

Jorge González González

Nationality: **Spanish.**

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Academic information:

Degree in Chemistry, Universidad de Sevilla, Spain. (1997 – 2001)

2000-2001. One year in University of Sheffield (Erasmus Program).

Ph.D. in Chemistry. University of St. Andrews, Scotland (UK) with Prof. Paul A. Wright. (2001 – 2005)

“Adsorption properties of porous organic-inorganic hybrid solids”

Postdoct: ITQ, Universidad Politécnica Valencia, with Dr. Avelino Corma (2005-2006). Involved in two projects:

“Improving the syntheses of two Chevron zeolites”

“New Zeolites for ITQ”

2007- Professor of Chemistry. University of Colima (Mexico).

UCOL-CA-74 .Chemical engineering.

Member of the SNI (Sistema Nacional de Investigación). Level II.

-Areas of interest:

Development of relevant analytical methods for the region

Materials Science. Applications in catalysis and separations.

Molecular syntheses.

Development of relevant analytical methods for the region

Chemical risk prevention in State of Colima.

Currently working on difficult and economically relevant molecular separations.

Scientific Productivity.

1. Pore-Network Connectivity and Molecular Sieving of Normal and Isoalkanes in the Mesoporous Silica SBA-2. Manuel Pérez-Mendoza*, Jorge González, Carlos A. Ferreiro-Rangel, Magdalena M. Lozinska, David Fairén-Jiménez, Tina Düren, Paul A. Wright, and Nigel A. Seaton. *J. Phys. Chem. C*, 2014, 118 (19), pp 10183–10190.
2. Patent: Itq-38 material, the method for the production thereof and the use thereof . WO2013110838 A1. 2013.
3. Patent: Microporous crystalline material of zeolitic nature, zeolite itq-39, method of preparation and uses. US20090312177 A1. 2009.
4. Synthesis Design and Structure of a Multipore Zeolite with Interconnected 12- and 10-MR Channels, Manuel Moliner, Tom Willhammar, Wei Wan, Jorge González, Fernando Rey, Jose L. Jorda, Xiaodong Zou, and Avelino Corma, *J. Am. Chem. Soc.*, 2012, 134 (14), pp 6473–6478
5. Structure and catalytic properties of the most complex intergrown zeolite ITQ-39 determined by electron crystallography Tom Willhammar, Junliang Sun, Wei Wan, Peter Oleynikov, Daliang Zhang, Xiaodong Zou, Manuel Moliner, Jorge Gonzalez, Cristina Martínez, Fernando Rey and Avelino Corma. *Nature of Chemistry*, 2012, 4, 188.
6. Synthesis of microporous eskolaite from Cr(VI) using activated carbon as a reductant and template. A. Cruz-Espinoza , V. Ibarra-Galván, A. LópezValdivieso, J. González-González. *Journal of Colloid and Interface Science*, 2012, 374, 321
7. A New Aluminosilicate Molecular Sieve with a System of Pores between Those of ZSM-5 and Beta Zeolite. Manuel Moliner, Jorge Gonzalez, M. Teresa Portilla, Tom Willhammar, Fernando Rey, Francisco J. Llopis, Xiaodong Zou, and Avelino Corma, *J. Am. Chem. Soc.* 2011, 133, 9497–9505.
8. 3-(Piperidin-1-ium-1-yl)-6-azoniaspiro[5.5]undecane dibromide monohydrate. Jorge Gonzalez, Roberto Atilano-Coral, Ana Lilia Peraza-Campos, David Ortego'n-Reyna and Eleuterio Alvarez. *Acta Cryst.* (2011). E67, o1308–o1309.
9. Asymmetric Transfer Hydrogenation of Prochiral Ketones in Aqueous Media with Chiral Water-Soluble and heterogenized bifunctional catalyst of the type Ligand-RhCp*. Angélica Barron-Jaime, Oscar F. NarvaezGarayzar, Jorge González, Valentín Ibarra-Galván, Gerardo Aguirre, Miguel Parra-Hake, Daniel Chavez and Ratnasamy Somanathan. *CHIRALITY* 23:178– 184 (2011).
10. X-Ray Supramolecular Structure, NMR Spectroscopy and Synthesis of 3-Methyl-1-phenyl-1H-chromeno[4,3-c]pyrazol-4- ones Formed by the Unexpected Cyclization of 3-[1-(Phenylhydrazono)ethyl]-chromen-2-ones” Itzia I. Padilla-Martinez, Irma Y. Flores-Larios, Efrén V. García-Baez, Jorge Gonzalez ,Alejandro Cruz and Francisco J. MartínezMartinez, *Molecules*, 2011, 16, 915-932.
11. Thermal [4 + 2] cycloadditions of 3-acetyl-, 3-carbamoyl-, and 3ethoxycarbonyl-coumarins with 2,3-dimethyl-1,3-butadiene in solventless conditions: a structural study” Irma Y. Flores-Larios, Lizbeth

- López-Garrido, Francisco J. Martínez-Martínez, Jorge González, Efrén V. García-Báez, Alejandro Cruz, and Itzia I. PadillaMartínez. *Molecules*, 2010, 15(3), 1513-1530.
12. Design of hybrids organic/inorganic adsorbents based on periodic mesoporous silica. C. Schmacher, J. Gonzalez, M. Perez-Mendoza, P. A. Wright, N. A. Seaton. *Industrial & Engineering Chemistry Research*. 45(16). 2006. 5586.
 13. Generation of atomistic models of periodic mesoporous silica by kinetic monte carlo simulations of the synthesis of the material. C. Schumacher, J. Gonzalez, P. A. Wright, N. A. Seaton. *Journal of physical chemistry B*. 110. 2006. 319.
 14. Deuterium NMR studies of framework and guest mobility in the metal-organic framework compound MOF-5, $Zn_4O(O_2CC_6H_4CO_2)_3$. J. Gonzalez, R. N. Devi, D. P. Tunstall, P. A. Cox, P. A. Wright. *Microporous Mesoporous Materials*. 84. (2005), 97.
 15. Packing of adsorbed molecules in microporous polymorphs aluminium methylphosphonates alpha and beta. Physical. C. Schumacher, J. Gonzalez, P. A. Wright, N. A. Seaton. *chemistry chemical physics*. 7. 2005. 2351.
 16. Synthesis and structure of framework scandium methylphosphonates $NaSc(MePO_3)_2$ and $ScF.H_2O.MePO_3$. S. R. Miller, E. Lear, J. Gonzalez, A. M. Z. Slawin, P. A. Wright, N. Guillou, G. Ferey. 20. 2005. 3319.
 17. The motion of aromatic hydrocarbons in the microporous aluminium methylphosphonates AlMePO-alpha and AlMePO-beta. J. Gonzalez, R. N. Devi, P. A. Wright, D. P. Tunstall, P. A. Cox. *Journal of physical chemistry B*. 109. 2005.21700.
 18. Elucidation of the pore structure of SBA-2 using Monte Carlo simulations to interpret experimental data for the adsorption of light hydrocarbons. M. Pérez-Mendoza, J. Gonzalez, P. A. Wright, N. A. Seaton. *Langmuir*. 20, 2004, 7653.
 19. Structural studies and computer simulation of the inclusion of aromatic hydrocarbons in a zinc 2,6-Naphthalene dicarboxylate framework compound. R. N. Devi, M. Edgar, J. Gonzalez, A. M. Z. Slawin, D. P. Tunstall, P. Grewal, P. A. Cox, P. A. Wright. *Journal of physical chemistry B*. 108, 2004.535.
 20. Structure of the mesoporous silica SBA-2, determined by a percolation analysis of adsorption. *Langmuir*. M. Pérez-Mendoza, J. Gonzalez, P. A. Wright, N. A. Seaton. *Langmuir* 20, 2004. 9856.
 21. Supercritical fluid chromatography with photodiode array detection for pesticide analysis in papaya and avocado samples. Norma S. Pano-Farias, Silvia G. Ceballos-Magaña Jorge Gonzalez, José M. Jurado, Roberto Muñoz-Valencia, *Journal of Separation Science*, 2015, 38, 1240-1247.
 22. Analytical method development for the determination of emerging contaminants in water using supercritical-fluid chromatography coupled with diode-array detection, Vilma del Carmen Salvatierra-Stamp, Silvia G. Ceballos-Magaña, Jorge Gonzalez, Valentin Ibarra-Galván, Roberto Muñoz-Valencia. *Anal Bioanal Chem* (2015) 407:4219–4226.

23. Emerging contaminant determination in water samples by liquid chromatography using a monolithic column coupled with a photodiode array detector, Vilma del C. Salvatierra-Stamp, Silvia G. Ceballos-Magaña, Jorge Gonzalez, Jose M. Jurado, Roberto Muñiz-Valencia. *Anal Bioanal Chem* (2015) 407:4661–4670.
24. Supercritical-Fluid Chromatography with Diode-Array Detection for Emerging Contaminants Determination in Water Samples. Method Validation and Estimation of the Uncertainty. Vilma del C Salvatierra-Stamp, Norma S Pano-Farias, Silvia G Ceballos-Magaña, Jorge Gonzalez, Valentin Ibarra-Galván and Roberto Muñiz-Valencia, *J Chromatogr Sep Tech* 2015, 6:6 <http://dx.doi.org/10.4172/2157-7064.1000291>.
25. In silico receptor-based drug design of X,Ybenzenesulfonamide derivatives as selective COX-2 inhibitors. David J. Pérez, Orlando Sarabia , Manuel Villanueva-García, Kayim Pineda-Urbina, Angel Ramos-Organillo, Jorge Gonzalez-Gonzalez, Zeferino Gómez-Sandoval, Rodrigo Said Razo-Hernández. *C. R. Chimie* 20 (2017) 169e180170.
26. Importance of iron oxides on the carbon surface vs the specific surface for VOC's adsorption. I.A. Aguayo-Villarreal, M. A. Montes-Morán, V. Hernández-Montoya, A. Bonilla-Petriciolet, A. Choncheso, C. K. Rojas-Mayorga, J. González. *Ecological Engineering*. 106 (2017) 400-4008.
27. Author of the Atlas of chemical hazards of the State of Colima. Work performed at the request of the federal authorities (2015-2017). Final version presented to CENAPRED.