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Título Profesional o Grado Académico (incluya el año de obtención):

**LICENCIATURA EN CIENCIAS C/M EN QUÍMICA, UNIVERSIDAD DE CHILE, 1992.**

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Estudios de Postgrado o Especialización (institución donde lo obtuvo y año de obtención):

**DOCTOR EN CIENCIAS C/M EN QUÍMICA, UNIVERSIDAD DE CHILE 1997**

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Actividad Actual e Institución en la cual trabaja:

**PROFESOR ASISTENTE DE LA UNIVERSIDAD DE CHILE. DEPARTAMENTO DE QUÍMICA, FACULTAD DE CIENCIAS.**

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Reseña de su actividad laboral actual:

**Área de Investigación:** Química inorgánica, química supramolecular, nanoquímica.

En la actualidad se está trabajando en nanoquímica y química del autoensamble. En esta área, entidades químicas de tamaño de los nanómetros consistentes en un número pequeño de átomos que poseen características intermedias entre las de un átomo y el de un material sólido. Estos materiales de escala nanométrica son interesantes especialmente debido a sus notables propiedades electrónicas, magnéticas, ópticas, biológicas y mecánicas, frecuentemente asociadas con su baja dimensionalidad y de efectos de confinamiento cuántico. Conceptos como reconocimiento molecular, auto- y co-ensamblamiento, crecimiento epitaxial y topología están esencialmente involucrados en esta química.

PUBLICACIONES:

Campos, C., Muñoz, M., Barrientos, L., Lang, E., Jara, P., Sobrados, I., Yutronic, N.

Adhesion of gold and silver nanoparticles onto urea-alkylamine inclusion compounds (2013) *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, 75 (1-2), pp. 165-173.

<http://www.scopus.com/inward/record.url?eid=2-s2.0-84873888524&partnerID=40&md5=e0510d5d830b516fb9acc64e9da6fa64>

DOCUMENT TYPE: Article

SOURCE: Scopus

Herrera, B., Adura, C., Yutronic, N., Kogan, M.J., Jara, P.  
Selective nanodecoration of modified cyclodextrin crystals with gold nanorods (2013) *Journal of Colloid and Interface Science*, 389 (1), pp. 42-45.

<http://www.scopus.com/inward/record.url?eid=2-s2.0-84867911692&partnerID=40&md5=1f74bd3f9da9c60dbbb46ad7b6b17a66>

DOCUMENT TYPE: Article

SOURCE: Scopus

Rodríguez-Llamazares, S., Jara, P., Yutronic, N., Noyong, M., Fischler, M., Simon, U.  
Preferential adhesion of silver nanoparticles onto crystal faces of  $\alpha$ -Cyclodextrin/carboxylic acids inclusion compounds (2012) *Journal of Nanoscience and Nanotechnology*, 12 (12), pp. 8929-8934.

<http://www.scopus.com/inward/record.url?eid=2-s2.0-84876241281&partnerID=40&md5=2d173d948c1cf2914d9c57760aa1a2ea>

DOCUMENT TYPE: Article

SOURCE: Scopus

Barrientos, L., Lang, E., Zapata-Torres, G., Celis-Barros, C., Orellana, C., Jara, P., Yutronic, N.

Structural elucidation of supramolecular alpha-cyclodextrin dimer/aliphatic monofunctional molecules complexes

(2012) *Journal of Molecular Modeling*, pp. 1-8. Article in Press.

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DOCUMENT TYPE: Article in Press

SOURCE: Scopus

Barrientos, L., Allende, P., Orellana, C., Jara, P.  
Ordered arrangements of metal nanoparticles on alpha-cyclodextrin inclusion complexes by magnetron sputtering

(2012) *Inorganica Chimica Acta*, 380 (1), pp. 372-377. Cited 1 time.

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DOCUMENT TYPE: Article

SOURCE: Scopus

Silva, N., Moris, S., Herrera, B., Diaz, M., Kogan, M., Barrientos, L., Yutronic, N., Jara, P.

Formation of copper nanoparticles supported onto inclusion compounds of  $\alpha$ -cyclodextrin: A new route to obtain copper nanoparticles

(2010) *Molecular Crystals and Liquid Crystals*, 521, pp. 246-252. Cited 1 time.

<http://www.scopus.com/inward/record.url?eid=2-s2.0-77952975963&partnerID=40&md5=54bff088e9f52f92e0fe4bc2cad71f91>

DOCUMENT TYPE: Conference Paper

SOURCE: Scopus

Barrientos, L., Rodríguez-Llamazares, S., Merchani, J., Jara, P., Yutronic, N., Lavayen, V.

Unveiling the structure of Ni/Ni oxide nanoparticles system

(2009) Journal of the Chilean Chemical Society, 54 (4), pp. 391-393. Cited 4 times.

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[77952337814&partnerID=40&md5=95c094cad14e2df9c9138008d51881f2](http://www.scopus.com/inward/record.url?eid=2-s2.0-77952337814&partnerID=40&md5=95c094cad14e2df9c9138008d51881f2)

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SOURCE: Scopus

Barrientos, L.J., Yutronic, N.I., Muñoz, M.E., Silva, N.R., Jara, P.S.

Metallic nanoparticle tropism of alkylthiol guest molecules included into  $\alpha$ -cyclodextrin host

(2009) Supramolecular Chemistry, 21 (3-4), pp. 264-267. Cited 4 times.

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Rodríguez-Llamazares, S., Merchán, J., Olmedo, I., Marambio, H.P., Muñoz, J.P., Jara, P., Sturm, J.C., Chornik, B., Peña, O., Yutronic, N., Kogan, M.J.

Ni/Ni oxides nanoparticles with potential biomedical applications obtained by displacement of a nickel-organometallic complex

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Inclusion compounds of  $\alpha$ -cyclodextrin with alkylthiols

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[54949126299&partnerID=40&md5=5895168b99c796aff763893b0f68526c](http://www.scopus.com/inward/record.url?eid=2-s2.0-54949126299&partnerID=40&md5=5895168b99c796aff763893b0f68526c)

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Merchan, J., Lavayen, V., Jara, P., Sanchez, V., Yutronic, N.

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Rodríguez-Llamazares, S., Jara, P., Yutronic, N., Noyong, M., Bretschneider, J., Simon, U.

Face preferred deposition of gold nanoparticles on  $\alpha$ -cyclodextrin/octanethiol inclusion compound

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Ordered arrangement of gold nanoparticles on an  $\alpha$ -cyclodextrin- dodecanethiol inclusion compound produced by magnetron sputtering  
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Merchán, J., Yutronic, N., Jara, P., Garland, M.T., Baggio, R.  
Protonated bis(quinuclidine) included in channel thiourea-bromide and ribbons thiourea-iodide lattice: New thiourea inclusion compounds  
(2006) Journal of Inclusion Phenomena and Macrocyclic Chemistry, 55 (3-4), pp. 367-371. Cited 3 times.  
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Inclusion compound of  $\alpha$ -cyclodextrin/diquinuclidinium cation [Q 2H]<sup>+</sup>  
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Yutronic, N., Merchán, J., Jara, P., Manríquez, V., Wittke, O., González, G.  
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diquinuclidine ion inserted in a polyanionic thiourea-chloride matrix  
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Jara, P., González, G., Manríquez, V., Wittke, O., Yutronic, N.  
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bis(thiourea)hexamethylenetetramine  
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Ionic Conducting Materials  
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Dahrouch, M.R., Jara, P., Mendez, L., Portilla, Y., Abril, D., Alfonso, G., Chavez, I., Manriquez, J.M., Rivière-Baudet, M., Rivière, P., Castel, A., Rouzard, J., Gornitzka, H.  
An effective and selective route to 1,5-dihdropolyalkylated s-indacenes:  
Characterization of their mono- and dianions by silylation. Structure of trans-1,5-  
bis(trimethylsilyl)-2,6-diethyl-4,8-dimethyl-s-indacene  
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Yutronic, N., Manríquez, V., Jara, P., Wittke, O., González, G.  
Dicyclohexylamine-Thiourea Clathrate  
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Yutronic, N., Manriquez, V., Jara, P., Witke, O., Merchán, J., González, G.  
Bis(thiourea)-1,2-diazabicyclo[2.2.2]octane. A new layered thiourea inclusion  
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13C CP-MAS NMR of azacycle-thiourea inclusion compounds  
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SOURCE: Scopus

Jara, P., Justiniani, M., Yutronic, N., Sobrados, I.  
Syntheses and structural aspects of cyclodextrin/dialkylamine inclusion compounds  
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Jara, P., Yutronic, N., González, G.  
Synthesis and structural aspects of urea/dialkylamine inclusion compounds  
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#### **PROYECTOS DE INVESTIGACIÓN:**

INVESTIGADOR RESPONSIBLE. 130147 PREPARATION OF CYCLODEXTRIN INCLUSION COMPOUNDS CRYSTALS DECORATED WITH NOBLE METALS NANOSTRUCTURES. A STUDY OF PHOTOTHERMAL EFFECTS PRODUCED BY LASER IRRADIATION. 2013

INVESTIGADOR RESPONSIBLE. 1080505 DESIGN AND OBTAINING OF METAL NANOTUBES AND METAL NANORODS FROM METALLIC ORDERED ARRANGEMENTS ON CYCLODEXTRIN INCLUSION COMPOUNDS. 2008

COINVESTIGADOR. 1050287 NUEVOS METODOS DE OBTENCION DE NANOPARTICULAS Y NANO-ORDENAMIENTOS METALICOS EMPLEANDO LA QUIMICA DE COMPUESTOS DE INCLUSION. 2005

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INTERACCION DE NANOPARTICULAS CON AUTOENSAMBLADOS DE ALQUILTIOLES  
ANCAPSULADOS EN CICLODEXTRINAS. 2004

Actualización, mayo 2014