

EULANETCERMAT – IRELAC SEMINAR BRUSSELS

PEOPLE

<p>Title of the presentation/Acronym: <i>Título de la presentación/Acrónimo:</i> Inorganic Laminar Semiconductors</p> <p>Name of the person: <i>Nombre y Apellidos de la persona que presenta el trabajo:</i> Guillermo González Moraga</p> <p>Institution represented: <i>Nombre de la institución que se representa:</i> Department of Chemistry, Faculty of Sciences, Universidad de Chile, and Center for Development of Nanoscience and Nanotechnology, CEDENNA, Santiago, Chile.</p>
<p>Short CV (5 lines maximum), <i>Breve CV (no más de 5 líneas)</i> Dr. rer. nat. by University of Stuttgart (1970), Full Professor Universidad de Chile (since 1976) teaching and research in Inorganic Chemistry, Materials Chemistry and Nanochemistry. Head of the Laboratory of Inorganic Synthesis and Electrochemistry Department of Chemistry. Member of Board of Directors and Principal Researcher of the Center for the Development of Nanoscience and Nanotechnology, CEDENNA.</p>
<h3>SEMINAR PRESENTATION</h3>
<p>DESCRIPTION OF THE OBJECTIVES (5 LINES MAXIMUM) <i>DESCRIPCIÓN DE LOS OBJETIVOS (5 LÍNEAS MÁXIMO)</i></p> <p>Study properties of inorganic semiconductors for energy conversion and photocatalytic applications. Effects of the size in the regimen of the nanometers. Synthesis, characterization, and properties of two-dimensional semiconducting hybrid organic-inorganic nanocomposites.</p>
<p>DESCRIPTION OF THE MAIN RELEVANT RESULTS (10 LINES MAXIMUM) <i>DESCRIPCIÓN DE LOS RESULTADOS MÁS RELEVANTES (10 LÍNEAS MÁXIMO)</i></p> <p>Two-dimensional nanostructures of transition metal semiconductors constituted by a quasi molecular layer of the semiconductor confined into a matrix of organic amphiphilics thus defining 2D micelle-like supramolecular arrangements which in bulk may be seen as layered host-guest intercalation compounds are obtained. Synthesis strategies for obtaining semiconductor layered structures as well as changes in the properties relative to bulk precursor principally depend on the crystallographic habit of the later. Alike than in graphite/graphene systems, the isolation of sheets, by enhancing the separation between them, may change some characteristic properties of the semiconductor.</p> <p>Acknowledgements. FONDECYT, 1090282; CEDENNA, FB0807; ICM, P10-061-F</p>

MARIE CURIE ACTIONS

**International Research Staff Exchange Scheme
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**EULANETWORK IN CERAMIC MATERIALS
WITH ENVIRONMENTAL AND INDUSTRIAL
APPLICATIONS**

PART B

PROPOSAL ACRONYM. EULA-NETCERMAT