Lavet and Grand prix de l'Académie des technologies (2005)*

# Carlo LAMBERTI (1965-2019)



*Professor  
University of Torino  
(Italy)*

- *Professor in Physical Chemistry at the University of Torino. Scientific director of the “Smart Materials Research Center” at the Southern Federal University of Rostov-on-Don (Russian Federation)*
- *His expertise ranged from Quantum Physics to Material Science, Chemistry and Catalysis.*
- *Pioneer in the in situ and operando methods, as well as their application to the study of catalytic materials.*
- *Author of > 400 publications*

# Guanzhong LU (1956-2017)



- *Professor & former vice president of East China University of Science and Technology, China*
- *Research interests in environmental catalysis*

*Professor  
East China univ. Science and Technol.  
(China)*





# Raymond MAUREL (1928 – 2019)



Professor  
University of Poitiers and Lyon  
(France)

- *Started in Lille, then set up catalysis laboratory in Poitiers and finally head of IRC in Lyon.*
- *Isomerisation, hydrogenation, hydrogenolysis and cracking reactions, fundamental aspects of kinetics and reaction mechanisms on bifunctional, bi-metallic and acid catalysts.*
- *Strong emphasis on interactions with industry.*
- *Founding member of the Groupe d'Etudes en CATalyse (GeCAT, Annual French Catalysis Meeting)*

# Sir John MEURIG THOMAS (1932-2020)



Master of Peterhouse  
University of Cambridge  
(UK)

- *One of Britain's most eminent scientists, a pioneer of solid state chemistry and recipient of many awards and honours worldwide.*
- *Former Master of Peterhouse, Cambridge, and Director of the Royal Institution.*
- *knighthood "for services to chemistry and the popularisation of science" in 1991.*
- *Royal Medal, known as the Queen's Medal, in 2016.*
- *23 honorary degrees from Australian, British, Canadian, Chinese, Dutch, Egyptian, French, Italian, Japanese, Spanish, and U.S. universities*
- *The Royal Society awarded Thomas the Royal Medal for Physical Sciences "for his pioneering work within catalytic chemistry, in particular on single-site heterogeneous catalysts, which have had a major impact on green chemistry, clean technology and sustainability*



# Enze MIN (1924 – 2016)



- *Professor of SINOPEC Research Institute of Petroleum Processing, China*
- *Laying the foundation for producing petroleum-refining catalysts in China*
- *Member of the Chinese Academy of Sciences & the Chinese Academy of Engineering & the Third World Academy of Sciences (TWAS)*

*Professor  
SINOPEC  
(China)*



# Hubert MIMOUN

(1943-2017)



Scientist  
Firmenich R&D  
(France, Switzerland)

- *38 years career, 20 years at IFPEN, France and 18 years in F&F Industry Firmenich S.A. Geneva, in R&D – Discovery & Development, leading position in flavor and fragrance industry research*
- *PhD Chemistry in Catalytic Oxidations IFPEN Rueil Malmaison*
- *Prof at University of Orsay and Lausanne*
- *Main discovery in selective oxidation and hydrogenation*
- *Retired 2008*



# JOHN B MOFFAT (1930 – 2024)



*Professor  
University of Waterloo,  
Waterloo (Canada)*

- *Professor of Chemistry, University of Waterloo, Canada*
- *President of Canadian Catalysis Foundation 1991-1995*
- *Chair of Canadian Catalysis Division 1984-1986*
- *Secretary for the International Congress on Catalysis (ICC) held in Calgary in 1988*
- *Chair for the 2001 North American Meeting (NAM) in Toronto*
- *Establish structural and functional relationships of acidic solids, heteropoly oxometalates, and hydroxyapatites*

# JOHN R. MONNIER (1948 – 2024)



*Professor of Chemical  
Engineering*

*University of South Carolina (USA)*

- *Ph.D., University of Wisconsin-Milwaukee, 1978*
- *Worked for Eastman Kodak and Eastman Chemical between before joining academia.*
- *Best known for his studies on epoxidation of olefins.*
- *Epoxidation of butadiene was commercialized in 1997.*
- *AIChE Catalysis and Reaction Engineering Practice Award*
- *North American Catalysis Society Ciapetta Lectureship Award - Member of the National Academy of Engineering,*

# André MORTREUX (1943 – 2020)



Professor  
University of Lille  
(France)

- *Head of the Molecular Catalysis department of the UCCS laboratory, Lille*
- *Homogeneous catalysis with transition metals (one of the pioneers in alkyne metathesis with  $\text{Mo}(\text{CO})_6$  / phenol) and green chemistry using renewable plant-based substances with a focus on industrial applications and sustainable chemistry.*
- *> 200 publications, 34 Patents*
- *Pierre Süe Prize 2017 of the SCF, Clavel–Lespieau Prize from the French Academy of Sciences in 2001*

# Petr NACHTIGALL (1963 – 2022)



*Professor  
Charles University  
(Czech Republic)*

- *Full Professor, Department of Physical and Macromolecular Chemistry, Faculty of Science, Charles University*
- *> 180 publications, h-index 57. Founder of Charles University Centre of Advanced Materials*
- *Theoretical investigation of nanoporous and 2D nanomaterials*
- *Awards: Donatio Universitatis Carolinae 2021, Award of the Ministry of Education for excellent research and innovation results 2019, Bedřich Hrozný Award 2016*



# Ei-ichi NEGISHI (1935 – 2021)



*Professor  
Purdue University  
(United States of America)*

- *Distinguished Professor and Director of the Director of the Negishi-Brown Institute*
- *Best known for his discovery of the Negishi coupling, Ei-Ichi Negishi developed chemistry worldwide, especially for palladium-catalysed cross-coupling in organic synthesis.*
- ***Nobel Prize in Chemistry in 2010***

# Edmond PAYEN (1948 – 2021)



Professor  
University of Lille  
(France)

- *Founder and head of the Unit of Catalysis and Solid State Chemistry (UCCS), Lille, France*
- *Raman spectroscopy applied to catalysts (HDS catalysis)*
- *Instrumental in the implementation of new characterization tools  
(time-resolved XAS beamline ROCK, synchrotron SOLEIL)*
- *Interconnected high-level fundamental research with the realities of the industrial world*

# Shaoyi PENG (1917 – 2017)



*Professor  
Institute of Coal Chemistry  
(China)*

- *Professor & former director of Institute of Coal Chemistry, Chinese Academy of Sciences, China*
- *Brilliant contributions on fuel chemistry, petrochemistry, catalytic chemistry*
- *Member of the Chinese Academy of Sciences*



# James F. ROTH

(1925-2021)



Corporate Chief Scientist  
Air Products & Chem.  
(USA)

- *Widely recognized for his technical leadership on the development of Monsanto's acetic acid process, which became a hallmark example of employing homogeneous catalysis at a large industrial scale.*
- *In 1980, Jim joined Air Products where he set up and directed the company's corporate research.*
- *Kokes Award from John Hopkins University, the Houdry Award from the North American Catalysis Society and the Industrial and Engineering Award from the ACS. He was inducted into the National Academy of Engineering.*
- *Prestigious Perkin Medal of the Society of Chemical Industry for his achievements in applied chemistry and catalysis (1988)*
- *PhD from the University of Maryland.*
- *Jim was well known for promoting the career of his staff and co-workers.*



# Mae K. RUBIN

(1929-2018)



Scientist  
Mobil R&D  
(USA)

- *48 year career, mostly at Mobil, in zeolite catalyst R&D – Discovery & Development - B.S. in Chemistry from Hunter College of NY*
- *Holder of over 50 U.S. Patents in the field of zeolites*
- *Discovered MCM-22, ZSM-12, and ZSM-23 – important commercial zeolites*
- *Improved the synthesis of many Mobil commercial zeolites including: ZSM-5, ZSM-11, ZSM-12; ZSM-23; ZSM-35; MCM-22; MCM-49*
- *Honored by the USPTO in 1990 and 1991; Association for Women in Science Award - In 1996 she won the prestigious Philadelphia Catalysis Club Award*



# GARRY REMPEL (1944 – 2018)



*Professor  
University of Waterloo,  
(Canada)*

- *University Professor, University of Waterloo, Waterloo, Canada*
- *PhD from University of British Columbia, and Postdoc (NATO postdoctoral fellowship) at Imperial College, in London, England.*
- *One of the longest serving members of the university (50 years)*
- *Applied catalysis and polymer science*
- *Queen Elizabeth II Jubilee Medal (2013).*
- *Member of the Order of Canada (2015) for contributions in education, research and industry in Canada.*

# Wolfgang SACHTLER

(1924-2017)



Professor  
U. of Leiden, Shell &  
Northwestern  
(The Netherlands)

- *PhD from the Technical University Braunschweig (Brunswick), Germany*
- *He joined the Royal Dutch Shell Laboratory in Amsterdam where he stayed until retirement as Director of Fundamental Research in 1983.*
- *From 1963–84 : Professor at the National University in Leiden. He was particularly known for his insightful application of surface science concepts to catalysis.*
- *He joined Northwestern University in Evanston in 1983 as the V.N. Ipatieff Professor of Catalytic Chemistry and the first Director of the Center for Catalysis and Surface Science*
- *> 440 scholarly publications to the literature.*
- *E. V. Murphree Award and the Petroleum Chemistry Award of the ACS, the Eugène Houdry Award of the NACS, the Rideal Lectureship Award, R.L. Burwell Lectureship Award of NACS, François Gault Lectureship Award of EFCATS.*



# Eduardo A. LOMBARDO

(1939-2019)



Professor  
University of Litoral  
(Argentina)

- *51 year career, mostly at University of Litoral (UNL) and at the Institute of Research in Catalysis and Petrochemistry (INCAPE), Santa Fe, Argentina.*
- *Visiting Professor at Carnegie-Mellon University, University of Pittsburgh, and other universities in Belgique, France, Hungary, Spain, Japan and Australia.*
- *Awarded with several prizes from academic institutions, among them the Bernardo Houssay prize to scientific trajectory (2005).*
- *> 150 publications in journals.*
- *Emeritus Researcher of National Council of Science (CONICET)*





# Shikong SHEN (1935 - 2016)



*Professor  
China University of Petroleum  
(China)*

- *Professor of China University of Petroleum, China*
- *Research interests in natural gas conversion, catalytic reaction kinetics and mechanism*

# Frank S. STONE (1925 - 2018)



*Professor  
University of Bath  
(United Kingdom)*

- *Professor of Physical Chemistry at the University of Bath.*
- *His research centered on metal oxide bulk and surface chemistry including heterogeneous catalysis.*
- *Pioneered research on heterogeneous photocatalysis on finely-divided oxides, solid-state reactions for spinel formation, and adsorption on supported metallic particles.*
- *European Editor of the Journal of Catalysis*
- *Author of > 120 publications*

# Dangsheng SU (1961–2019)



*Professor  
Dalian Institute of Chemical Physics  
(China)*

- *Professor of Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China*
- *Research interests in design of functional nanomaterials with energy applications and the investigation of catalysts by means of electron microscopy, and electron energy-loss spectroscopy*

# Kenzi TAMARU (1923-2020)



Professor  
Yokohama National University and  
University of Tokyo  
(Japan)

- A “titan of mechanism” who initiated the *in situ* study of catalysts
- His enduring legacy will be his insight that catalysts have to be studied at reaction conditions. This insight was the basis for the now widespread use of *in situ* and *operando* studies in catalysis.
- Kenzi was educated at the University of Tokyo, obtaining his B.S. in 1946, and his Ph.D. in 1950. In 1953 he was awarded a Fulbright Fellowship and went to work with Sir Hugh Taylor at Princeton University
- Kenzi Tamaru held many important positions including the presidencies of the Japan Chemical Society in 1989-1990, and the International Association of Catalysis Societies in 1988-1992. He was recognized with many awards, including the Japan Chemical Society Award in 1974, the Purple Agate in 1985, and the Japan Academy Award in 2000.



# Kozo TANABE (1927-2018)



Professor  
Hokkaido University  
(Japan)

- *Main contributions in Acid-Base catalysis by solids.*
- *Pioneered the role of acid-base pairs in conferring unique reactivity and selectivity by stabilizing intermediates through concerted interactions.*
- *President of the Catalysis Society of Japan and as Vice president of the Chemical Society of Japan.*
- *> 300 publications and 10 books,*
- *Awarded from the Chemical Society and the Catalysis Society of Japan and the Japan Institute of Petroleum. Medal with Purple Ribbon and the Order of the Sacred Treasure.*

# Victor TEIXEIRA DA SILVA (1964 – 2018)



*Professor  
Federal University of Rio de Janeiro  
(Brazil)*

- *21 year faculty career at the Military Institute of Engineering and the Federal University of Rio de Janeiro*
- *President of the Brazilian Catalysis Society (2015-2018); Brazilian representative at the International Association of Catalysis Societies (2008 – 2018)*
- *Heterogeneous catalysis - Hydrodeoxygenation – metal phosphide and carbide catalysts for hydrotreating and biomass conversion*

# Khi-Rui TSAI (1914 – 2016)



*Professor  
Xiamen University  
(China)*

- *Professor of Xiamen University, China*
- *Pioneer of coordination catalysis & C1 chemistry*
- *Member of the Chinese Academy of Sciences*
- *IACS Council Member (1984-1988)*

# SCHUCHARDT ULF (1946 – 2020)



Professor  
University of Campinas (Brazil)

- *Full Professor at the State University of Campinas (Brazil)*
- *Was a visionary in biofuel production studies in the 1980s when few were researching this area. Emphasis should be placed on his role in educating and supervising students. Many now hold prestigious positions in academia and industry, reflecting his impactful role as a professor and mentor.*
- *Heterogeneous catalysis for biodiesel production*
- *Main distinction/Award: Member of the Brazilian Academy of Sciences and JBCS Medal*



# Herman VAN BEKKUM (1932 – 2020)



Professor  
Delft University of Technology  
(The Netherlands)

- *Zeolite chemistry, including the synthesis, characterization and particularly the application of zeolites in catalysis.*
- *Pioneer of organic chemistry and carbohydrate chemistry over zeolites.*
- *Named as Ambassador for the IZA in 1988. Founder of the Federation of European Zeolite Associations (FEZA)*
- *Member of the Royal Netherlands Academy of Arts and Sciences*

# ARVIND VARMA (1947-2019)



*R. Games Slayter  
Distinguished Professor  
Purdue University  
(USA)*

- *Recognized for ground-breaking research in chemical and catalytic reaction engineering, hydrogen energy sources, and synthesis of advanced materials.*
- *> 300 research publications, 3 books*
- *Fellow of the AIChE; Foreign Member, Academy of Engineering, Mexico; AAAS; ACS I&EC Division. Recipient of the Benjamin Garver Lamme Award (ASEE); Giulio Natta Medal in Chemical Engineering; Warren K. Lewis Award (AIChE); Chemical Engineering Lectureship Award (ASEE); and R.H. Wilhelm Award (AIChE).*
- *PhD from the University of Minnesota under Neal Amundson.*
- *Led chemical engineering departments at Notre Dame (1977-2004) and Purdue (since 2004) with distinction.*



# Qin XIN (1939 – 2020)



- *Professor of Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China*
- *Pioneering research in in-situ FTIR in China*

*Professor  
Dalian Institute of Chemical Physics  
(China)*



# Yide XU (1940 – 2020)



*Professor  
Dalian Institute of Chemical Physics  
(China)*

- *Professor of Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China*
- *Contributions on methane dehydroaromatization*

# KIM YOUNG GUL

(1930 – 2024)



Professor  
Pohang University of Science & Technology  
POSTECH (Korea)

- *Professor of Northwestern University, USA ; Professor of Korea Advanced Institute of Science and Technology (KAIST); Professor of Pohang University of Science and Technology (POSTECH); President of Korean Inst. of Chemical Engineers*
- *Fostered KAIST and POSTECH as research-oriented universities; Established Korean Catalysis Society; Key contribution to establishing APACS/APCAT*
- *Catalysis for C1-chemistry: Green synthesis of fine chemicals: Environmental catalysis.*
- *Award : Camellia Medal of Order of Merit (Korean government); Award of Merit, Award of Academy (Korean Inst. of Chemical Engineers); Designated as a Person of Distinguished Service to Science and Technology (Korean government and KAST)*



# Zuolong YU (1940 – 2020)



- *Professor & former director of Chengdu Institute of Organic Chemistry, Chinese Academy of Sciences, China*
- *Research interests in catalytic chemistry and functional materials*

*Professor  
Chengdu Institute of Organic Chemistry  
(China)*



# Huilin WAN (1938 – 2024)



- *Professor of Xiamen University, China*
- *Brilliant contributions on chemical simulation of biological nitrogen fixation, ammonia synthesis, and selective oxidation of light hydrocarbons*
- *Member of the Chinese Academy of Sciences*

*Professor  
Xiamen University  
(China)*



# Hongli WANG (1922 – 2017)



- *Professor of Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China*
- *Research interests in surface chemistry and heterogeneous catalysis*

*Professor  
Dalian ICP  
(China)*





# Jens WEITKAMP (1942 – 2019)



Professor  
University of Stuttgart  
(Germany)

- *Pioneer in the field of zeolite and porous materials, especially for applications in catalytic processes such as hydrocracking, isomerization, alkylation, but also selective ring opening of polynuclear aromatics*
- *> 250 publications and books*
- *Corresponding Member of the Saxon Academy of Sciences and Humanities (2003).*
- *Honorary Professorship of the Changchun University in China*
- *Alwin-Mittasch-Prize of the DECHEMA in 2010 and Honorary Membership of DECHEMA in 2011; Carl-Zerbe-Award; Carl-Engler Medal (2002) of the German Society for Petroleum and Coal Science and Technology (DGMK).*



**To the memory of friends and colleagues  
With gratitude for their exemplarity and their  
contribution in Catalysis Science**