



جامعة طنطا

ضمان الجودة

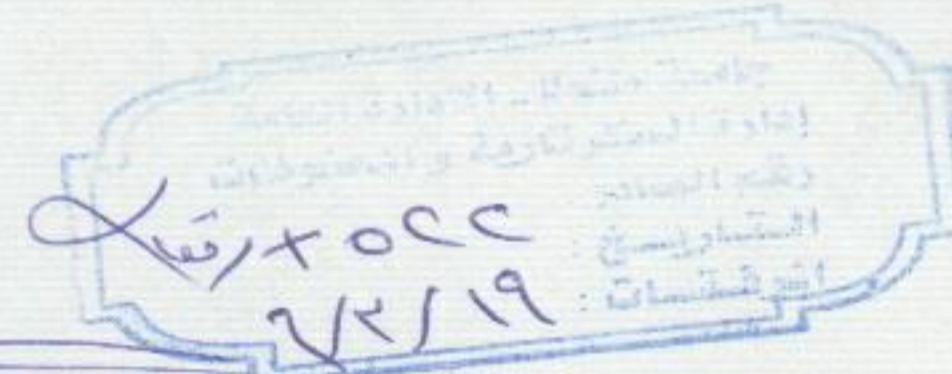
١٦٢٠٣

التاريخ : ٢٠١٦/٣/١٦

من : (الادارة العامة للعلاقات الثقافية) إدارة البعثات

إلى : السيد الأستاذ الدكتور / وكيل كلية الهندسة للدراسات العليا والبحوث

الموضوع :



السيد الاستاذ الدكتور / وكيل كلية الهندسة  
للدراسات العليا والبحوث

تحية طيبة وبعد . . .

الحاقة لكتابنا رقم ٤٥٠ بتاريخ ٢٠١٦/٣/٩ الذي يفيد بأنه ورد لأمانة المجلس كتاب السيدة السفيرة نائب مساعد وزير الخارجية Iola لشئون البحث العلمي والتكنولوجيا والاتصال بالجامعات ومراكز الأبحاث مرفقا به ما ورد من معهد الأبحاث الصربي institute المتخصص في مجال الهندسة الميكانيكية والكهربائية والذي أبدى رغبته في بحث إمكانية التعاون مع الجامعات والمعاهد البحثية في مصر

نشترف بالافادة بأنه ورد كتاب المجلس الاعلى للجامعات - الادارة المركزية للعلاقات الثقافية ( إدارة الاتفاقيات والتبادل الثقافي ) رقم ٣٢٧٦ بتاريخ ٢٠١٦/٣/١٢ وواردلينا بتاريخ ٢٠١٦/٣/٨ بشأن رغبة معهد الأبحاث الصربي institute المتخصص في مجال الهندسة الميكانيكية والكهربائية ، في اقامة تعاون مع الجامعات المصرية ( مرفق نسخة من الكتاب المشار اليه ) .  
برجاء التكرم بالعلم واتخاذ اللازم والإفادة بالرأي

وتفضلاً سيادتكم بقبول فائق الاحترام

المدير العام

مدير الادارة

المختص

الاسم : ١/ طارق علي الشناوي

الاسم : ١/ حسين محمود سامي

الاسم : رباب صلاح مصطفى

التوقيع : طارق

التوقيع : كه

التوقيع : رباب صلاح

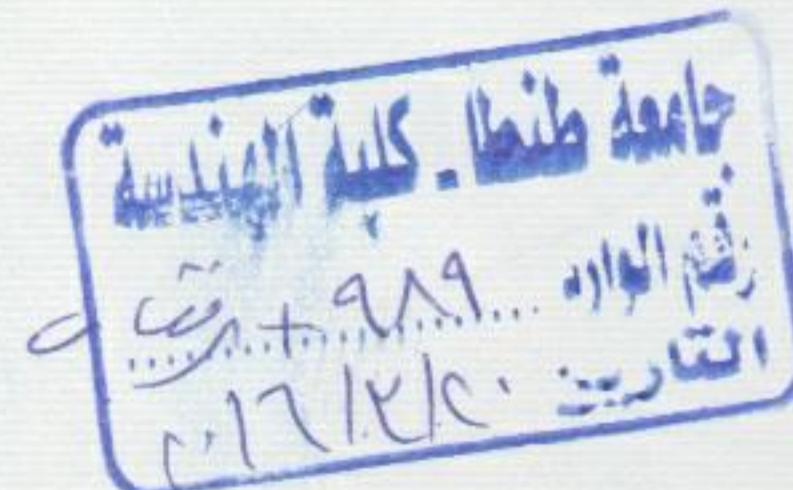
التاريخ : ٢٠١٦/٣/١٦

التاريخ : ٢٠١٦/٣/١٦

التاريخ : ٢٠١٦/٣/١٦

التاريخ : ٢٠١٦/٣/١٦

الدكتور طارق علي الشناوي  
مدير الادارة  
جامعة طنطا  
الدكتور طارق علي الشناوي  
مدير الادارة  
جامعة طنطا





٤١٧  
٢٠٢١١٩

ادارة لجنة  
طارى  
٢٠٢١١٩

السيد الأستاذ الدكتور / نائب رئيس جامعة  
لشنون الدراسات العليا والبحوث

تدية طيبة وبيده،،،

٢٠٢١١٩  
٢٠٢١١٩

الشرف بإفاده سعادتكم بأنه قد ورد لأمانة المجلس كتاب رئيس أكاديمية البحث  
العلمي والتكنولوجيا يفيد تلقى سعادته خطاب السفارة المصرية ببلجراد بشأن رغبة  
معهد البحوث الصربي Lola Institut المتخصص في مجال الهندسة الميكانيكية  
والكهربائية ، فى اقامة تعاون مع الجامعات المصرية ( مرفق نسخة من الكتاب  
المشار اليه )

برحاء التكرم بالاحاطة والتفضل بالترجمة باتخاذ ما ترون مناسبا فى  
هذا الشأن .

وتفضلو بقبول وافر الاحترام والتقدير ،،،

رئيس الادارة المركزية

٢٠٢١١٩  
صحيانى  
(ناهد سعد ابراهيم)

Chairman

٢٠٢١١٩  
جامعة العلوم والتكنولوجيا

٢٠٢١١٩

٢٠٢١١٩  
جامعة العلوم والتكنولوجيا

٢٠٢١١٩  
جامعة العلوم والتكنولوجيا

٢٠٢١١٩  
جامعة العلوم والتكنولوجيا



٢٠١٦ فبراير ٤٨

السيد الأستاذ الدكتور / أشرف داتم  
أمين المجلس الأعلى للجامعات  
تحية طيبة وبعد،

ورد للأكاديمية البحث العلمي والتكنولوجيا خطاب مقدم عن طريق السفارة المصرية في بلجارد من معهد الأبحاث الصربي Lola Institut المتخصص في مجال الهندسة الميكانيكية والكهربائية، والذي أبدى رغبته في بحث إمكانية التعاون مع الجامعات والمعاهد والدراسات البحثية في مصر.

أتشرف بإرفاق صورة الخطاب برجاء التفضل بالتعهيم على الجامعات واتخاذ ما تزونه مناسبًا لدراسة سبل التعاون والإفادة.

وتفضلاً بقبول وافر الاحترام والتقدير،

رئيس أكاديمية

البحث العلمي والتكنولوجيا

محمود

د. محمود محمد صقر

C.17/٢/٣٨

لـ (M.M)

استاذ  
جامعة  
جامعة  
جامعة

جامعة - ٢٠١٦ - ٢٠١٧ - ٢٠١٨

جامعة - ٢٠١٦ - ٢٠١٧ - ٢٠١٨

صونار

C.17/٢/٣٨

(C)

## Subject: Intention Letter

The Institute Lola from Belgrade, Serbia is the state research and development institute which has extensive experience in the field of mechanical and electrical design, manufacturing and engineering of:

- > Computer Controlled Systems,
- > Machine tools,
- > Robotics,
- > Energetics,
- > Mechanical and Process Engineering and Ecology,
- > Stress and Strain Analysis of Mechanical Parts
- > Computer Simulation of Casting

The Lola Institute is member of the EFFRA (The European Factories of the Future Research Association). The key objective of EFFRA is to promote the implementation of the "Factories of the Future" (<http://www.effra.eu>).

The Institute Lola has special interest to develop business in Egypt (Institutes, Universities and Companies) in the following areas:

### I. Industrial applications:

1. Renovate and modernization of Machine Tools
2. Robotics
3. Automation
4. Experimental tests of mechanical systems (Diagnostic tests, Monitoring current technical state of mechanical systems, Structural Testing of Mechanical Systems)
5. Static and dynamic structural calculations (Turbines, Generators, Principle forms of oscillations, Hydro-thermo mechanical equipment..)
6. Research and Development of Mini Hydro Power Plants
7. System for separate collection, transport, and compacting of communal waste
8. Integrated system for processing industrial communal waste and bio-waste
9. Development of main elaborates on repair of ship lock systems and repair of the ship lock systems
10. Production of technological procedures and simulation of the casting process
11. Sales machine tools (used and new CNC machines), the integration and perform training for programming CNC machine
12. Industrial Engineering and Consulting (Inspection and supervision of welding in different industrial areas)



II. Aerospace applications:

- Consulting and engineering services for the design, development and integration of:
  - † equipment for combat aircraft pilot training
  - † Flight Simulation
  - † Flight Testing
  - † Flight Test Instrumentation
  - † Avionics

III. Performing courses in the field of:

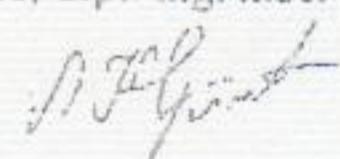
- 1 Training for programming CNC machines
- 2 Computer simulations of Casting with MAGMASOFT® program
- 3 Vibration according to ISO 17042 and ISO 18436-2
- 4 Aerospace applications

APPENDIX:

- 1 Short Presentation of the Institute Lola,

General manager of Institute Lola

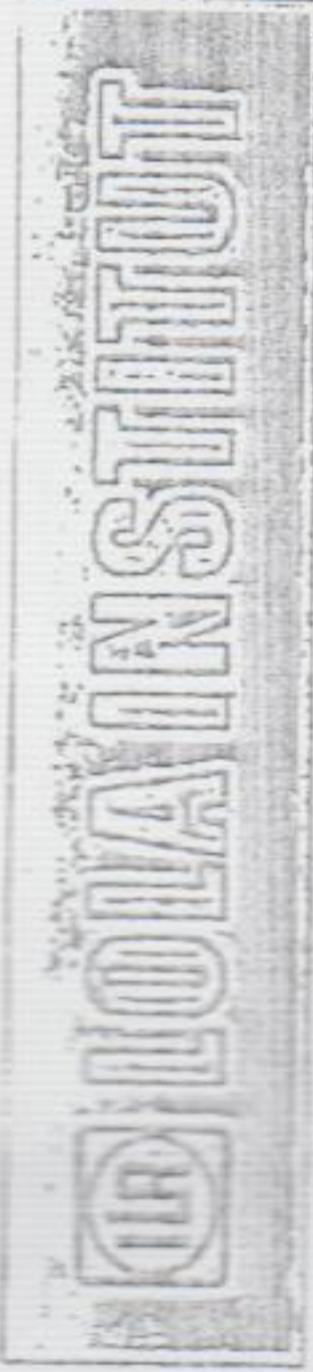
Dr. Vladimir Kvrzić, dipl. ing. mach.



Place and date:

Belgrade, 02.02.2016

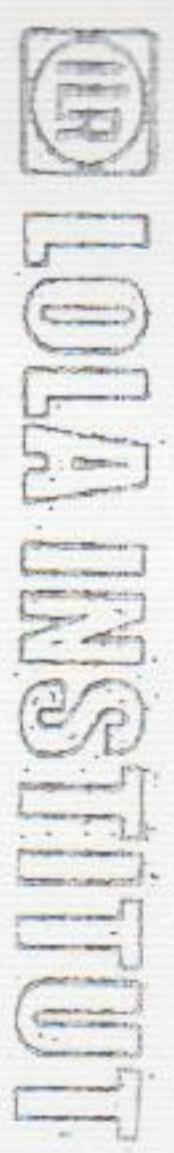




# Presentation of Scientific and Research Activities of the Institute Lola

General manager of Institute Lola  
*dr Vladimir Kurgić, dipl. ing. ME*

*Vladimir Kurgić (Signature)*



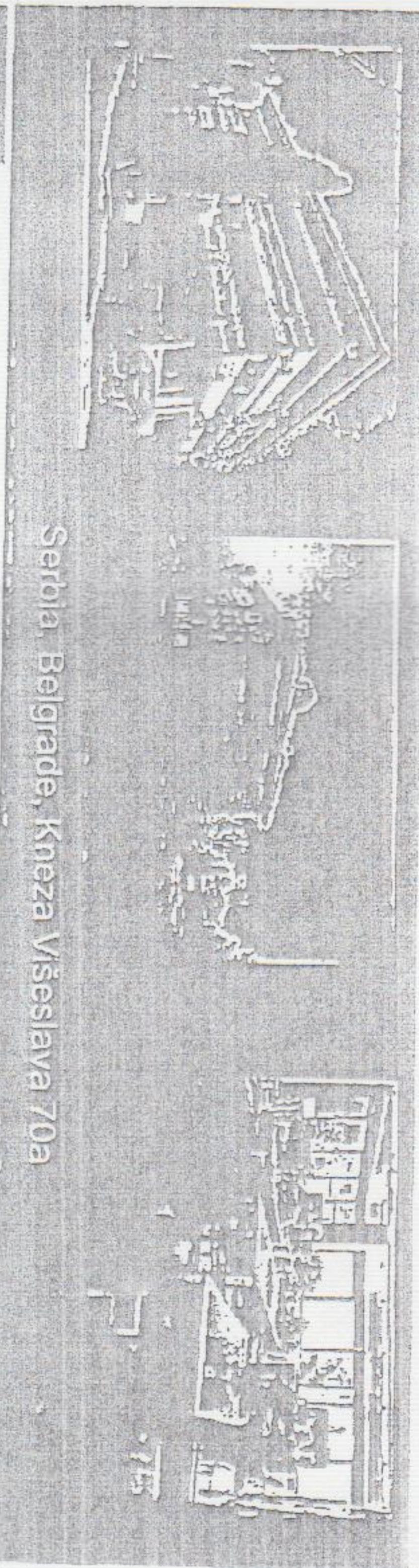
## History

Lola institute was a part of the LLR factory which produced machine tools, robots, process equipment, metallurgy and other equipment.

Institute was founded in 1963 and it took a part in development of these machines and that equipment.

# Opening Remarks

## LOLA INSTITUT



The Institute Lola has 42 employees in 6 organizational units.

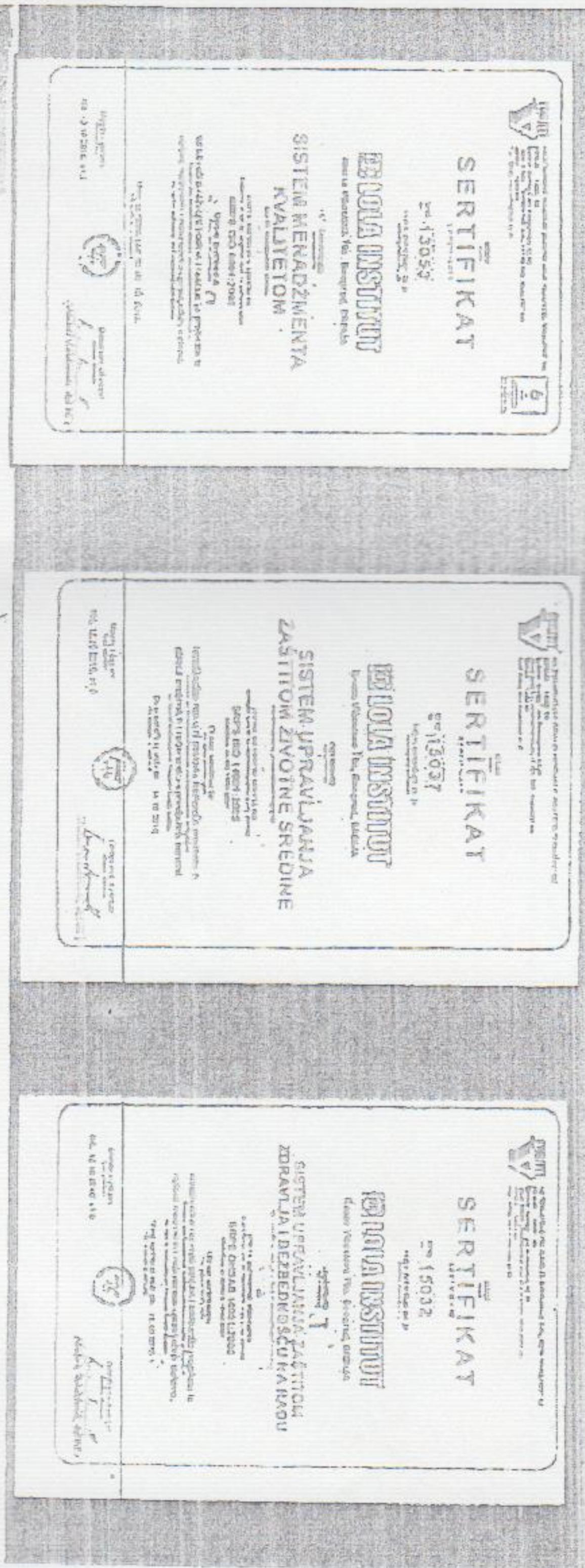
The number of employees researchers increases continuously.

Currently are employed:

- ✓ 8 Ph.D. and 6 Ph.D. candidates,
- ✓ 6 MSc/Master,
- ✓ 15 BSc
- ✓ 7 secondary education

# LOLA INSTITUT

## Certifications



- Development and implementation of management systems in accordance with the requirements of international standards:
- > QMS (according to SRPS ISO 9001:2008)
  - > EMS (according to SRPS ISO 14001:2005)
  - > OHSAS (according to SRPS BS 18001:2008)

## The main fields of activities

The main fields of activities of the institute are projects (National and International, Our own developments) in the field of:

- machine tools,
- robotics,
- control systems,
- equipment for pilot training and flight simulation,
- equipment for recycling of the communal waste and equipment for small hydro power plants.

## Research & Development

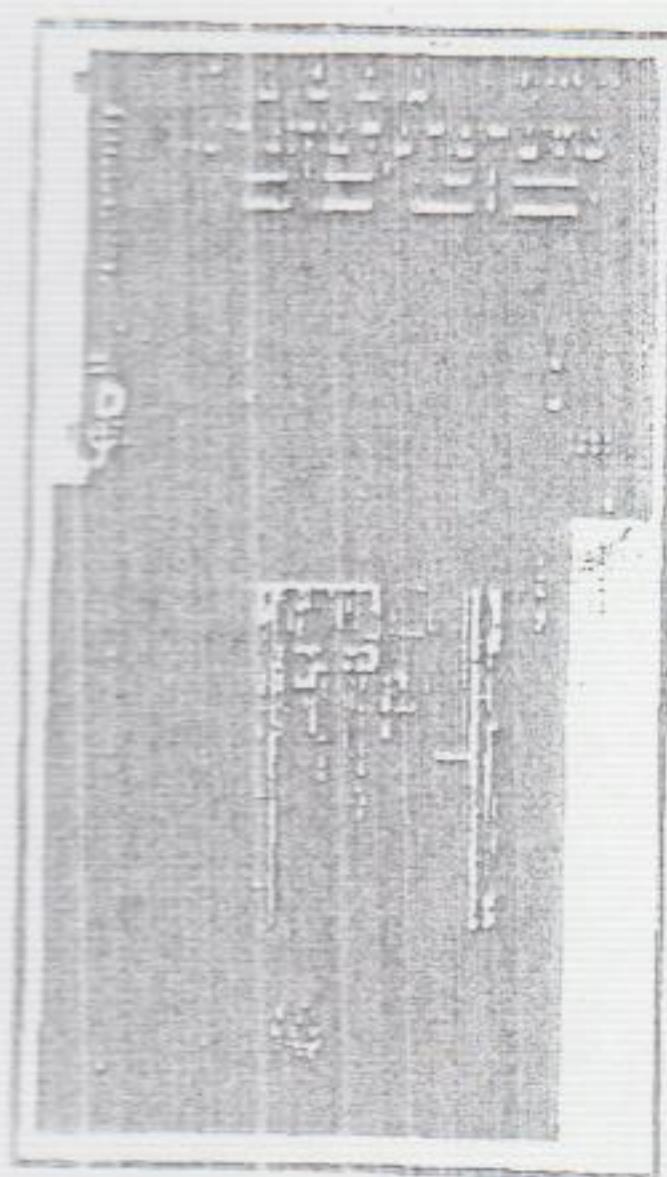
1. Computer Controlled Systems,
2. Machine tools,
3. Energetics,
4. Mechanical and Process Engineering and  
Ecology,
5. Stress and Strain Analysis of Mechanical  
Parts
6. Computer Simulation of Casting
7. Occupational Health and Safety (OHS)  
Risk Assessment

# Research & Development

## 1. Computer Controlled Systems

Technical and thematic areas of the department:

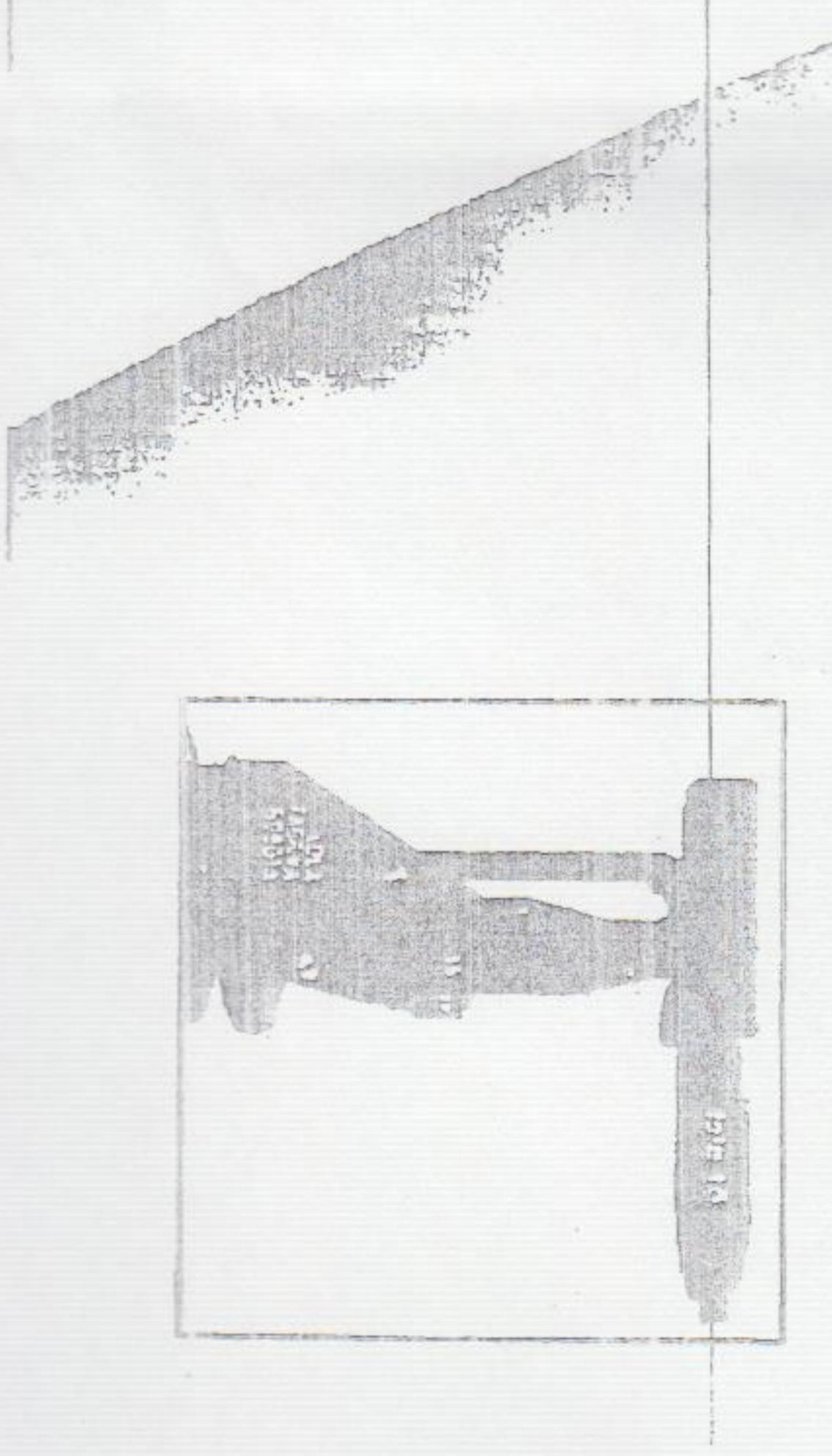
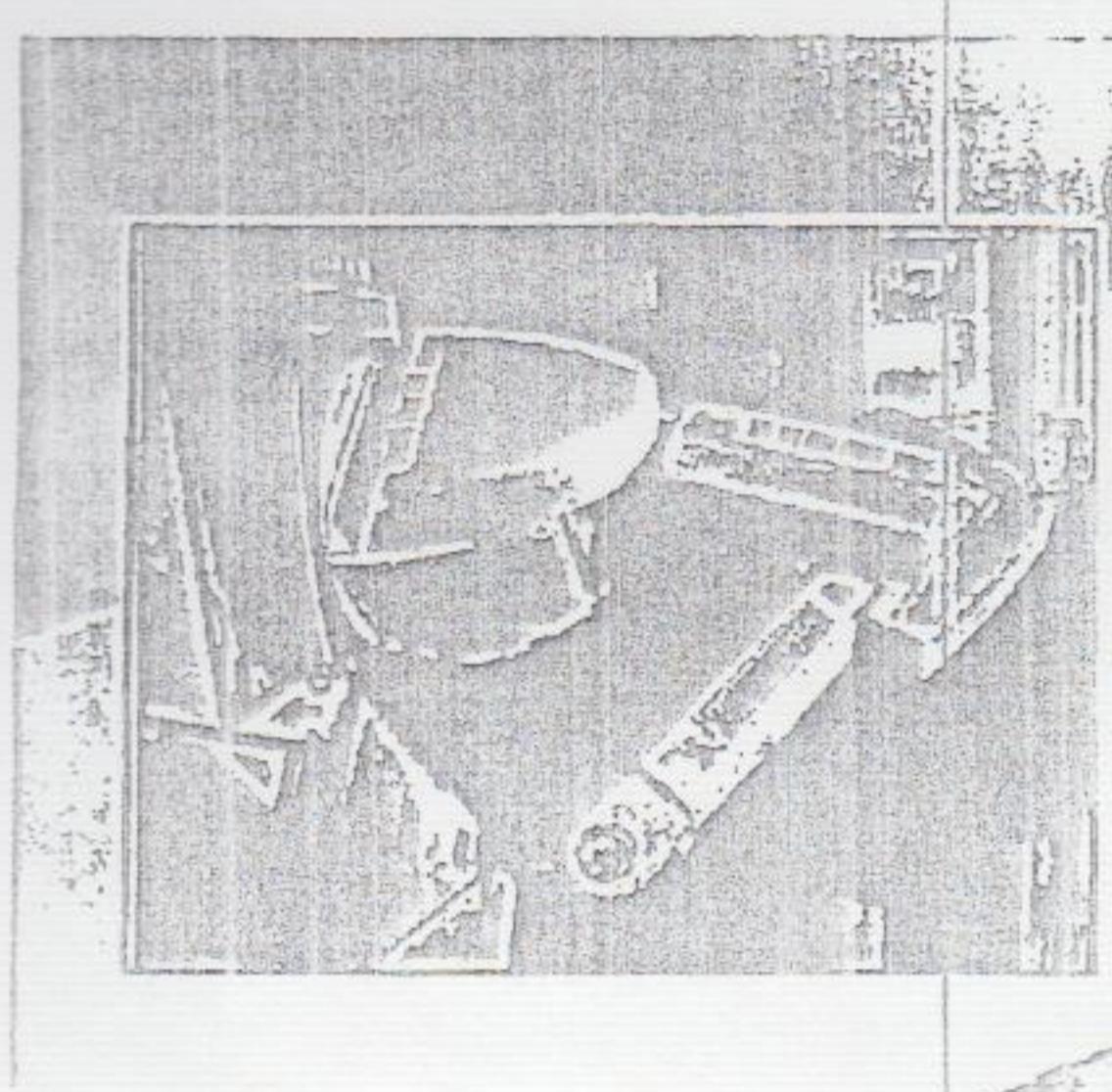
- CNC
- PLC
- Process controllers
- Industrial software
- Specialized control computer systems
- Robotics

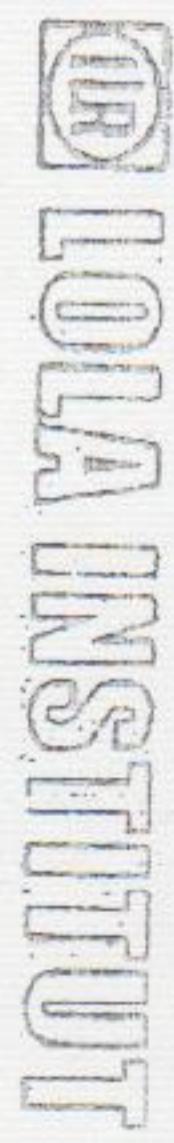


## Research & Development

### 1. Computer Controlled Systems-Robotics

- Industrial robots
- Robot controllers and industrial robotics language





## Research & Development

### 1. Computer Controlled Systems-Aero

#### Space

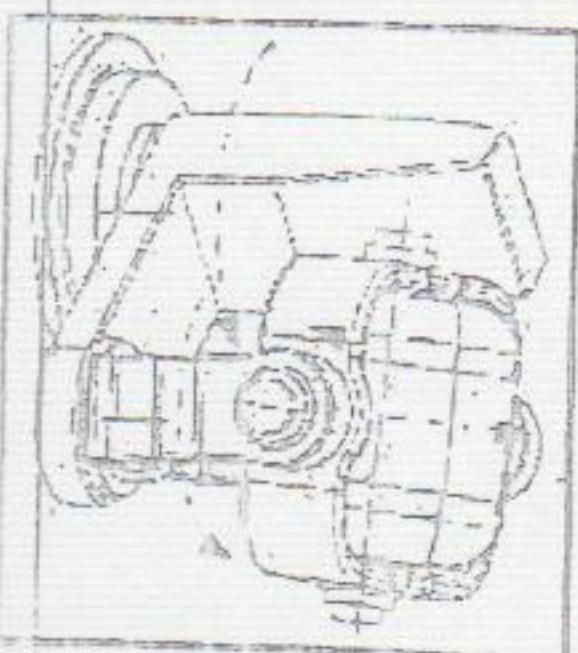
Equipment for combat aircraft pilot training

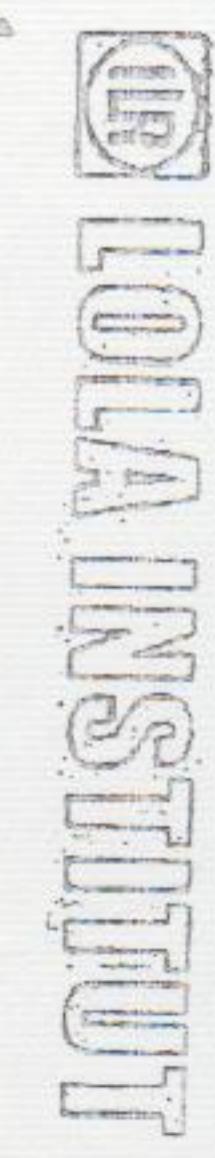
Flight Simulation

Flight Testing

Flight Test Instrumentation

► Avionics

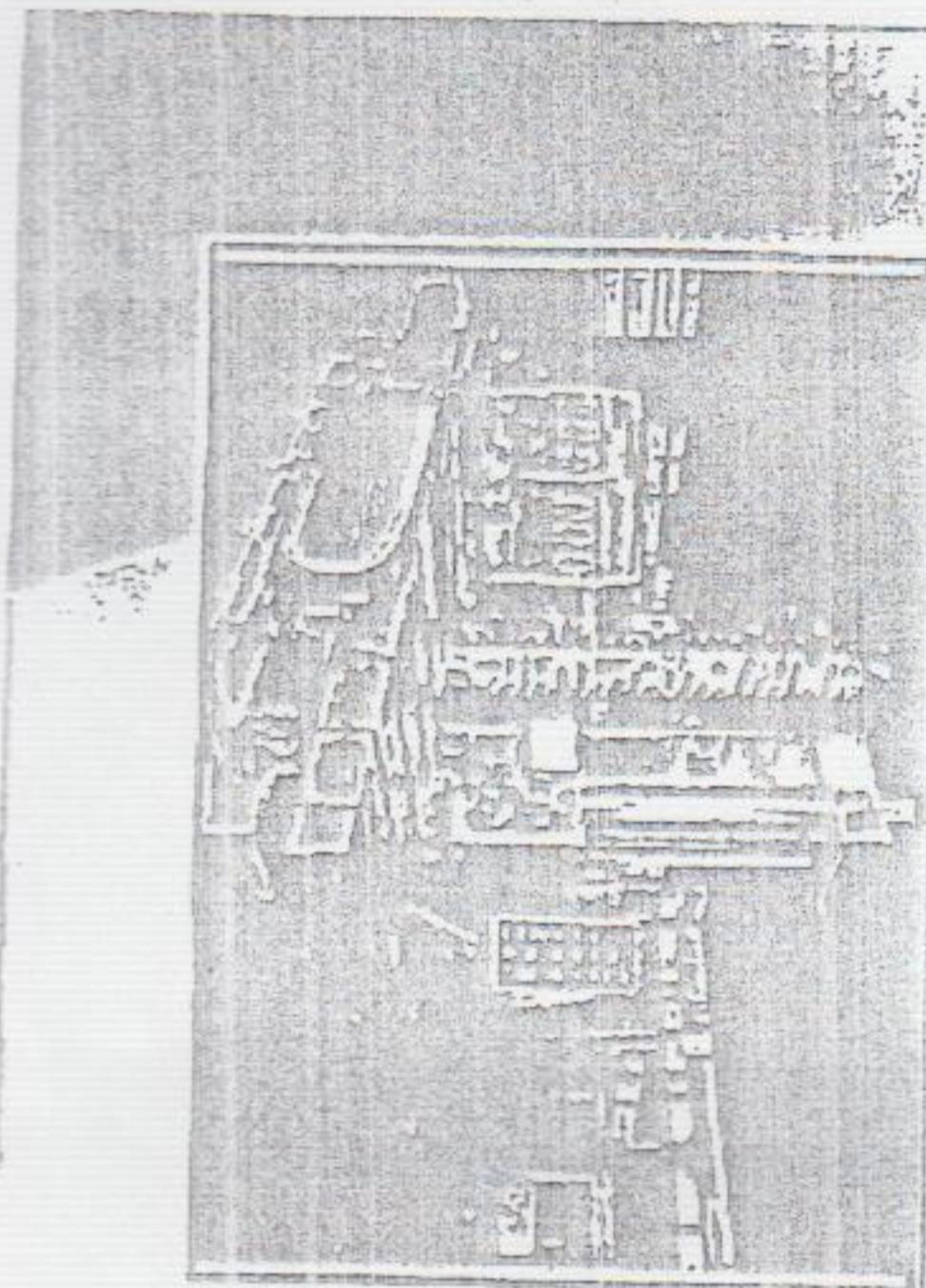


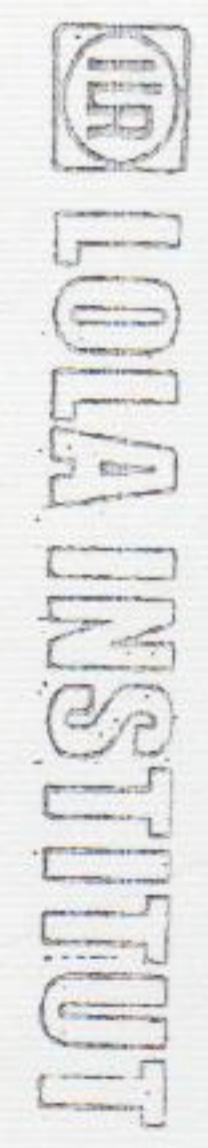


## Research & Development

### 2. Machine tools

- Research and development of machine tools
- Retrofit and modernization of machine tools
- Machine Tool Control Systems



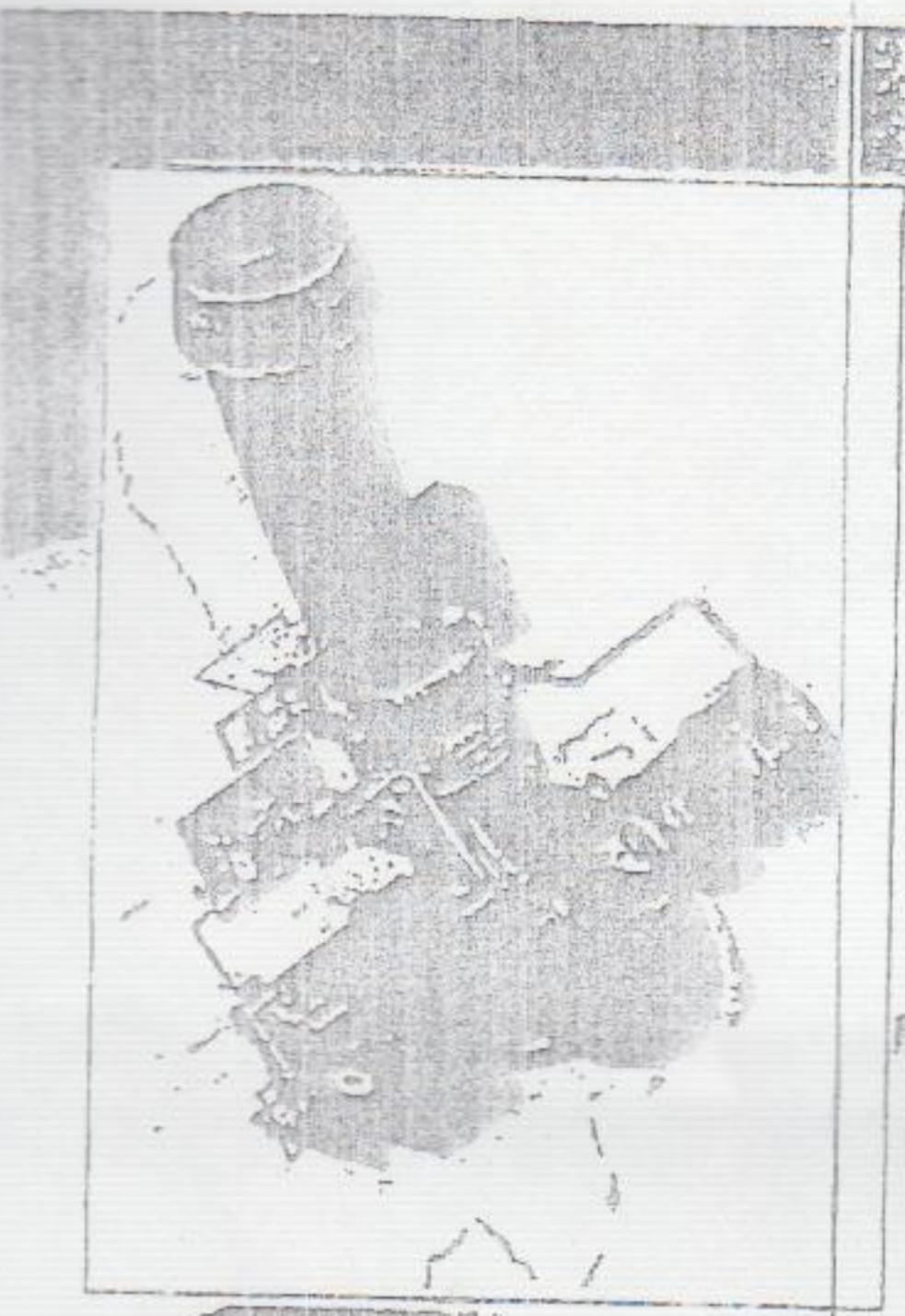


## Research & Development

### 3. Energetics

- Maintenance of Machinery, Plants and Equipment
- Research and Development of Hydro and Thermal Power Plants

#### Research and Development of Mini Hydro Power Plants

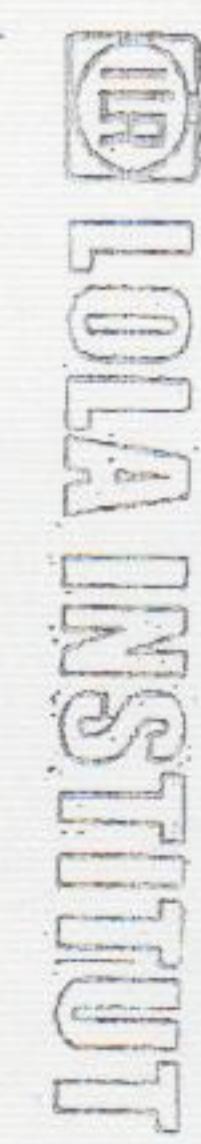


# Research & Development

## 4. Mechanical and Process Engineering and Ecology

The Institute Lola does the following types of projects:

- System for separate collection, transport, and compacting of communal waste
- Integrated system for processing industrial communal waste and bio-waste
- System for sorting industrial and communal waste
- System for composting organic waste
- System for extracting metal from slag after burning waste
- System for bio-gas generation
- System for processing water
- Development of main elaborates on repair of ship lock systems and



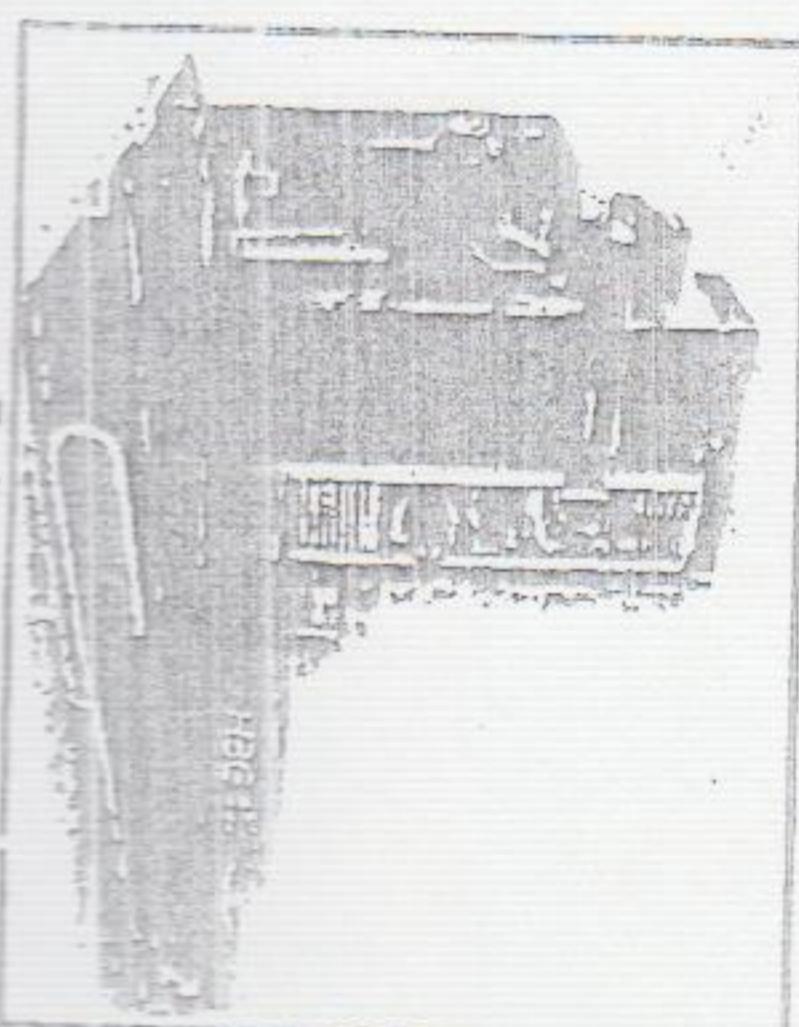
## Research & Development

### 5. Stress and Strain Analysis of Mechanical Parts

1. Experimental tests of "mechanical systems" (Diagnostic tests, Monitoring current technical state of mechanical systems, Structural Testing of Mechanical Systems)

2. Static and dynamic structural calculations:

- o Turbines,
- o Generators,
- o Principle forms of oscillations,
- o Hydro-thermo mechanical equipment,
- o Dams,
- o Pipelines,
- o Sliplocks,
- o Machine tools
- o Fans, cyclones, mills and other rotary machines





## Research & Development

### 6. Computer Simulation of Casting

LOLA Institute is exclusive representative of company MAGMA GmbH from Germany for program package MAGMASOFT® for territory of Serbia and Montenegro.

In addition to this, our company offers computer simulations with MAGMASOFT® program equipment and qualifying package users and ordering parties of simulation.

**LOLA INSTITUT**  
Research & Development

## 6. Computer Simulation of Casting

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- In addition to this, our company offers computer simulations with MAGMASOFT® program equipment and qualifying package users and ordering parties of simulation.

## Research & Development

### 7. Occupational Health and Safety (OHS) Risk Assessment

Lola Institute sector for OHS risk assessment offers the following marketing and research services:

- OHS management
- Environmental management
- Fire protection engineering

## References

- The realization of many scientific projects financed by the Ministry of Science of Serbia
- The realization of a large number of projects in the energy and the metal industry of Serbia
- Designed and implemented system for sorting industrial and communal waste, "REP" Paris, France.
- Designed and implemented system for composting organic waste, "Baucaire" Marseille, France.
- Designed and implemented system for extracting metal from slag after burning "Innova de France", France.



## Offer of the Institute Lola

### II. Aerospace applications:

Consulting and engineering services for the design, procurement and integration of:

- Equipment for combat aircraft pilot training
  - Flight Simulation
  - Flight Testing
  - Flight Test Instrumentation
  - Avionics



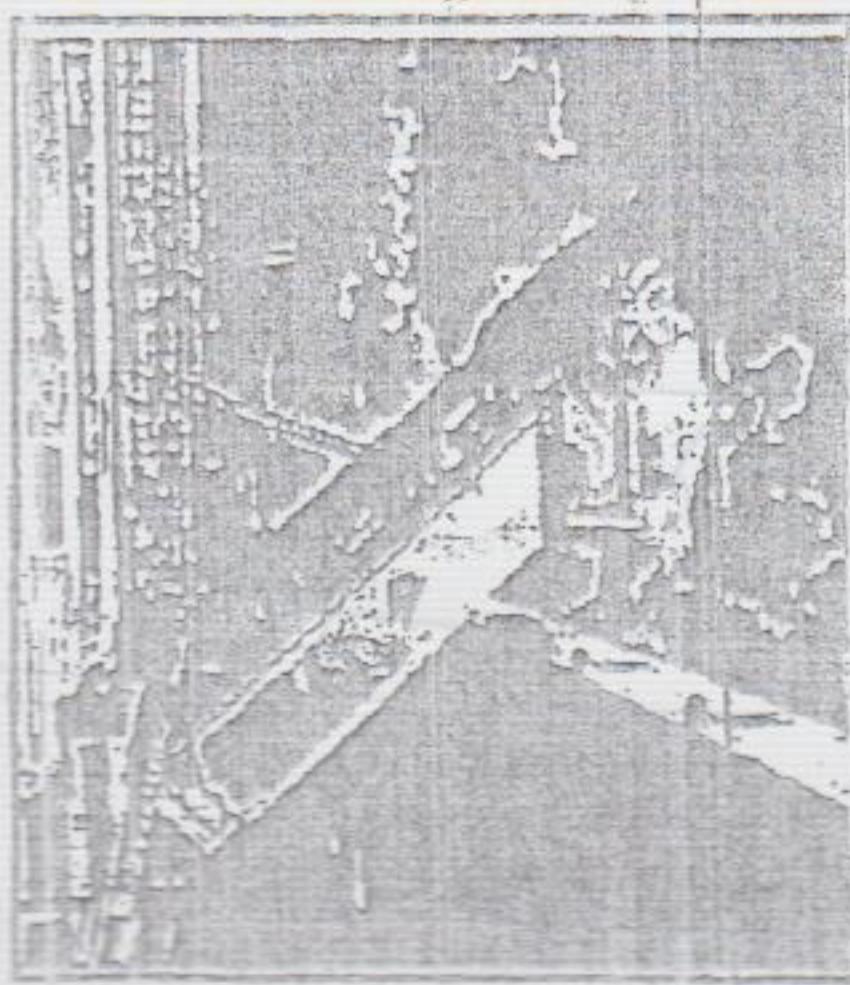
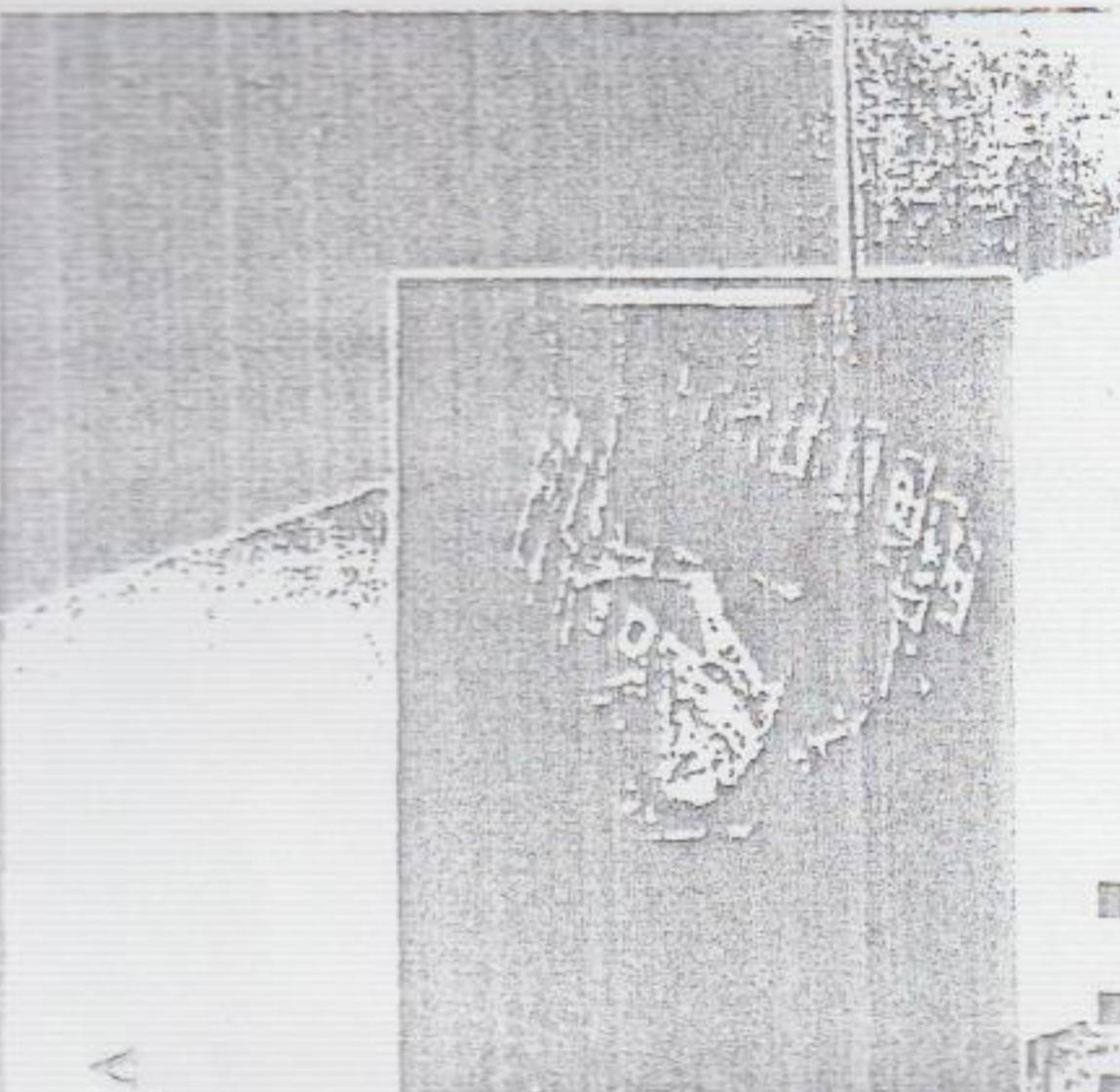
## Offer of the Institute Lola

### III. Performing courses in the field of:

1. Training for programming CNC machines
2. Computer simulations of Casting with MAGMASOFT® program.
3. Vibration according to ISO 17042 and ISO 18436.2
4. Aerospace applications

(L)

thank you



vladimir.kvetic@li.rs