



# METALLAGRAM

LONG ISLAND CHAPTER



Volume 64 Issue 5

Chapter website: <http://DoL1.eng.sunysb.edu/asm/>

**Next Meeting . . . . . Wednesday January 18th, 2023**

**Where . . . . . Pollo Rico Latin Bistro, Centereach, NY**

**Topic: New Insights on Old Salts from the  
Molten Salts in Extreme Environments**

**Speaker: James Wishart, Brookhaven National Laboratory**

**Social hour ... 6:00 pm Dinner ... 7:00 pm Meeting ... 8:00 pm**

**Members ... \$25 Guests ... \$27 Students ... \$15**

**(New and recently transferred-in members free)**

**Reservations appreciated – contact Dan Migliorino**

**at [MigliorinoDan@gmail.com](mailto:MigliorinoDan@gmail.com) or 516-468-9615**

## **Directions to Pollo Rico Latin Bistro**

Pollo Rico is located at 2435 Middle Country Road (Rte. 25), Centereach. Probably the simplest way to get there from the LIE is to take Exit 62 (Nicolls Road) and go north on CR 97 (towards Stony Brook). Continue north for about 3 miles then take the exit to Rte. 25. At the traffic signals at the end of the ramp go left and head west (Smithtown). The restaurant will appear after about 1.5 miles, on the right side of the highway. Their telephone number is 631-471-0585. Their website is: <http://www.polloricolatinbistro.com/> .

## The Speaker

James Wishart is a Senior Chemist in the Chemistry Division of Brookhaven National Laboratory, where he has worked for 35 years. He is Director of the Molten Salts in Extreme Environments Energy Frontier Research Center (MSEE EFRC), a 9-institution collaboration supported by the U. S. Department of Energy. In the mid-1990s he built the BNL Laser-Electron Accelerator Facility, which is used to study chemical reactions initiated by ionizing radiation down to the picosecond timescale. He received his PhD in Inorganic Chemistry from Stanford University and worked for two years as a postdoctoral research associate at Rutgers University before joining BNL.

## The Topic

The purpose of the Molten Salts in Extreme Environments EFRC is to provide fundamental and predictive understanding of molten salt bulk and interfacial chemistry that will establish robust principles to guide the technologies needed to deploy molten salt nuclear reactors (MSRs), a potentially game-changing nuclear reactor technology that could provide a cost-competitive, safe, and more sustainable commercial nuclear power option. MSRs operate above 500 °C and employ molten salts as coolants for solid-fueled reactors, and in some implementations the nuclear fuel constituents are dissolved in the molten salt as combined coolant and fuel. The development of reliable MSRs requires a comprehensive understanding of the physical properties and chemistry of molten salts and of their interfacial interactions with reactor materials. This presentation will describe how MSEE is using state-of-the-art instrumentation and computational capabilities to paint a detailed picture of how molten salts work on the atomic level, adding up to their servable physical, chemical and interfacial properties.



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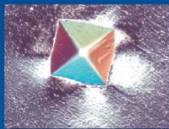
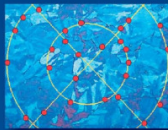
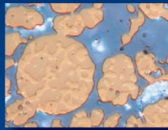
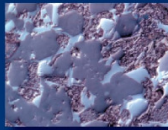
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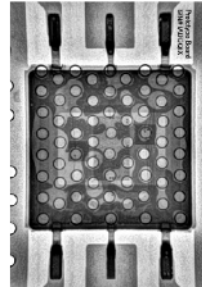
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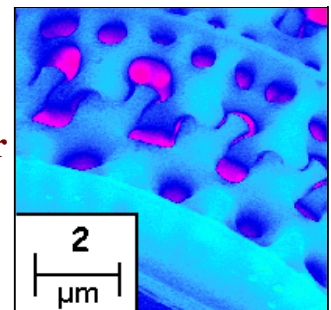
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## ON-LINE FORUM

ASM now has an active on-line forum called "ASM Online Member Community". You can join by going to:

<https://www.asminternational.org/communities>

## Long Island Chapter Meeting Schedule

- Feb 15, 2023**    **HITEMCO, Thermal Spray Coatings**  
**Pollo Rico, Centereach, NY**
- Mar 22, 2023**    **Bob Aller, Marine Materials**  
**Pollo Rico, Centereach, NY**
- April 19, 2023**    **Student Nite**  
**Old Field Club by West Meadow Beach**

## Metro NY-NJ Chapter

[www.asminternational.org/web/metro-nynj-chapter](http://www.asminternational.org/web/metro-nynj-chapter)

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