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# **Seminar**

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Date : Thursday, **March 22<sup>nd</sup>**, 2012  
Time : **16:00 hrs**  
Room : **5118.-156**  
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## **Exploring the mechanisms of metal-based pharmacological agents via an integrated approach**

The peculiar chemical properties of metal-based drugs impart innovative pharmacological profiles to this class of therapeutic and diagnostic agents, most likely in relation to novel molecular mechanisms still poorly understood. However, inorganic drugs have been scarcely considered for medicinal applications with respect to classical organic compounds due to the prejudice of the relevant toxic effects evidenced in certain cases. Thus, the development of improved metallodrugs requires clearer understanding of their physiological processing and molecular basis of actions. Among the various issues in the area of medicinal inorganic chemistry, the possibility of target elucidation is essential for the identification of new therapeutic applications for metal compounds or as molecular biological tools. Here we present the results of our recent research in the field, which in our opinion constitute the basis of a systematic and interdisciplinary approach to address some of the critical issues in the study of the molecular mechanisms of metallodrugs' action via the implementation of high-resolution biophysical techniques coupled with more biological and pharmacological methods.