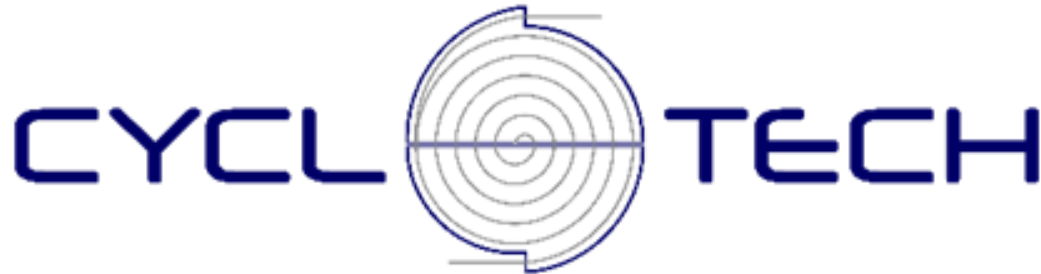




This project is co-financed by the  
European Union and the Republic of Turkey  
Bu proje Avrupa Birliđi ve Türkiye Cumhuriyeti tarafından  
finanse edilmektedir

# CYCLOTech

## Advanced Technologies & Solutions

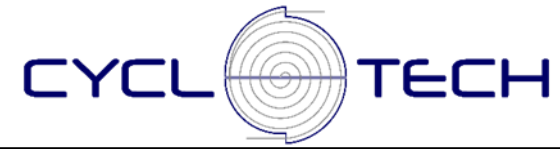


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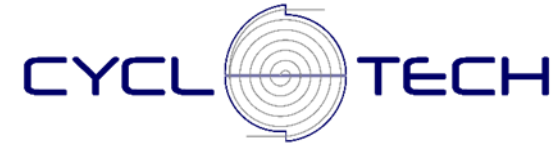
Mobile: +351 966939880

# Brief Description of the Organization



- With over 15 years of experience CYCLOTech helps Radiopharmaceutical Production Marketplaces (R&D&I, Diagnostic and Therapy) with services, design, build and operate **cyclotron accessories** for the production of radiopharmaceuticals to be used in the detection, treatment and study of cancer and other critical diseases;
- CYCLOTech, despite being a young SME – officially incorporated only in 2019 – is based on an international highly experienced Team of Experts (with in excess of ninety years of accumulated experience) specialized on Integrated Solutions for the Radiopharmaceutical Industry, typically on the Solid Targetry field and related areas;
- It uses innovative approaches at conceptual level as for bioengineering, software and robotics applied dedicated solutions.

# Brief Introduction



## Nuclear Medicine

“Best Use of Radiation - EVER”

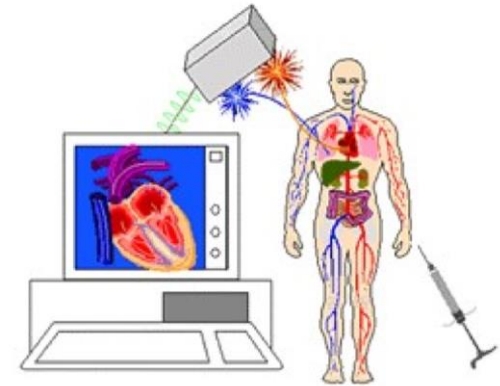
## Molecular Imaging

- Earlier Detection
- Higher Diagnostic Accuracy
- Precise Treatment Response Monitoring

## Theranostics

- Transition from Conventional Medicine to Personalized / Precise Medicine Approach
- Using Nanoscience to link Diagnostic and Therapeutic Applications on a Personalized Way:

~~One-Medicine-Fits-All  
Trial & Error Medicine~~



## THERANOSTICS

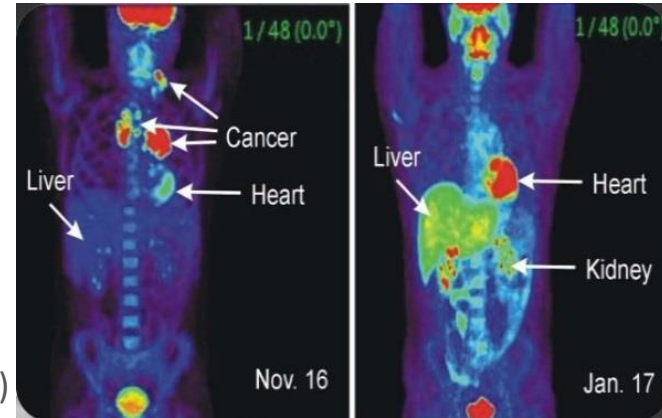
Right Treatment for the  
Right Patient, at the  
Right Time, with the  
Right Dose, providing a much more  
targeted, precise and effective  
Therapy, easily monitored.

# Relevant Data Resumed

- +/- 55.000 Nuclear Medicine and Molecular Imaging Departments
- +/- 50 Million Diagnostic Procedures/year

## Developed Countries (26% of World Population):

- 1,9%: Diagnostic Nuclear Medicine procedures
- 0,2%: Radionuclide Metabolic Therapy procedures
- USA: 18/20 Million NM procedures/year (5,8% - 311 Million people)
- Europe: 10 Million NM procedures/year ( 2% - 500 Million people)
- Australia: 560k NM procedures/year (2,7% - 21 Million people)



## Use of Radiopharmaceuticals in Diagnostics is growing over 10%/year

(Sources: OCDE/NEA, SNM&MI, WHO, AIPES, World Nuclear Association – 2010/11)

## Use of Radiopharmaceuticals in Metabolic Therapy is growing over 34%/year



**“THE” Bottleneck for Further Development and Wide Use and Acceptancy is the Production and Distribution of an Adequate Amount and Variety of Radiopharmaceuticals**

## BioEngineering

BioTech Products  
(Solid Targetry  
Products Line)

Intellectual Products Line  
(Know-How)

CRO

Main  
Products  
(ex: Systems)

Consumables

Consultancy

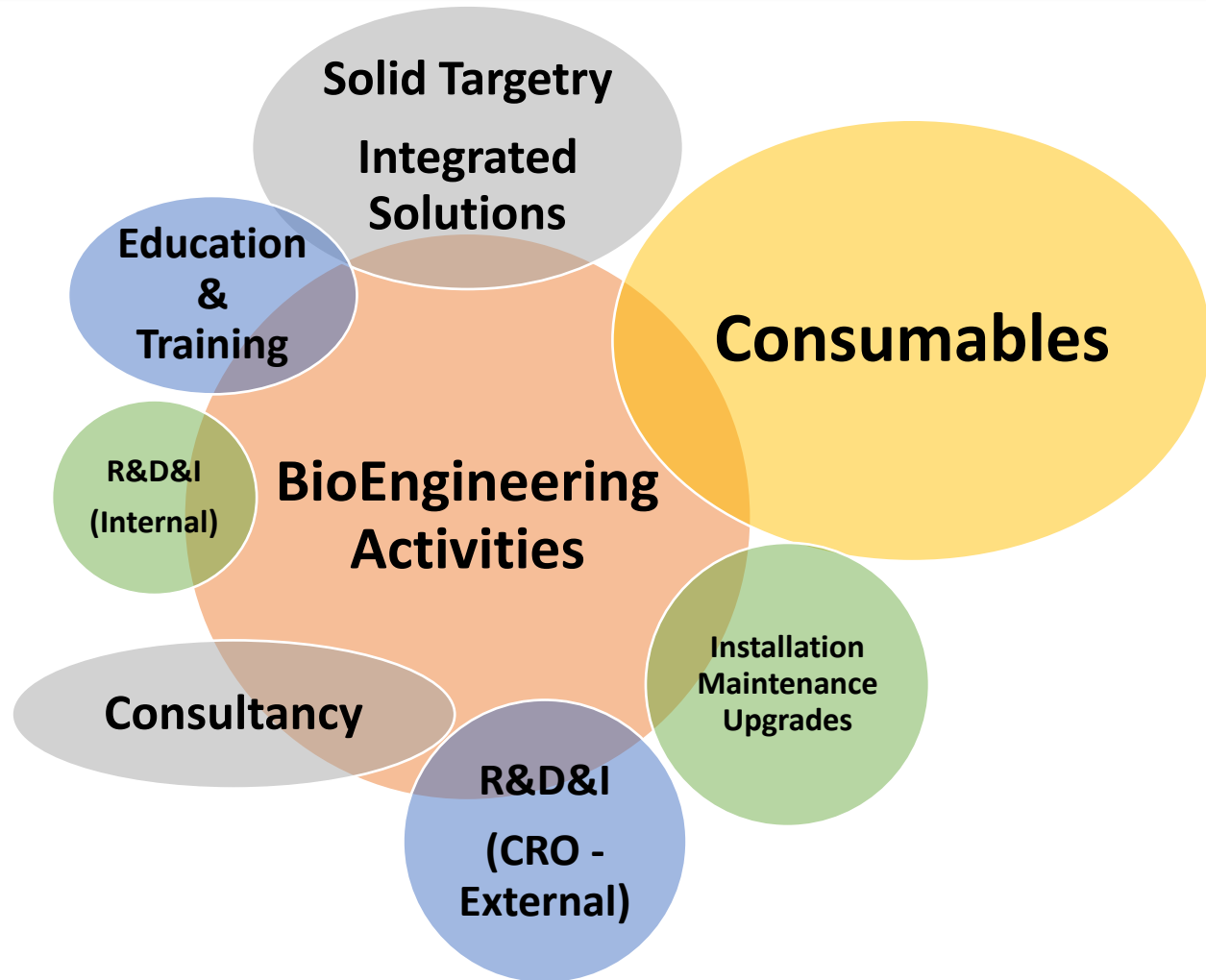
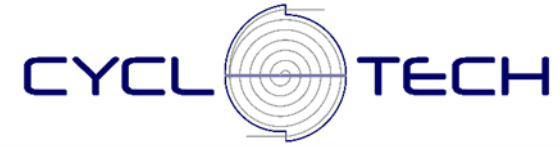
Maintenance

E & T

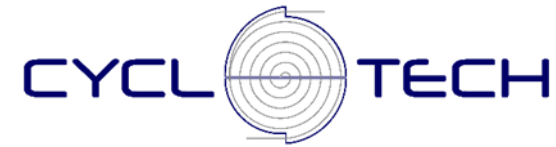
R&D&I  
(under  
collaboration)

R&D&I  
(internal)

# CYCLoTech Vision (Solid Targetry Dept.)



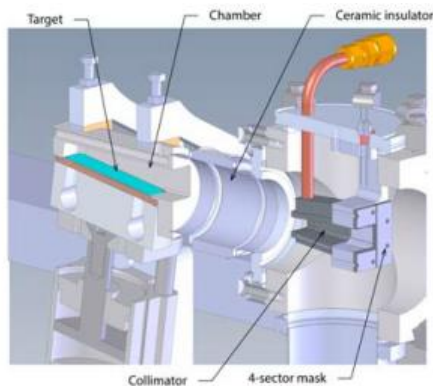
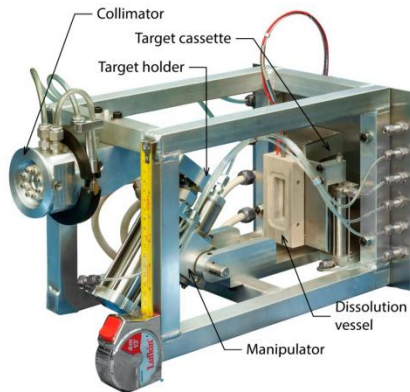
# CYCLOTech's Research & Development interest



**Development of Biomedical Equipment, Technologies and Applied Technical Solutions** essentially directly related with Advanced Radiopharmaceutical Industry and Theranostic Areas (core fields and subjects).

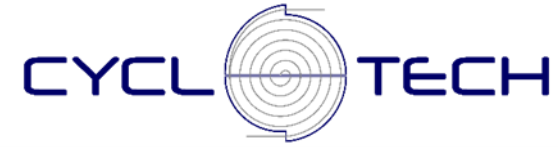
## Examples of Projects under development and/or to be developed:

- **STarS – Solid Targetry Systems & Solutions:** “going to the market” project related to the solid targetry integrated systems, methods and solutions (including consumables) developed by IsoPor and its partners;
- **CYCLOTech:** direct production of  $^{99m}\text{Tc}$  using low energy cyclotrons; 3 Patents have already been fulfilled and need to be reinforced, with several others being predicted;
- **(S)PET-21:** concerns the development of a new generation of small cyclotrons that will be vehicles to change the actual paradigm of radiopharmaceutical production for a increasingly large number of products;



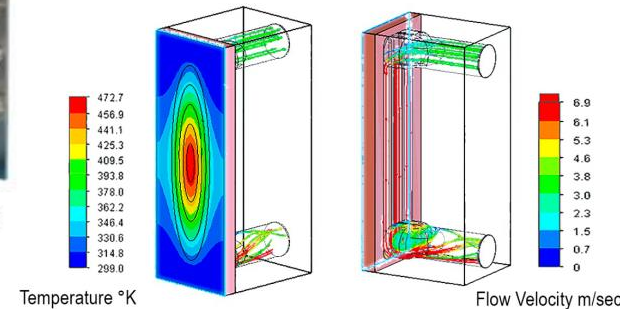
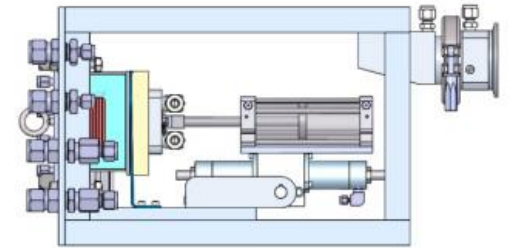
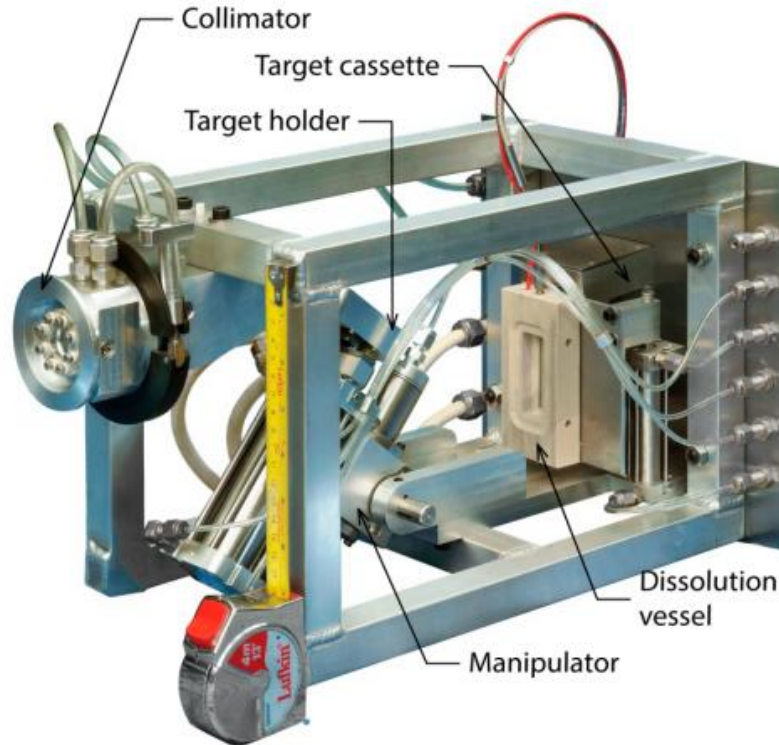
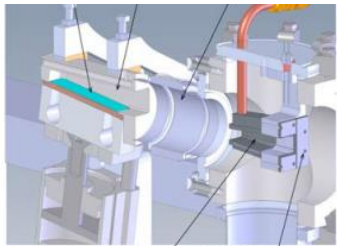
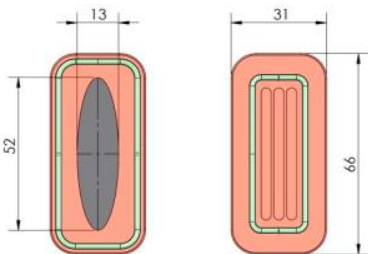
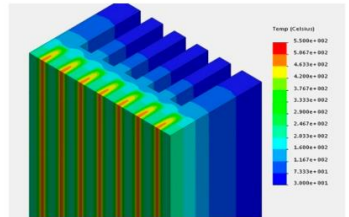


# CYCLOTech's Research & Development interest



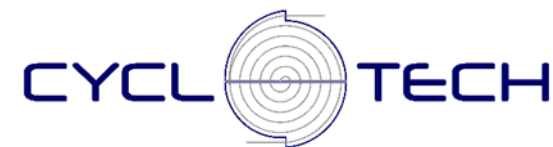
## STarS – Solid Targetry Systems & Solutions\*:

Project at the “going to the market” phase, related with an Integrated System of Solid Targetry with In-Situ Target Dissolution representing a full solution (B2B) that includes the entire system, ready to use and produce badges of distinct radioisotopes on the customer cyclotron unit, including access to all the services needed (before and during production) and the necessary consumables to follow the production later.





# Project Idea – Call Topics of Interest



## The Call Topics of Interest are

### **HORIZON-MISS-2021-CANCER-02-01: Develop new methods and technologies for cancer screening and early detection**

CYCLOTech technologies and solutions might be (and are ready and willing to be) applied towards radiopharmaceuticals adequate to facilitate early detection, for precise staging and for sooner and precise therapeutical monitoring, allowing sooner and more efficient clinical decision taking;

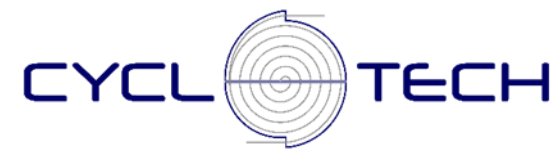
### **HORIZON-MISS-2021-CANCER-02-02: Develop and validate a set of quality of life and patient preference measures for cancer patients and survivors**

CYCLOTech technologies and solutions might be (and are ready and willing to be) applied towards radiopharmaceuticals adequate for to be used under the Theranostic approach, so including radiopharmaceuticals to be used for RadioMetabolic Therapy, the most precise, accurate and efficient approach, improving patients prognosis and quality of life, both for curative and palliative approaches;

### **HORIZON-MISS-2021-CANCER-02-03: Better understanding of the impact of risk factors and health determinants on the development and progression of cancer**

CYCLOTech technologies and solutions might be (and are ready and willing to be) applied towards radiopharmaceuticals adequate for to be used under R&D&I programs, as well as under the Theranostic approach, so including radiopharmaceuticals to be used for Personalized and High Precision Diagnostic and patient follow-up, namely using them for advanced Molecular Imaging, dramatically improving the exact knowledge and understanding of the pathology development and progression;

# Project Ideas – most relevant

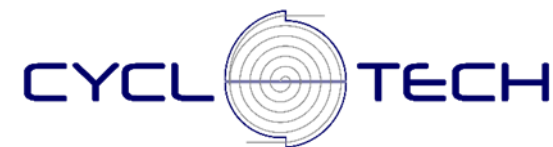


## Relevant Project Ideas:

Our technologies and solutions might be (and are ready and willing to be) applied towards

- The contribution with new solutions for **actual radiopharmaceutical supply problems**,
- The creation of new products/paths for to be used for **Molecular Imaging Diagnostic (Clinical, Pre-Clinical, R&D&I,...)**, including conception, optimization, production and distribution practical and efficient solutions,
- The creation of new products/paths for to be used for **RadioMetabolic Therapy (Clinical, Pre-Clinical, R&D&I,...)**, including conception, optimization, production and distribution practical and efficient solutions,
- The creation of new products/paths for to be used for **Theranostics (Clinical, Pre-Clinical, R&D&I,...)**, including conception, optimization, production and distribution practical and efficient solutions,

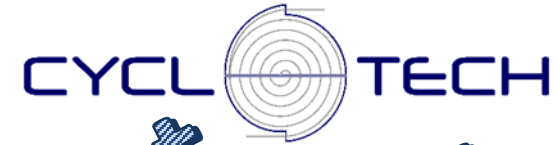
# Project Idea – Expected Results



## Expected Results should consist of strong contributions for

- the optimization of already existing radiopharmaceuticals, that are in need for to becomes more widely accepted and used (actually “exotic radiopharmaceuticals”, that only benefits a very small number of patients and entities);
- the introduction of new radiopharmaceuticals, both for Molecular Imaging, for RadioMetabolic Therapy and/or for Theranostics;
- further developments and “change of level” situations on actual and new R&D&I programs, allowing to increase and strongly ameliorate indicators as
  - level of preparedness,
  - level of intrinsic specific knowledge on NCE being studied,
  - level of control and auto-evaluation on the new products/processes,
  - “time-to-market” for new products/processes,
  - .....
- **to increase EUROPEAN industrial competitiveness**

# Consortium - required partners



No	Expertise	Type	Country	Role in the project
01		RTD		
02		SME		
03		INFRA		
04				
05				
06				

Open to Consider Distinct Opportunities, Whenever Related w/CYCLOTech Field of Expertise



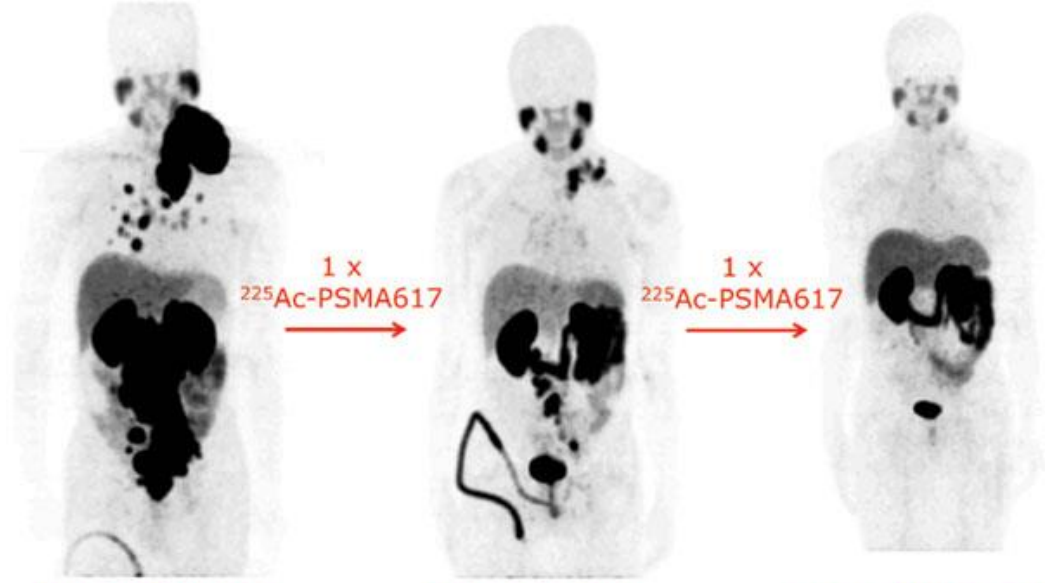
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finanse edilmektedir

- Staff matters,
- Science & Technology matter,
- Environment matters,
- Facilities matter,

...but above all, **Patients** are those who matter the MOST!

**LIFE**

**IS THE MOST IMPORTANT  
ASSET**



PSA = 1301 ng/ml

PSA = 6.1 ng/ml

PSA < 0.05 ng/ml

**Contacts & Further Informations:**

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**TERinov**