



## WP4: Innovations in metallic materials treatment and conditioning

## T4 : Development and optimization of decontamination processes



NUCLEAR RESEARCH INSTITUTE



CONTRIBUTORS:

IMT, NNL, CEA, CTU, UJV, SORC

TASK LEADER: ABDESSELAM ABDELOUAS (IMT)

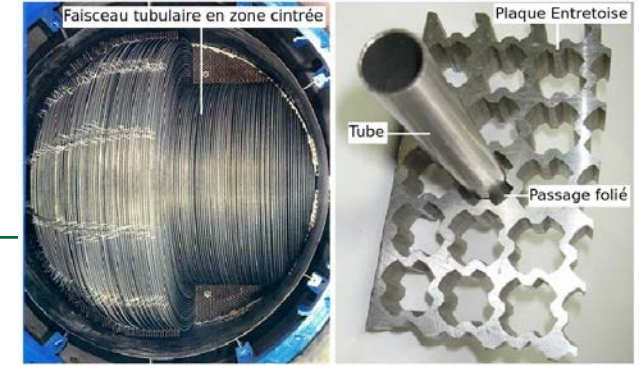
[abdeloua@subatech.in2p3.fr](mailto:abdeloua@subatech.in2p3.fr)



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WP4 Webinar 16<sup>th</sup> of February 2021

# Context and Objectives



## ■ Objectives

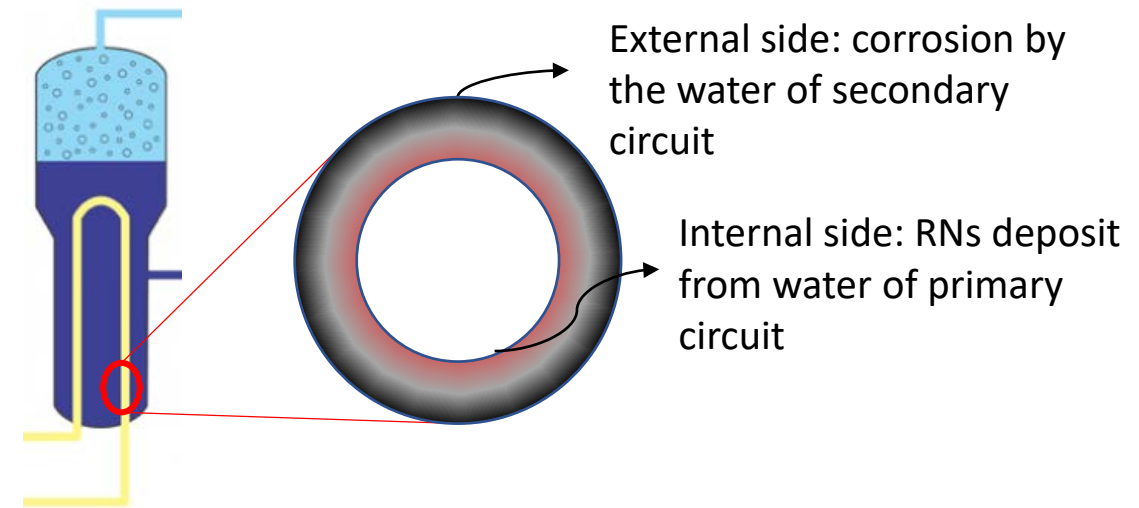
- Development/Optimization of decontamination processes of metallic waste (Ni-alloys, Stainless steel) while minimizing secondary waste
- Secondary waste treatment and immobilization

## ■ Benefits

- Save repository resources
- Recycle metallic compounds

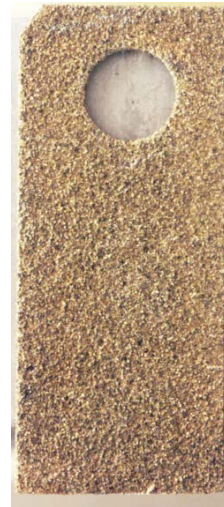
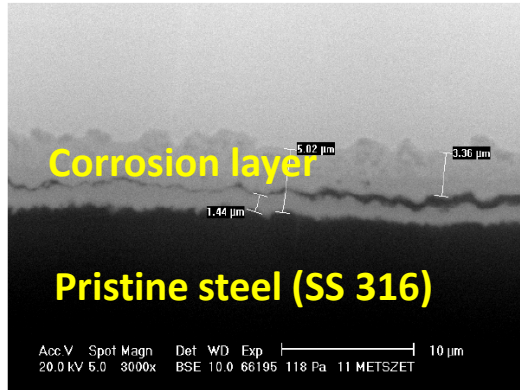
## ■ Subtasks

- Subtask T4.3.1. Optimization of decontamination of metallic waste (Leader: CEA)
- Subtask T4.3.2. Optimization of treatment of secondary waste streams (Leader: IMT)

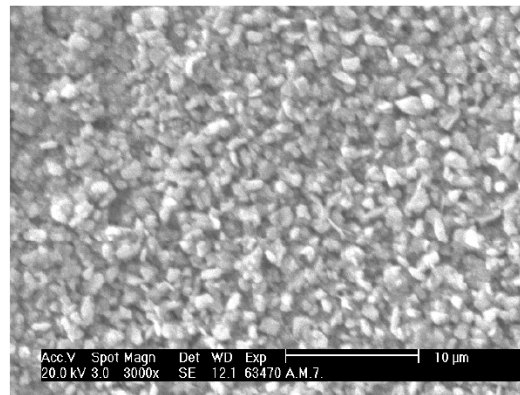


# Studies methodology

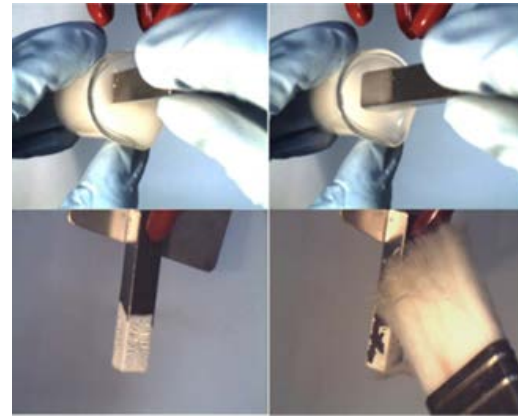
## Preparation of surrogate specimens



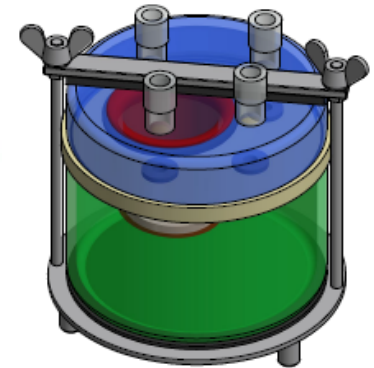
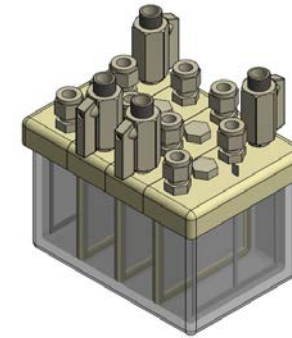
## Preparation of contaminated specimens



## Decontamination: gel, solutions



## Effluent treatment

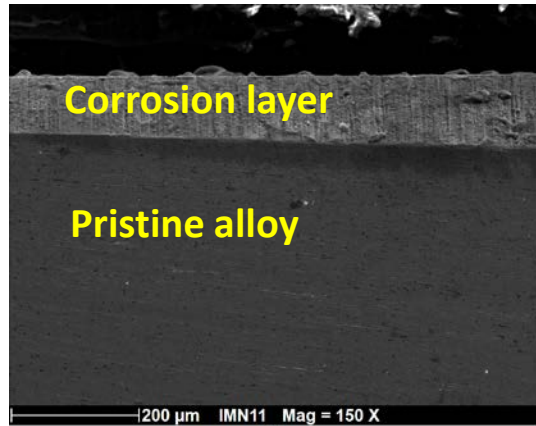


## Residues confinement





# Applications to real samples



From Surrogates



Real samples  
(Co60, Mn54, Ni63, Fe55, etc.)



# PREDIS

**Thank you!**