

IDEAAL Work Package 4

Innovation and Industries

WP4 Tasks

- **Task 1** : Access provision to research teams from industries and involvement of industrial users (GANIL - MH Moscatello/X.Ledoux)
- **Task 2** : Industrial Applications and Technology Transfer (NE-NUCLEOPOLIS - N.Renard)
 - Sub-Task 2.1 – Provide industrial application tools to GANIL
 - Sub-Task 2.2 – Operational implementation (*General Case*)
 - Sub-Task 2.3 – Operational implementation : Support for the technology transfer of the beam profile monitors
 - Sub-Task 2.4 – Operational implementation: Innovative radioisotope production
- **Task 3** : Increase of innovation potential (CEA/DRF - A.Leservot)

Access provision for research teams from industries and involvement of industrial users - GANIL

M.Kurzyp – X.Ledoux - MH.Moscatello

STATUS

- 2 experiments scheduled in 2019
- 1 experiment scheduled in 2020
- Survey on the industrial needs in terms of beam time for the next 6 years
- Proposal of a business plan for the development of R&D on membranes at Ganil (in collaboration with a research team expert in chemical etching) and irradiations of electronic components

IN PROGRESS:

- Deliverable D4.1 almost completed: **Business plan for the industrial application activities at GANIL**

TASK 2

Applications and Technology Transfer - Normandie Energies / Nucleopolis

M.Grar – MH.Moscatello – N.Renard (until August 31st 2020)/G.Zolnowski –P.Rouxel

Sub-Task 2.1 – Provide industrial application tools to GANIL

STATUS:

- Mapping of existing potential: meetings and interviews with most of the groups at GANIL (~ 40 meetings occurred) report completed in July 2018
- Market research outsourced to ERDYN Company
- Communication tools in collaboration with GANIL/WP5

IN PROGRESS:

- New transfer to industry : Patent on Aluminium Flanges to be transferred to a company (Ganil)
- **Deliverable D4.2 in progress (to be finalised):** Report on the technology transfers identified and developed in the framework of the project

Sub-Task 2.2 – Operational implementation (General Case)

STATUS:

- Exchange of good practices with GSI laboratory:
 - Meeting in GSI in November 2017 (practices for technology transfer, meetings with companies)
 - Meeting with GSI on September 24th 2020
- Participation in WNE 2018 with Nucleopolis (June 26th to 28th Paris Nord Villepinte)
- Participation to the ENSAR2/NUPIA Workshop in October 2018 (Varsovie)
- **Organisation of a workshop with companies on GANIL know-how on February 5th 2019**
- (ion sources, beam diagnostics, vacuum technologies, mechanics, radioisotopes)
- Participation to the the ENSAR2/NUPIA Workshop in November 2019 (Sevilla)
- **Sub-Task completed**

Sub Task 2.3 – Operational implementation: Support for the technology transfer of the beam profile monitors

STATUS:

- Transfer contract signed in December 2017 and transfer to Pantechnik in progress
- Collaboration contract signed in January 2020
- MS9 on Month 9: delayed to Month 37
- **Sub-Task completed**

Sub-Task 2.4 – Operational implementation: Innovative radioisotope production

STATUS:

- Study and proposals of possible methods for transfer with the M2 trainee - January to June 2017 (GANIL/Nucleopolis) – MS10 at Month 30: OK

→ **211At and 212Pb**

- ARRONAX collaboration: presently on stand-by, but multilateral collaboration within the frame of the ANR REPARE
- TRISKEM : possible collaborations have been identified (meeting in December 2019)
- ORANO MED: meeting in January 2020 at GANIL -> OM not willing to be involved in this R&D in the next few years
- **Sub-Task completed**

Increase of innovation potential - CEA/DRF

A.Leservot - MH.Moscatello - M.Kurzyp

Study the possibilities of increasing the innovation potential of the GANIL laboratory:

- Identify new applications with heavy and light ions beams, in order to replace the reactor technology with the accelerator technology, for as many applications as possible.
- Identify new R&D subjects that might lead to innovative technologies and application
- Identify the necessary technical developments to adapt the facility to these future and new applications

STATUS:

- General study during the first 2 years
- 2 subjects investigated in details from 2018:
 - Membranes & filtration– deliverable almost completed (D4.1 and D4.3)
 - Electromagnetic Isotopic Separation: completed
- Deliverable D4.3 in finalisation step

Milestones and Deliverables

Milestone number	Milestone name	Due date	Means of verification
MS9	Beam profile monitors: Licence contract and R&D collaboration contract with the company	Months 6 DELAYED to Month 37	Report
MS10	Report on the methodology for the technology transfer for radioisotope production	Months 30	Report

Deliverable	Deliverable Title	Due date
D4.1	Business plan for the industrial application activities at GANIL	M51
D4.2	Report on the technology transfers developed in the framework of the project	M51
D4.3	Report on the increase of innovation potential study	M51

Thank you for your attention