



Centro Internacional de Física

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Director

Colombo 2015
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Mission:

Promote basic and applied research, specially in physics, and industrial and technological development in Colombia and the Andean and Caribbean countries.

Objectives:

- Development of basic and applied research
- Scientists training
- Industrial technological development and innovation
- Introduction of new technologies in the country
- Creation of knowledge-based industries (spin offs)

Cif's groups

BASIC RESEARCH

- Biophysics and Membranes biology
- Optics
- Materials science



APPLIED RESEARCH AND TECHNOLOGICAL DEVELOPMENT

- Applied Physics and Tech. Development
- Biotechnology



OUR MOST IMPORTANT PROJECTS

ENVIRONMENTAL BIOTECHNOLOGY

- Environmental Impact Assessments -
- Cleaner production

BIOPHYSICS AND MEMBRANE BIOLOGY

- Leishmania chloride channels, therapeutic potential
- Neurosciences

OPTICS AND MATERIALS

- Topographic Lidar
- Nanotechnology in agriculture

APPLIED PHYSICS AND TECH. DEVELOPMENT

- Strategies for the optimum use of electric energy by vulnerable population
- Chip design lab

PROJECTS FINANCED BY THE ROYALTIES FUND

PROJECT:

Identification of alternatives for mitigation of impact of Climate Change in the basin of Rio Negro and Lower Magdalena river



US\$ 3.000.000

Participants:
-6 towns
-3 Universities



Impact on sugar cane and coffe growers

Sustainable Strategies for the optimum use of Electric Energy by Vulnerable Populations



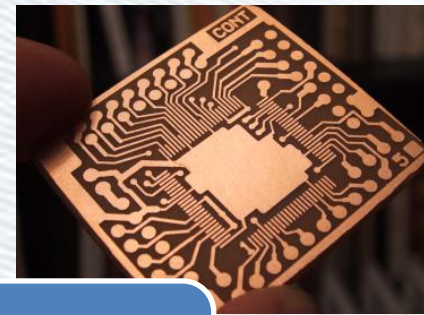
US\$ 3 million
Installation of solar panels in schools
Development of smart control mechanisms for street lightning

Participants:

- 8 Towns
- 3 Universities



NEW PROJECTS : Chip design laboratory



Objectives

- Design services by highly educated and experienced designers with broad experience in commercial design houses
- Innovative IP low cost designs
- Access to a pool of the best Colombian designers
- RFID tags, internet of things

Key Partners

- Chipus Microelectronics Design House, Brazil.
- Silterra Malaysia Foundry
- Electrical Engineering Professor – University of South Florida
- X-Fab Semiconductor Foundries

NETWORKING

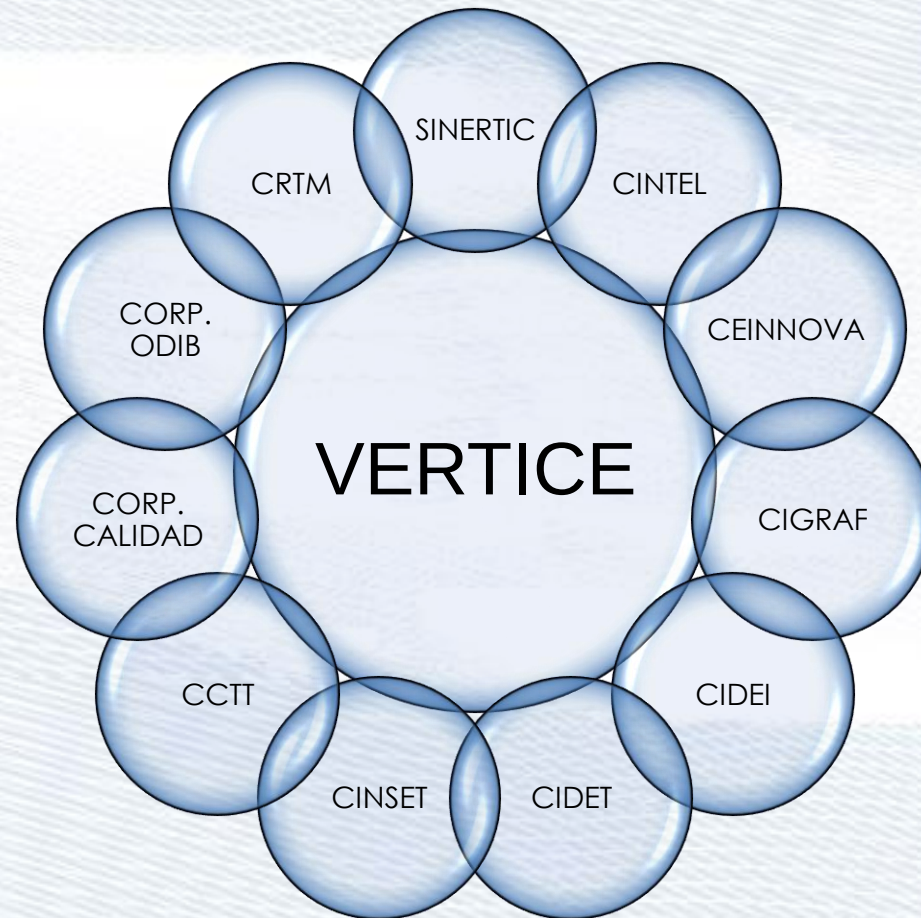


Association with 5 Centres with similar characteristics:

- Complementary research fields
- High scientific and technological level
- Regional distribution and international recognition



NETWORKING



International NETWORKING

- COMSATS
- ICTP
- TWAS
- Max Planck Institute
- Ecole de Physique et Chimie, Paris
- Paris VI
- NWY, Biophysics Institute
- Woods Hole



THE WORLD ACADEMY OF SCIENCES
for the advancement of science in developing countries

