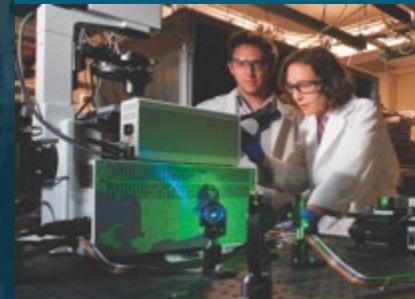


MELCOR Overview Summary



PRESENTED BY

David Luxat



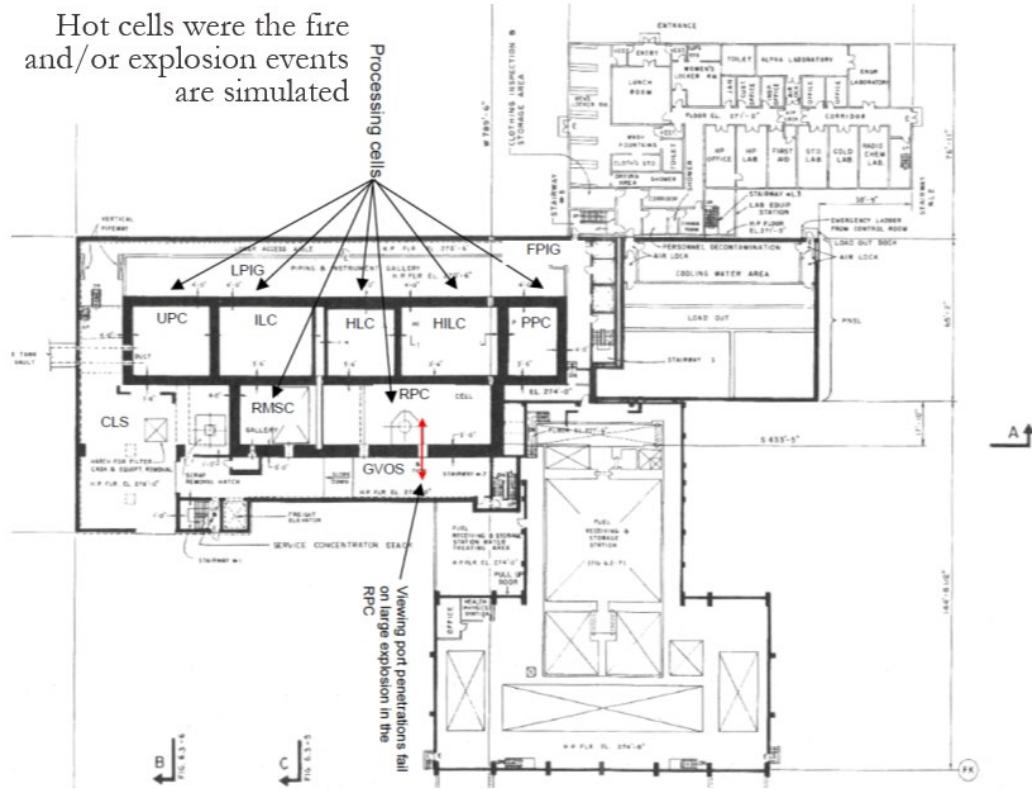
Sandia National Laboratories is a multimission laboratory managed and operated by National Technology and Engineering Solutions of Sandia LLC, a wholly owned subsidiary of Honeywell International Inc. for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.

Other Non-Reactor Application Using MELCOR



- Using MELCOR to estimate the source term (ST) out of a spent fuel reprocessing plant due to solvent explosion (Red Oil) and solvent fire accident scenarios
- A detailed MELCOR model has been developed for BNFP, was selected as a representative facility to MELCOR demonstrate best-estimate, non-reactor facility accident capabilities

Hot cells were the fire
and/or explosion events
are simulated



MELCOR Modeling of Accident Scenarios at a Facility for Aqueous Reprocessing of Spent Nuclear Fuel

Manuscript Completed: September 2019
Date Published: January 2020

Prepared by: K. C. Wagner and D. L. Y. Louie



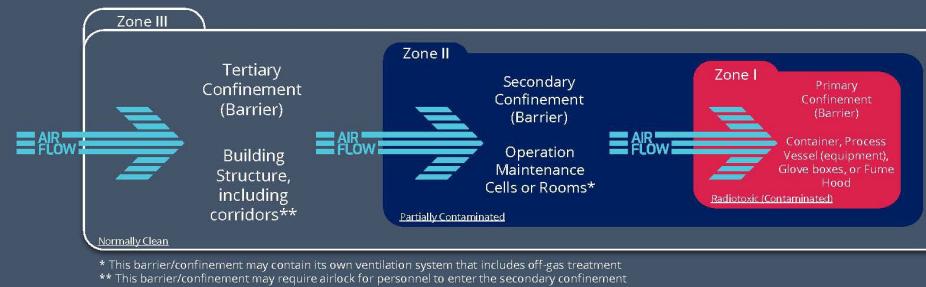
Upcoming in-person week long MELCOR training:

- At SNL-CGSC outside Kirkland Base
- Follow NM COVID restriction
- Need vaccination proof



MELCOR CODE TRAINING

Albuquerque, NM— April 4-7, 2022



4-Days Covering: Usage of MELCOR, tools and SNAP



Thermal-Hydraulics, Control Functions, Aerosol Transports in MELCOR



Practical applications of MELCOR for analyzing major accidents in DOE facilities

MELCOR Introductory Training on Nuclear Facility Safety Application With Hand-On and interaction with instructors

Registration Fee: \$2500

For more information, contact David Louie at dlouie@sandia.gov

**Non-Disclosure Agreement must be filled out in advanced. Click [here](#)

NRC Code Registration

- To obtain NRC codes, go to:
 - <https://www.nrc.gov/about-nrc/regulatory/research/obtainingcodes.html>
 - Governments, academic institutions and commercial enterprises can obtain NRC codes
 - MELCOR, SNAP and MACCS
 - All code requestors must fill out and sign a code **non-disclosure agreement**
 - Send to safetycodes@nrc.gov
 - There may be a shipping and handling fee for the domestic commercial entities