



# REGION OF CRETE CRINNO

ACTION 5  
INCUBATOR OF IDEAS OF UNIVERSITY STUDENTS

## UNISTEP



TECHICAL UNIVERSITY of CRETE  
UNIVERSITY of CRETE  
FORTH / STEP-C

Coordinator: Assis. Prof. V. C. Kelessidis



# ELEMENTS OF ACTION

## OBJECTIVE :

Creation of favourable environment for the growth of entrepreneurial culture of students of HIGHER EDUCATION INSTITUTIONS

## DURATION

**2 YEARS**

## *Budget*

**400.000 €**

Training of Students:

45.000 €

Incubator of Ideas:

335.000 €

Network of Mentors:

20.000 €





# AIMS

- Creation of favorable environment for the development of original products or services from students
- Development of prototypes as a first step towards the creation of new enterprises
- Enrichment of knowledge of students for the business via the seminars



# INCUBATOR OF IDEAS - METHODOLOGY

- Idea of students
- Collaboration with laboratories of Institutions :
  - ❖ Access to infrastructure and equipment
  - ❖ Technical support
- Submission of proposals
- Evaluation/approval
- Implementation - 8 month period (2 cycles):
  - ❖ Technical and administrative support
  - ❖ Training
  - ❖ Submission of reports
  - ❖ Final reports of assessment





# SEMINARS - METHODOLOGY

## STARTING-UP OF NEW VENTURES

Four units (2 times) in Chania and Heraklion :

- ❖ Introduction to implementation / application of original ideas
- ❖ Financing of new ventures
- ❖ Legal issues of realization of ideas and intellectual property
- ❖ Development of business plan

### Seminar Instructors :

- ❖ Prof. N. Bilalis, TUC
- ❖ Prof. K. Zopounidis, TUC
- ❖ Ass. Prof. E. Marias, UOC
- ❖ Mr . A. Saitakis, FORTH / STEP-C

Presentation of success stories of enterprises  
(with the help of KETA)





# RESULTS

- 20 prototypes were developed
- 100 students attended the seminars on starting-up of new enterprises
- Development of methodology for the “Incubator of Ideas”
- Awareness and support of HEI



# PROTOTYPES



An autonomous, multi-mission platform for detection, surveying and transmission of data and images  
(TECHNICAL UNIVERSITY OF CRETE)



Design of an autonomous navigation system for an unmanned VTOL (Vertical TAKE-OFF AND LANDING) (TECHNICAL UNIVERSITY OF CRETE)



Development of a seismic dampener with the use of smart electro-rheological materials  
(TECHNICAL UNIVERSITY OF CRETE)

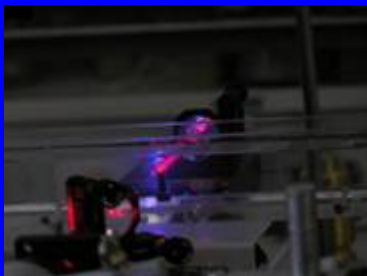
# PROTOTYPES



BlueReRun Bluetooth reconfigurable run time environment (TECHNICAL UNIVERSITY OF CRETE)



Production of thermal energy from peach pits (TECHNICAL UNIVERSITY OF CRETE)



Interferometric cochlea (TECHNICAL UNIVERSITY OF CRETE)



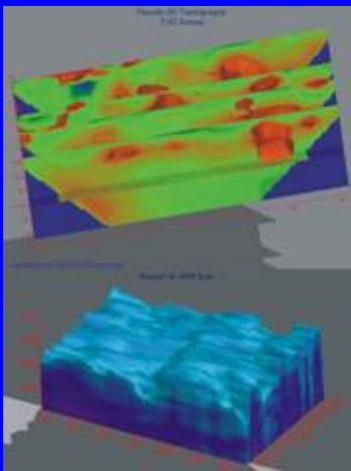
# PROTOTYPES



Software and electronic library for the synthesis of furniture (TECHNICAL UNIVERSITY OF CRETE)



Autonomous robotic vehicle  
(TECHNICAL UNIVERSITY OF CRETE)

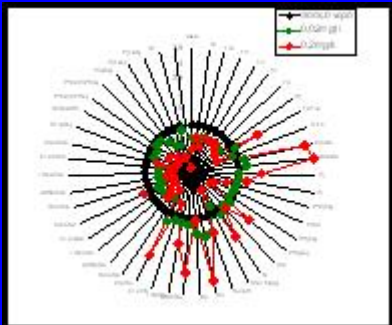


Pilot study of geophysical methods to a construction site in TUC (TECHNICAL UNIVERSITY OF CRETE)

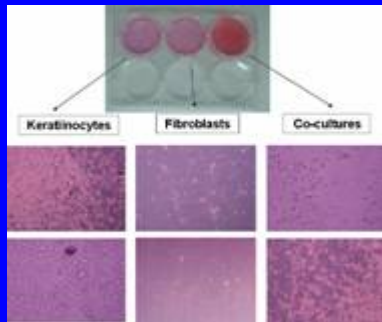
# PROTOTYPES



Production of ecological hydraulic lime  
(TECHNICAL UNIVERSITY OF CRETE)

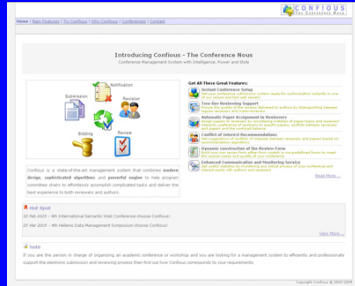


Algae-based water quality biosensor for detecting at least one chemical or biological warfare agent  
(FORTH / STEP-C)



Production of skin cultures for autografting  
(FORTH / STEP-C)

# PROTOTYPES



Confious – Conference management system  
(FORTH / STEP- C)



Automatic temperature control system  
(FORTH / STEP-C )



Biosynthesis of flavonoids, genistein and quercetin,  
from *Saccharomyces cerevisiae* with biotechnological  
methods  
(FORTH / STEP-C)

# PROTOTYPES



Emerging applications of genomic research in plants and pathogenic micro-organisms of agricultural interest (**FORTH / STEP-C**)



Process development for the production of an alternative fuel from a mixture of used vegetable oils (**UNIVERSITY OF CRETE**)



Control of the bee parasite *Varroa destructor*, through the isolation of potentially drastic acaricides contained in *Ditrichia viscosa* and *Anageris foetida* (**UNIVERSITY OF CRETE**)

# PROTOTYPES



Development of methodology for evaluation of visual performance when driving at night  
(UNIVERSITY OF CRETE)



Low Cost Local Wireless Services for Mobile Phones  
(UNIVERSITY OF CRETE)

# ...CONTINUATION OF PROTOTYPES

- Software and electronic library of furniture
  - Project proposal within EPAN framework, International Cooperation in Industrial Research
- Process development for the production of an alternative fuel from a mixture of used vegetable oils
  - Participation and AWARD in the Panhellenic student competition on business planning, IDEOPOLIS 2004, Univ. of Peresus
  - Project proposal 'Biodiesel' production from useless farm side-products' in EU Life-Environment
- An autonomous, multi-mission platform for detection, surveying and transmission of data and images & Interferometric cochlea
  - Project proposal in the Regional Innovation Pole of Crete



# PROMOTION (1)



- Logo UNISTEP
- First promotional brochure
- Web site, Technical University and University of Crete
- Local newspapers and radio :
  - Description of program / promotion
  - Invitations for submission of proposals and attending the seminars
- Final promotional brochure of results of UNISTEP





## PROMOTION (2)

Two conferences → Heraklion , 5 December  
→ Chania , 9 December

- Results presentation and product exhibition
- Invited organizations for funding support, business angels , Incubators, local and national authorities

### CRINNO conference

- Exhibition of products







## PROMOTION (3)

- IASP → A paper for UNISTEP was prepared and submitted
  - **But**, did not get approval by E.U. officer to go and present paper
- Technical Engineering Chamber (TEE) conference, 15 December
  - «Growth of business skills in Greece and the role of Greek Engineers» - Presentation of UNISTEP





# FUTURE STEPS

- Methodology in place, best practice
- Environment more favorable
- Awareness of student and professor community
- Strong support for continuation
- The pilot action proved that “Incubator of Ideas” aids the transformation of new ideas into products or services
- We have submitted UNISTEP Plus in the Regional Innovation Pole of Crete



# Many THANKS to:

- Students
- Professors / technical staff
- Instructors of seminars
- Mentors
- Advisory teams
- Steering Committee of UNISTEP
- Administrative / supporting staff
- Region of Crete, GSs: Mr. A. Karountzos & Mr. S. Tsokas
- CRINNO Coordinators: Dr. M. Kassotaki & Dr. K. Strataridakis
- European Commission for funding support
- Technical University of Crete, University of Crete, FORTH / STEP-C

