



**INSTITUTO TECNOLÓGICO E NUCLEAR**

Ministério da Ciência Tecnologia e Ensino Superior

Estrada Nacional 10, 2686-953 Sacavém, Tel: +351 9946000, Fax: +351 219550117, [www.itn.pt](http://www.itn.pt)

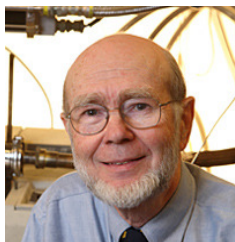
# SEMINÁRIO

Date-Time / Data-hora: 19-05-2010, 12h00  
Auditório do ITN / *ITN Auditorium*

Speaker / Palestrante: **Lester Andrews** *Department of Chemistry, University of Virginia,*  
(Emeritus Professor) *Charlottesville, USA*

Title / Título: ***Laser Ablated Metal Atom Reactions to Form Novel Molecules***

Summary: A wide variety of laser-ablated metal atom reactions in solid rare gas matrices at cryogenic temperatures to form novel product molecules will be presented. These will include the ion-pair molecule  $\text{LiO}_2$ , the dialane molecule  $\text{Al}_2\text{H}_6$ , the thorium methylidene  $\text{CH}_2=\text{ThH}_2$ , the uranium methylidyne  $\text{HC}\equiv\text{UF}_3$ , the nitride  $\text{N}\equiv\text{UF}_3$ , and other recently prepared uranium bearing molecules  $\text{UC}$  and  $\text{CUC}$  containing triple bonds.



**Brief CV:** Lester Andrews was born in Lincolnton, NC, on January 31, 1942. He earned a B.S. degree in Chemical Engineering from Mississippi State University in 1963 and a Ph.D. degree in Physical Chemistry from the University of California, Berkeley, in 1966. He joined the faculty of the University of Virginia in 1966 where he has been active in matrix isolation spectroscopy, publishing over 750 research papers on novel chemical species. He is one of the most highly cited chemists in the world, having been cited over 18,500 times. His work has fundamentally changed the understanding of chemical bonding in many elements, providing key insights for generations of chemists to come. He recently received the 2010 Earle K. Plyler Prize for Molecular Spectroscopy from the American Physical Society. He is now Professor Emeritus but still exceptionally active. In addition, he enjoys playing the E-flat soprano clarinet.

