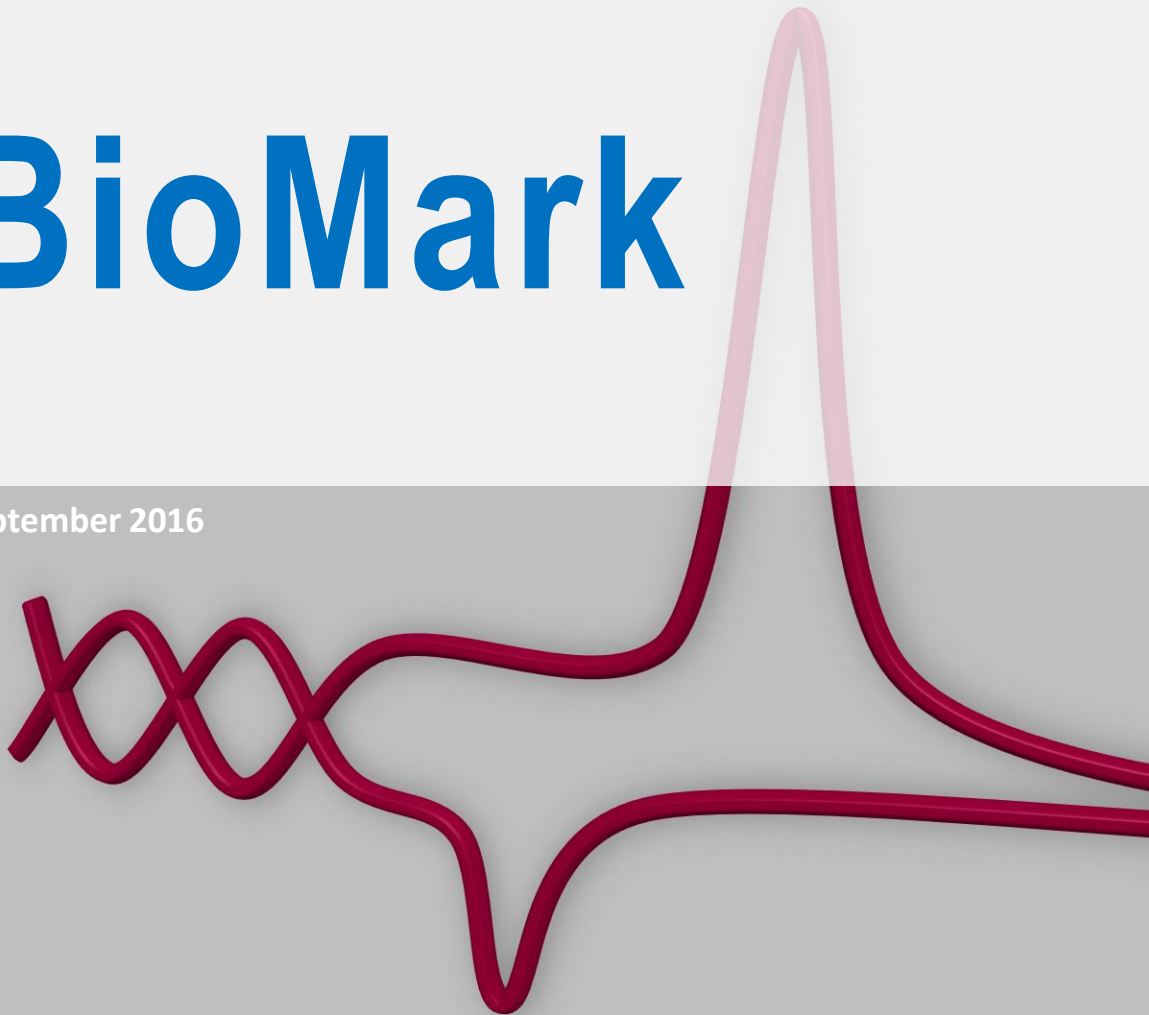
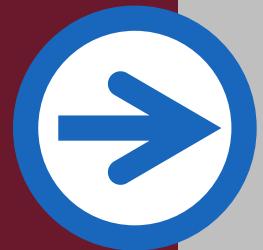


# BioMark

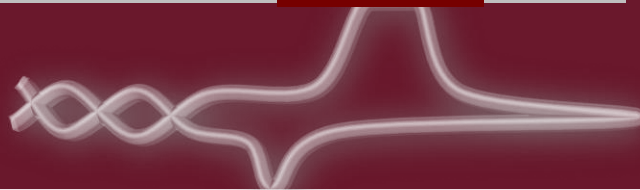
15 September 2016






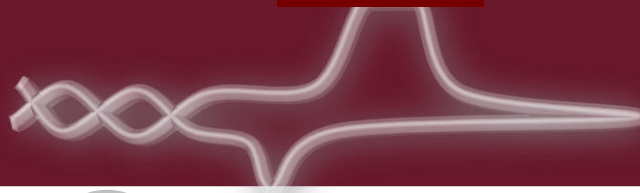
Towards a  
FET-Open  
funding



Goreti SALES



-  **Who are we?**
-  **What do we do?**
-  **FET-Funding...**



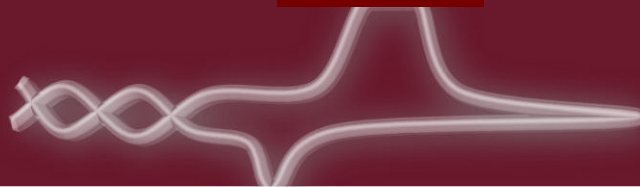
# ISEP/IPP

School of Engineering of the  
Polytechnic School  
Porto

**Jun 2011**



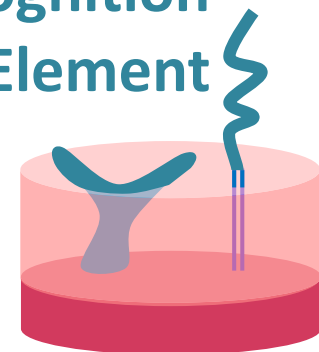




# Sensing Materials / (Bio)sensors / Autonomy



Biorecognition  
Element



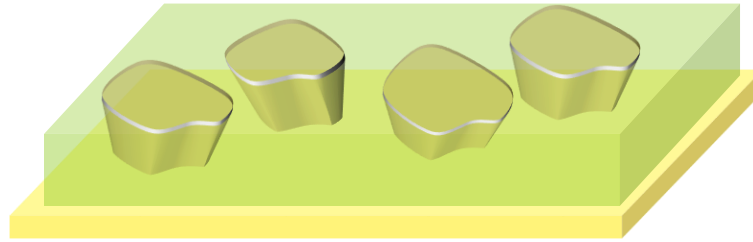
Transducer

[http://upload.wikimedia.org/wikipedia/commons/e/e2/Blaus\\_en\\_0299\\_Diabetes\\_BloodGlucoseMeter.png](http://upload.wikimedia.org/wikipedia/commons/e/e2/Blaus_en_0299_Diabetes_BloodGlucoseMeter.png)

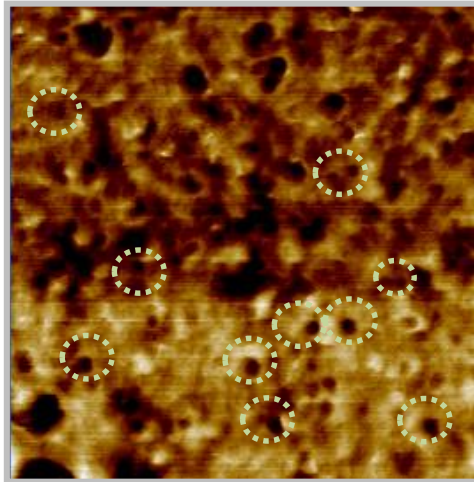
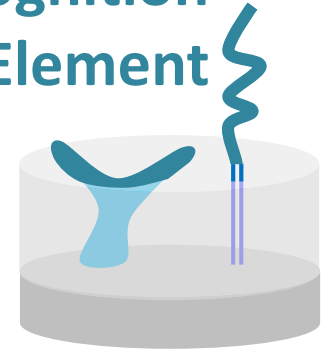




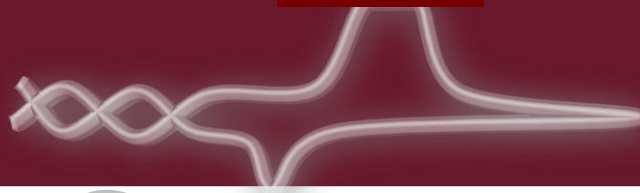
## Sensing Materials / (Bio)sensors / Autonomy



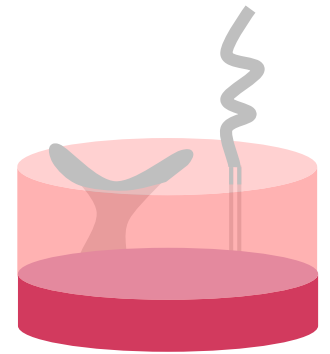
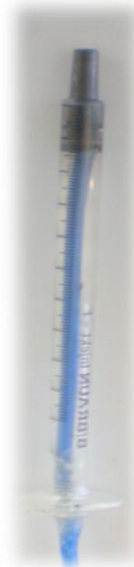
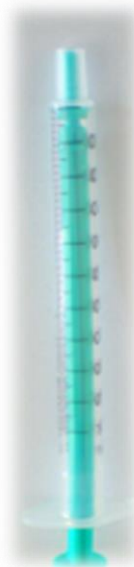
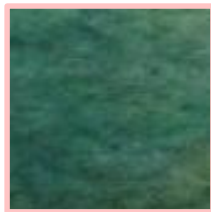
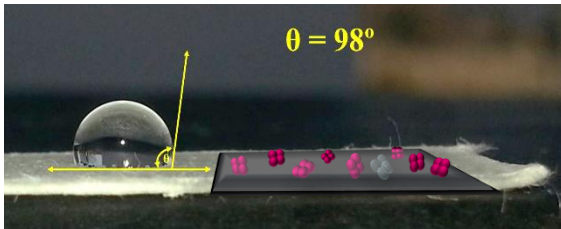
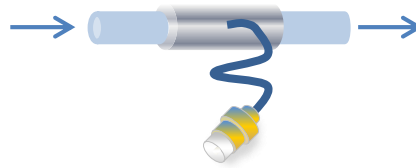
Biorecognition  
Element



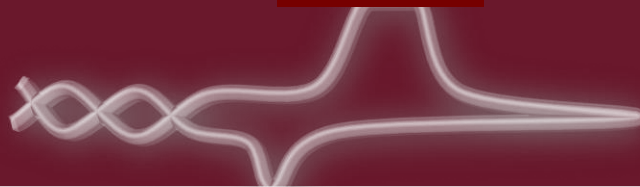
**Plastic  
Antibodies**



# Sensing Materials / (Bio)sensors / Autonomy



**Transducer**



## Sensing Materials / (Bio)sensors / **Autonomy**

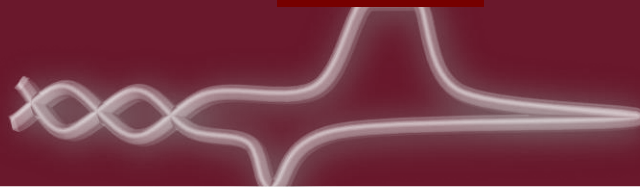
**New biomedical device**

With electrical readings

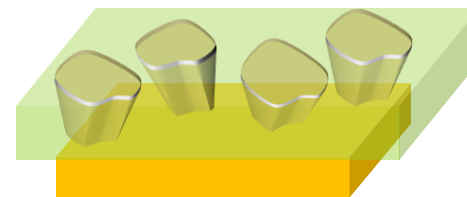
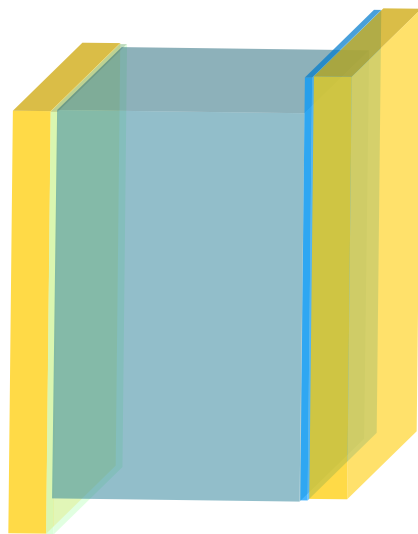
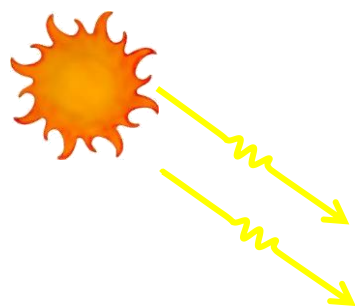
But full autonomy







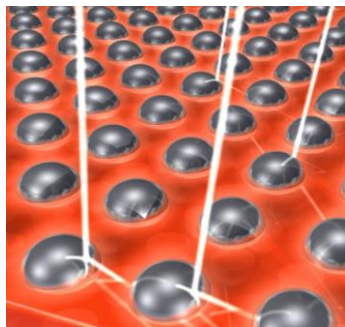
## Sensing Materials / (Bio)sensors / **Autonomy**



***Plastic Antibodies***

***Photovoltaics***

***Plasmonics***

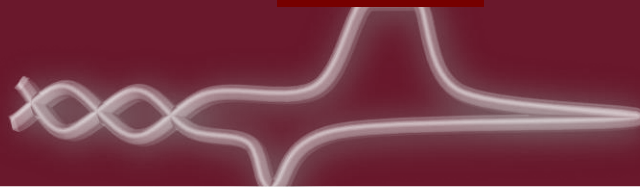


Nature Materials  
9, 205–213 (2010)

**3P's**



***Electrically Independency***



Sensing Materials / (Bio)sensors / **Autonomy**

**STARTING GRANT**  
*European Research Council*

2012

**Cancer Biomarkers**

**Point-of-care**

**Plastic Antibodies**

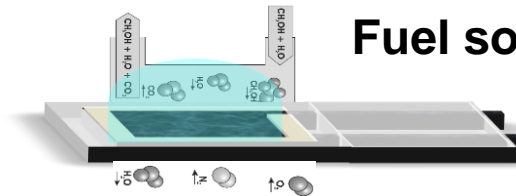
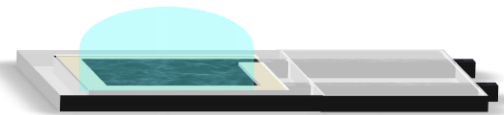
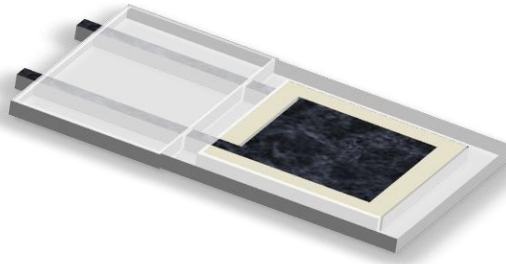
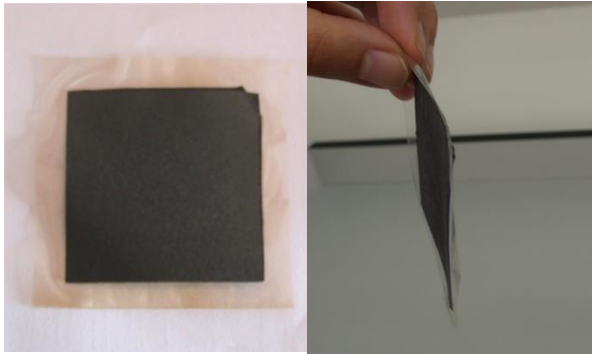
**Photovoltaics**

**Plasmonics**

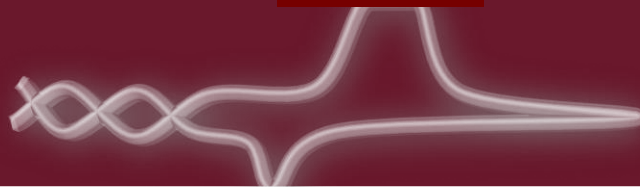
**3P's**



# Sensing Materials / (Bio)sensors / **Autonomy**



**Fuel solution**



Sensing Materials / (Bio)sensors / **Autonomy**

**FET-Open**

*H2020 - Lúcia Brandão*

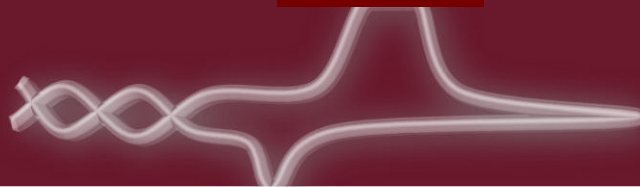
2015

***Fuel cells***

***Cancer Biomarkers***

***Point-of-care***





## FET-Open

*European Commission  
Research and innovation actions*

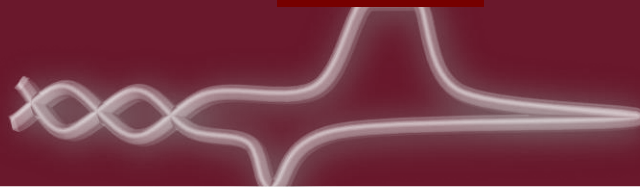
**Future** and **Emerging** Technologies

Go **beyond** what is known!

**Visionary** thinking can open up promising avenues towards powerful new technologies.

**OPEN**... to any idea for a new technology





## FET-Open

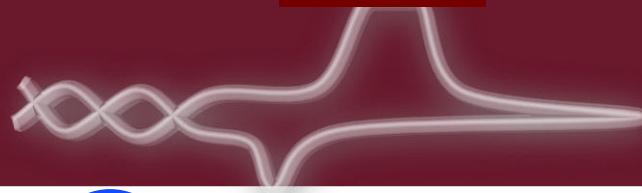
*European Commission  
Research and innovation actions*

FET Open supports **early-stage research**

**Any idea** for a new technology and no pre-defined themes

**Expanding** the traditional technological disciplines

*To turn the best knowledge into the  
technology of the future.*



**FET-Open**  
*European Commission*  
*Research and innovation actions*

# Olympics...

NOT MANY CAN WIN!

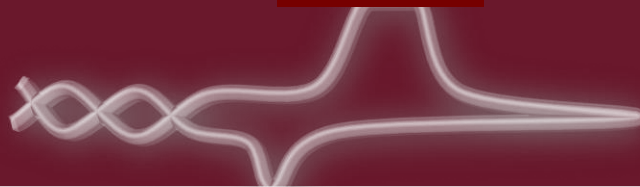
What is the probability?

**But some are funded!**

More and more proposals from call to call...

No one wants to waste time (candidate and evaluators)

**Do your best** in writing the proposal!



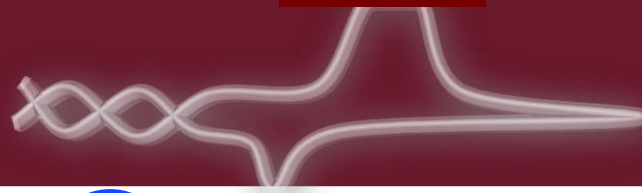
**FET-Open**  
*European Commission*  
*Research and innovation actions*

## The evaluation

Excellence

Impact

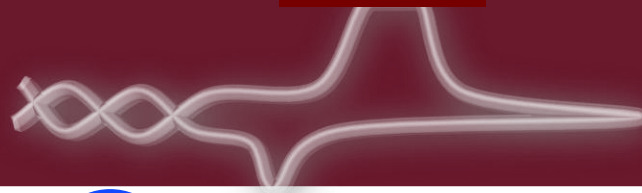
Implementation



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*European Commission  
Research and innovation actions*

# The gatekeepers...

- Groundbreaking** High degree of novelty
- Paradigm shift** Ambitious scientific/technological breakthrough
- Excellence** Long-term vision
- Commitment** Foundational character
- Excellence** content, form, or presentation High-risk
- Commitment** Deep synergistic interdisciplinary approach



**FET-Open**  
*European Commission  
Research and innovation actions*

# The gatekeepers...

***New ideas and concepts, rather than the application or incremental refinement of existing ones***

**Groundbreaking**

High degree of novelty

Paradigmatic breakthrough

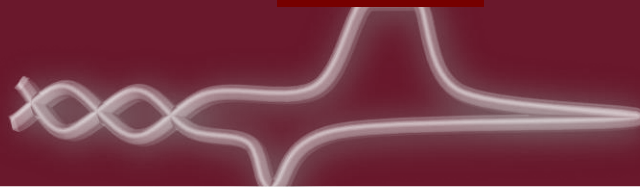
Long-term vision

Foundational character

High-risk

Synergistic interdisciplinary approach





**FET-Open**  
*European Commission  
Research and innovation actions*

# The gatekeepers...

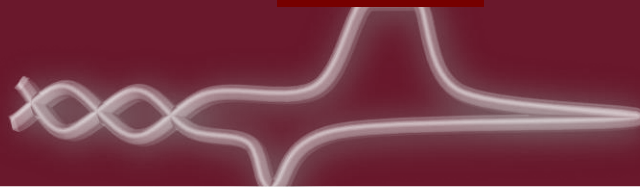
High degree of novelty

Ambitious scientific/technological breakthrough

***Scientifically ambitious and  
technologically concrete breakthroughs  
plausibly attainable within the life-time of  
the project***

**Groundbreaking  
Excellence**

step synergistic interdisciplinary approach



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*European Commission  
Research and innovation actions*

# The gatekeepers...

***A new, original or radical long-term vision of technology-enabled possibilities going far beyond the state of the art***

**Paradigm shift**

High degree of novelty

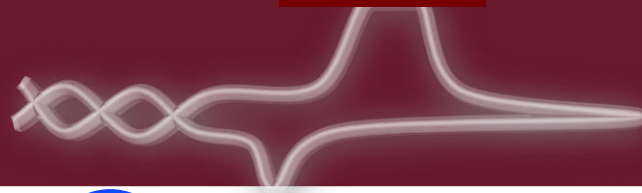
Technological breakthrough

Long-term vision

Foundational character

High-risk

Deep synthesis approach



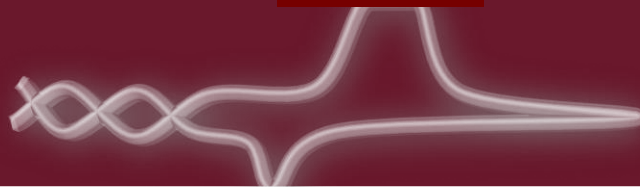
**FET-Open**  
*European Commission  
Research and innovation actions*

# The gatekeepers...

*The breakthroughs must be foundational in the sense that they can establish a basis for a new line of technology not currently anticipated*

- High degree of novelty
- Technological breakthrough
- Long-term vision
- Foundational character
- High-risk
- Deep synthesis
- Interdisciplinary approach

**Paradigm shift**



**FET-Open**  
*European Commission  
Research and innovation actions*

# The gatekeepers...

***The potential of a new technological direction depends on a whole range of factors that cannot be apprehended from a single disciplinary viewpoint***

**Commitment  
Disruptive...**

High degree of novelty

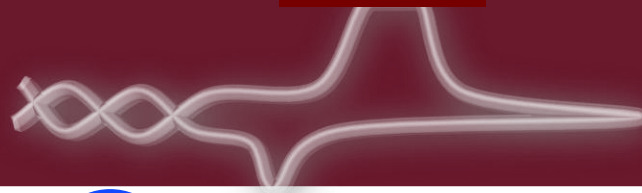
Ambitious scientific/technological

Lo

foundational character

High-risk

Deep synergistic interdisciplinary approach



**FET-Open**  
*European Commission  
Research and innovation actions*

# The gatekeepers...

**Commitment  
Excellence**

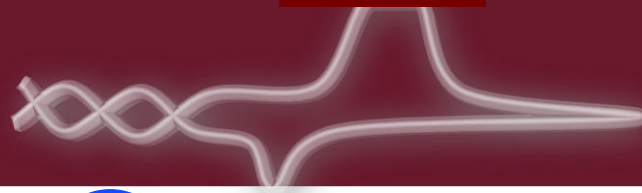
High de

Ambitious scientific/technological breakthrough

***The proposed collaborations must go beyond current mainstream collaboration configurations in joint S&T research, and must aim to advance different scientific and technological disciplines together and in synergy towards a breakthrough.***

Deep synergistic interdisciplinary approach





**FET-Open**  
*European Commission*  
*Research and innovation actions*

# Recommendations

## Be ambitious

Follow your crazy idea  
High risk (scientific risk) endeavored  
Long ranging idea  
Still, be concrete!

## Consortium

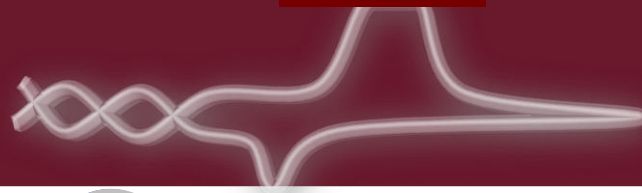
3 countries  
Look for the best  
Only if you need

## Commitment

Self!  
Changes!  
New directions

## Style of writing

Write for simple people  
Be objective  
Say only what you wish



**Thank you!**



**Best wishes**



