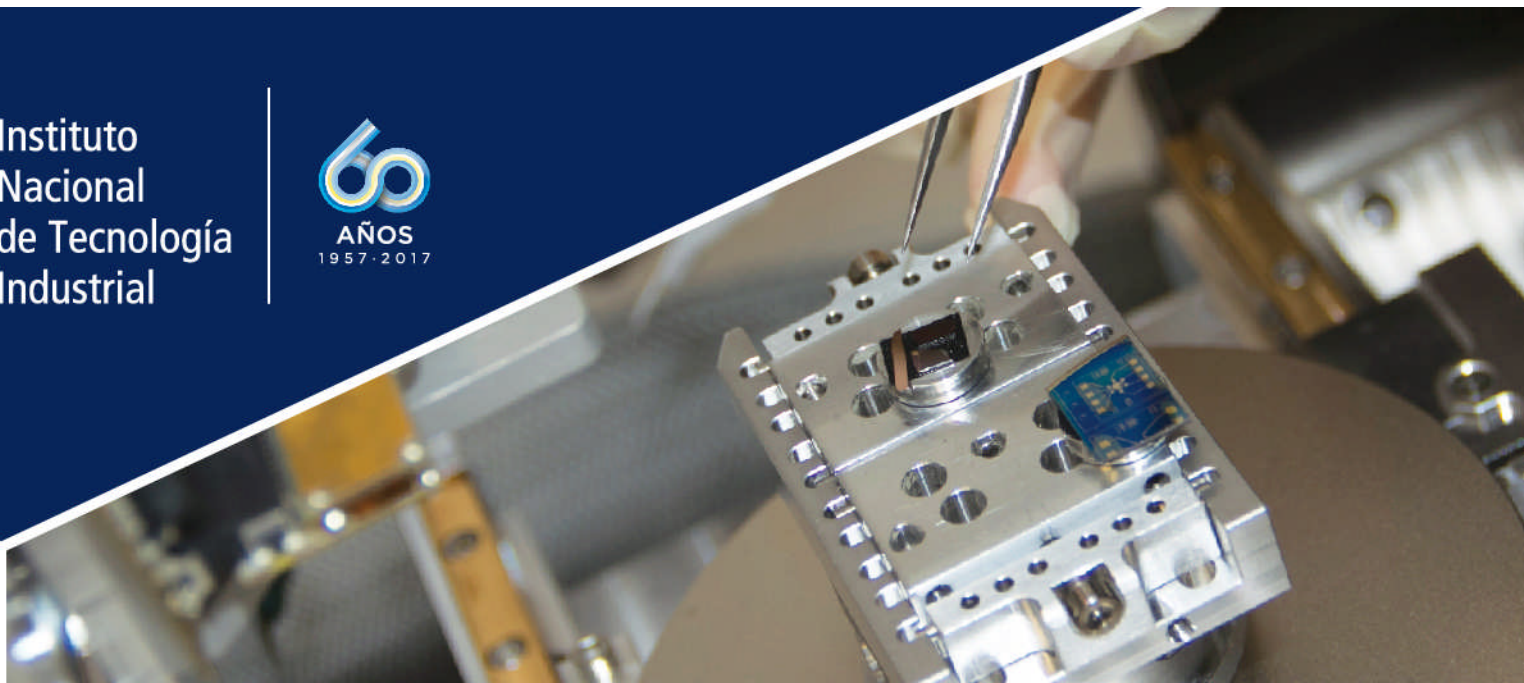




Instituto  
Nacional  
de Tecnología  
Industrial



# VALORIZATION OF AGROINDUSTRIAL RAW MATERIALS FOR THE PRODUCTION OF ADHESIVES FOR THE WOOD INDUSTRY

Advanced Nanocomposites  
Research Group



Ministerio de Producción  
Presidencia de la Nación



**Caucho**

Centro de Investigación y Desarrollo  
Tecnológico de la Industria del Caucho

# PROPOSAL

## 1. Replacement of urea-formaldehyde resins(UF).

- Used for the production of particleboards and plywoods
  - Non renewable material.
- Formaldehyde was declared a carcinogen by the World Health Organization (WHO).

## 2. Industrialization of agricultural products.

- Development of protein based bioadhesives (soybean and blood meal)
- Improvement of the mechanical properties by the incorporation of clay nanoparticles.
- Increase of raw materials added value.

## 3. Promotion of sustainable industries

- Production of environmentally friendly products.
- Use of waste, or by-products, of the agricultural industry.

# CURRENT PARTNERS OF THE ADVANCED NANOCOMPOSITES RESEARCH GROUP

## PUBLIC COLLABORATORS



Instituto Cubano de Investigaciones  
de los Derivados de la Caña de  
Azúcar

## PRIVATE COLLABORATORS



## SEARCH OF PARTNERS

### R&D in Timber and Wood

- Universities or Research Institutes with experience in particleboards, plywood or composite wood panels.

### R&D in Adhesives and Bioadhesives

- Universities or Research Institutes with experience in protein based adhesives.

### Private Collaborators

- Wood Companies with an innovative profile and interested in the development of sustainable and eco-friendly industries.





**INTI**



**AÑOS**  
1957 - 2017

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Nanocompuestos Avanzados

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