

# PNNL & GlobalFIA R&D Activities Related to Radiochemical Processing of $^{211}\text{At}$

**Matthew J. O'Hara<sup>1</sup>, Graham D. Marshall<sup>2</sup>**

1. Sr. Scientist, Nuclear Sciences Division  
Pacific Northwest National Laboratory  
Richland, WA

2. President, GlobalFIA  
Fox Island, WA

*$^{211}\text{At}$  Users Meeting  
2019 SNMMI Conference  
Anaheim, CA  
June 23, 2019*

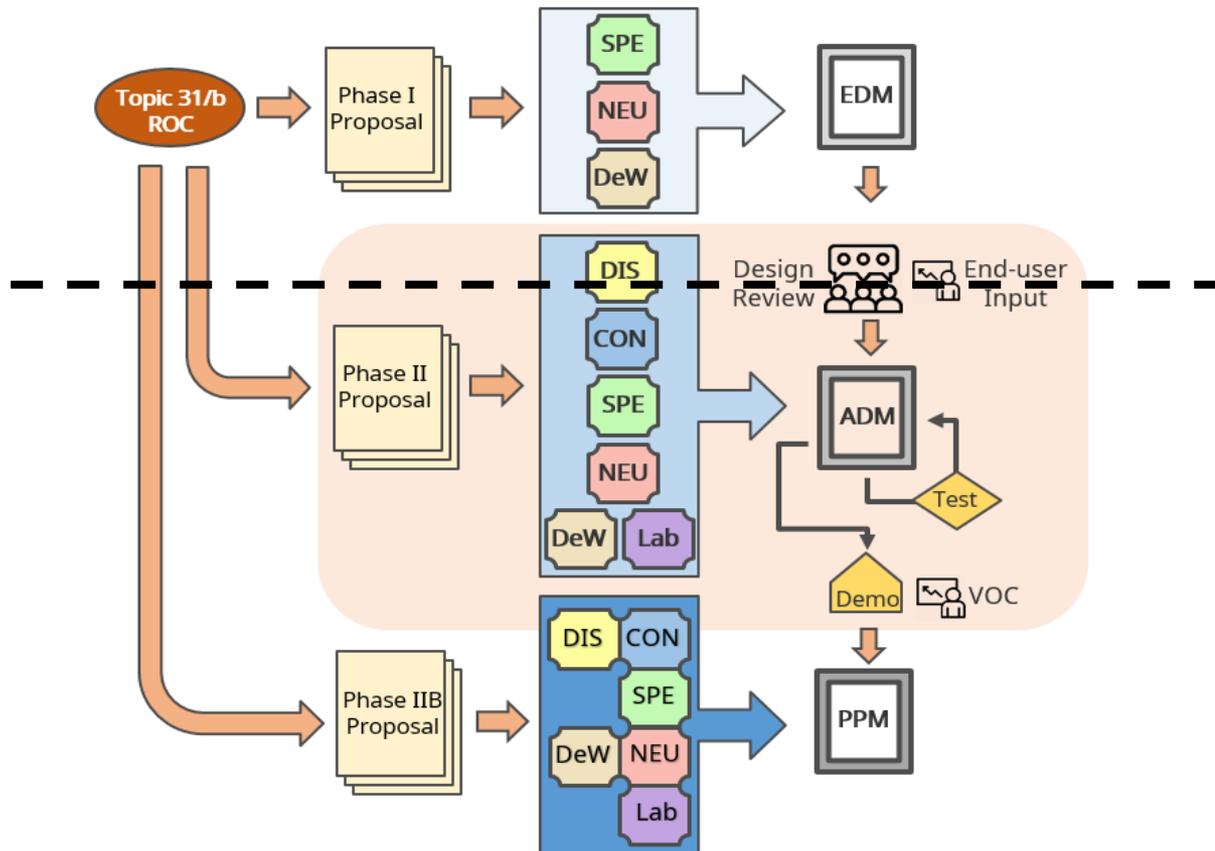
**GLOBALFIA**  
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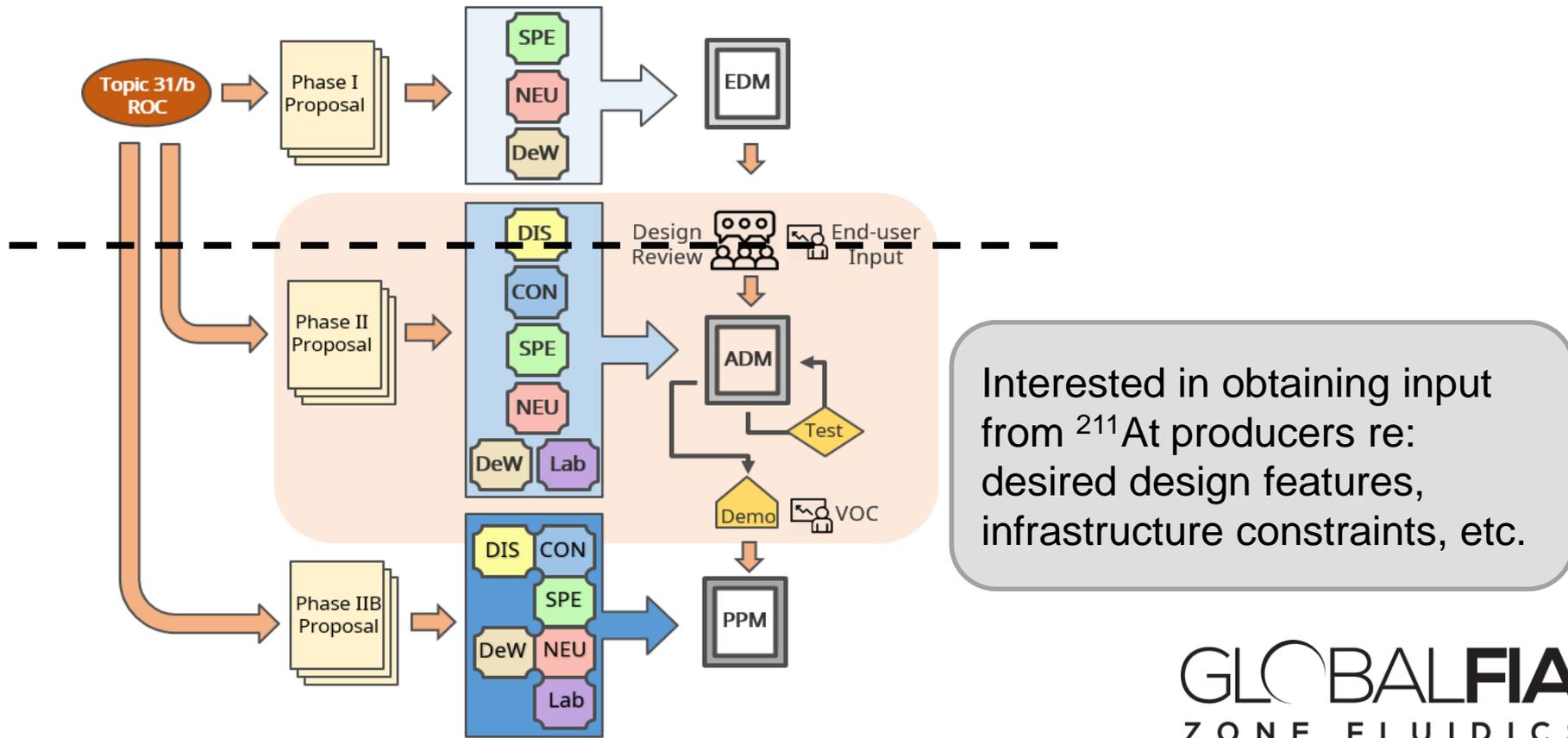
# <sup>211</sup>At Isolation System Under Development

- ▶ Presently working to design / engineer a system to routinize <sup>211</sup>At radiochemical processing
  - GlobalFIA / PNNL collaboration made possible through funding from DOE-OS SBIR/STTR program



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  - Small-footprint system for routine target processing
  - In-line fluidic workstation to perform:

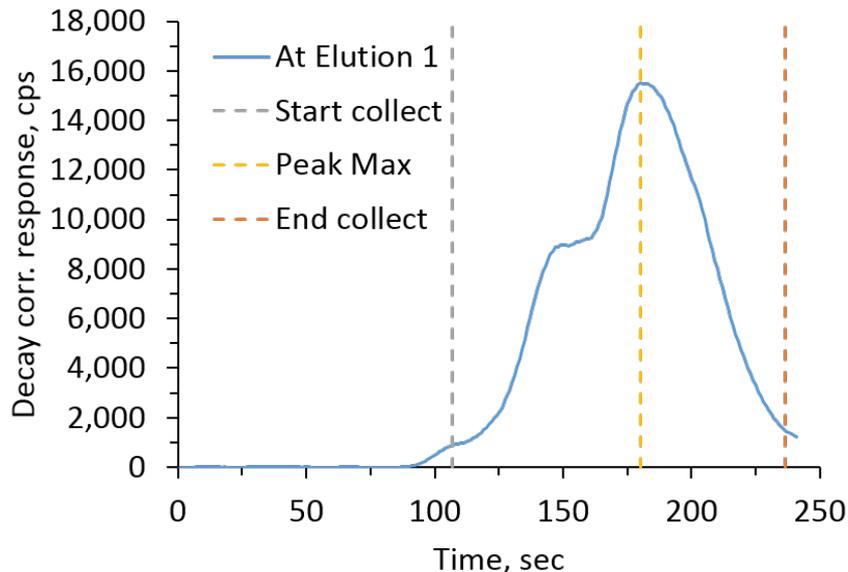
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    - Target solution preparation

1. M.J. O'Hara, et al., Appl. Rad. & Isotop. 2017. 122:201-210.

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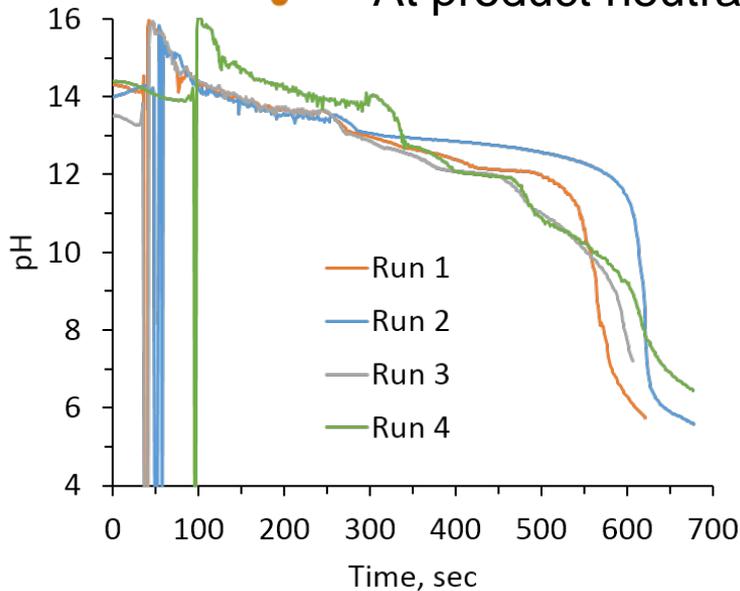


Real-time elution peak monitoring /  
product collection triggering

1. M.J. O'Hara, et al., Appl. Rad. & Isotop. 2017. 122:201-210.  
2. M.J. O'Hara, USPTO App. US2018/0308599A1, Oct. 25, 2018.

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    - $^{211}\text{At}$  product neutralization

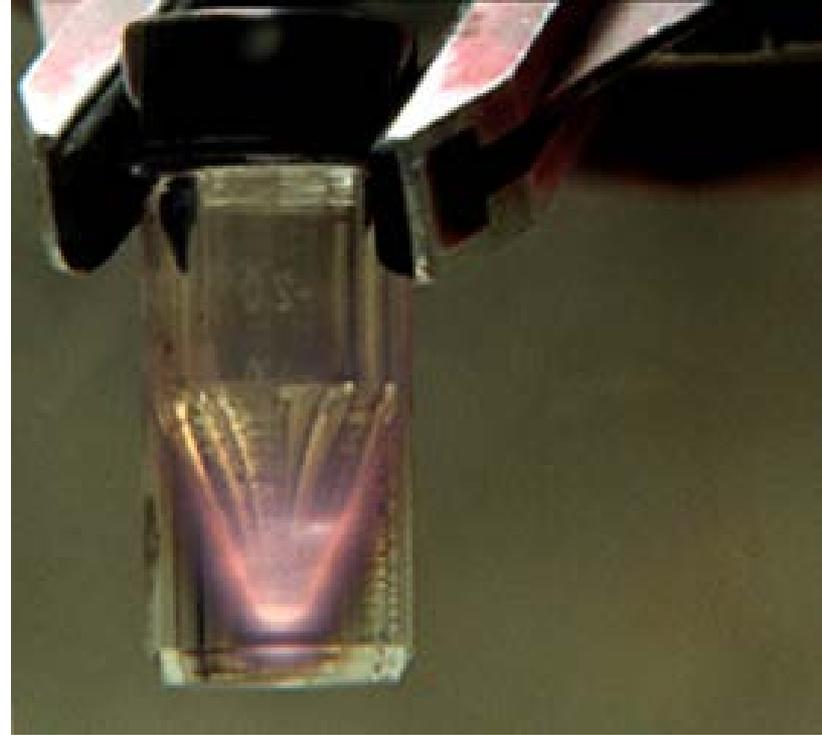


In-line solution neutralization to obtain label-ready  $^{211}\text{At}$

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# Thank You!

Questions???



## Contact Info:

Matt O'Hara

509-375-5579

[Matthew.OHara@pnnl.gov](mailto:Matthew.OHara@pnnl.gov)

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