

Project idea/ Field of expertise:

Recycling technologies

Organisation Name:

CEA (RTO)

- French alternative energies and atomic energy commission

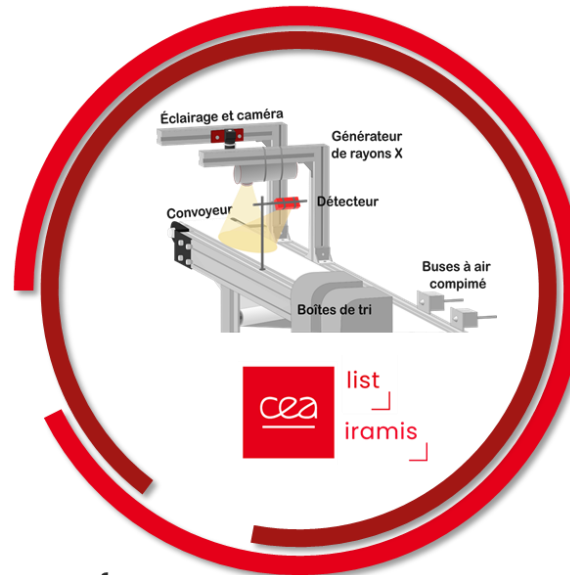
Addressed topic(s):

**HORIZON-CL4-INDUSTRY-2025-01-MATERIALS-61 :
Technologies for critical raw materials and
strategic raw materials from End of Life products**

Implementation and optimisation of X-ray spectro imaging method for in-line inspection and sorting

Numerical simulation

- X-ray imaging simulation
- Parametric studies for optimisation
- Synthetic data generation for IA based method



Post treatment

- Spectral data based algorithm
- Spectral mixing algorithm based on maximum likelihood estimation
- IA based algorithm
- Spectral signature identification with ultimate target quantification

- Pixelated spectral detector for element identification and localisation
- Timepix3 electronic to address fast event (inline measurement)

Hardware

- 2D Mask to enhance the spatial sensibility

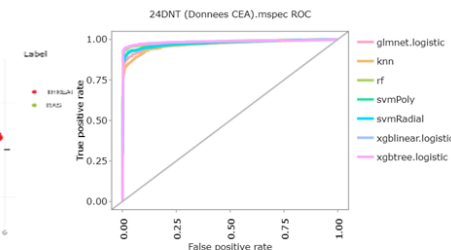
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Contact details

Contact person

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B2Match profile	
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