

# INSTITUTO TECNOLÓGICO DE GALICIA

Researching:

# Water



## Who We Are

Instituto Tecnológico de Galicia | ITG

**TECHNOLOGY CENTRE** located in Galicia, Spain

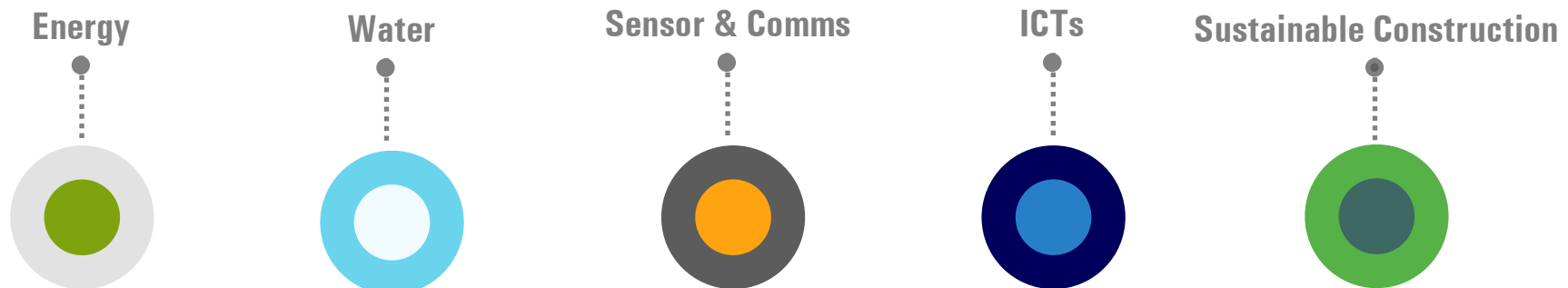
[No. 115 Spanish Ministry of Economy & Competitiveness Register]

**PRIVATE NON-PROFIT FOUNDATION** set up in 1991

**BOARD OF TRUSTEES:** Architects, Civil Engineers and Industrial Engineers Galician Associations, Mining Engineers' Assoc., Galician Agronomic Engineers' Council, Naval and Oceanic Engineers' Assoc.; Galician Businessmen Confederation, and Universities of A Coruña, Vigo and Santiago de Compostela

Certification in UNE-EN ISO 9001 standard (Quality Management System) and in UNE 166002 standard (R&D&I management system | CEN/TS 16555-1:2013)

At ITG we are organised in **5 INTERCONNECTED KNOWLEDGE AREAS:**



# Research & Development Activities on Water

## Drinking and Sanitation Water Networks

- Mathematical modelling and calibration of water distribution piping systems for drinking and sanitation water networks analysis, through SWMM and EPANET, specific hydraulic modelling softwares.
- Data capture, data treatment and visualization of drinking and sanitation water networks results.
- Water audits.
- Detection of water leaks for drinking water networks.

---

## Water Management, Urban Planning & Citizens

- Urban planning and drinking water management integration.
- Urban planning and sanitation water management integration.
- Analysis of drinking water availability; medium and long-term perspective. Planning and improvement studies of hydraulic systems.
- Assistance towards transparent knowledge of water management and its environmental issues; access to water information data.
- Conduct consumer exposure assessments.

---

## ICTs for Water

ITG has extensive experience and background in Software Development by combining Web Oriented Architectures with Open-Source Technologies and Information Systems with Analysis and Decision-Making Process.

Specifically referred to Water, ITG develops Geographic Information Systems for Drinking and Sanitation Water Networks:

- Management drinking and sanitation water information systems.
- Software engineering for efficient processing, data modelling, monitoring and exploitation of data collection.
- Designing and development of business intelligence layer and user interface.

# Research Results: Technology Solutions in Water

ITG has participated in the development of important Water Technology Solutions:

## WETNET

Intelligent Flow-Meter for Leak Detection in Water Distribution Networks | Control System | Improvement of control distribution networks | Patented\* Technology

<http://www.wetnet.it/en>



\* WETNET flowmeter is patented by B.R.E. Elettronica Ltd | ITG has a Strategic Alliance with B.R.E. in order to improve the development of WETNET flowmeter.



## WIZ4ALL GIS

Web Information Platform for Managers & Citizens: Availability of resource, water pipelines, “Participative Management” of water by citizens, ... | Taking into account Climate Change Impact | Future Scenarios Forecasts

<http://wiz4ALL.itg.es>

## WIZ4PLANNERS GIS

Web Information Platform for Local Authorities related to Urban Planning & Water Management: water resource data + urban data | Decision-making Process: urban planning & water resources availability | Taking into account Climate Change Impact | Future Scenarios Forecasts

<http://wiz4PLANNERS.itg.es>



## ITG International R&D Projects

Since 1996, ITG has developed international cooperation projects with important public and private entities.

---

SANePLAN Project – Integrated Planning and Sustainable Management of Sanitation Infrastructures through Innovative Precision Technology [www.saneplan-life.eu](http://www.saneplan-life.eu)

---

WETNET Project – Innovative in-pipe hot-tap insertion flow sensor plus smart NETWORKS enable ecowise pervasive monitoring of water distribution grids [www.wetnet.it](http://www.wetnet.it)

---

WIZ Project, WaterIze Spatial Planning: encompass future drinkwater management to climate change [www.wiz-life.eu](http://www.wiz-life.eu)

---

ASAP Project – Actions for Systemic Aquifer Protection [www.klink.it/gate/asap](http://www.klink.it/gate/asap)

---

ROEM + Project – High resolution Approach for Management of Surface Water Eutrophication in Rural areas of the Duero River Basin [www.roemplus-life.eu](http://www.roemplus-life.eu)

---

ENTIC Project – Smart & Sustainable Energy Management for improving the competitiveness of SMEs in the Euroregion [www.entic.eu](http://www.entic.eu)

---

GE2C'S Project – Efficiency, CHP and Energy Management in Service Sector [www.ge2cs.com](http://www.ge2cs.com)

---

E4R Project – Building Energy Efficiency Assessment Tools. Refurbishment in SUDOE Territory [www.e4rproject.eu](http://www.e4rproject.eu)

---

GENER Project – SMEs' Accompaniment in Efficient Models for Energy Management Implementation [www.proyctogener.org](http://www.proyctogener.org)

---

INCOPYME NETWORK Project – Cooperation between Centres and Research and Innovation SMEs improving competitiveness in the Euroregion [www.redincopyme.org](http://www.redincopyme.org)

---

e-MEDI@TE Project [www.emediate-justice.eu](http://www.emediate-justice.eu)

---

## How to Contact Us

INSTITUTO TECNOLÓGICO DE GALICIA  
PO.CO.MA.CO, Sector I, Portal 5  
15190 A Coruña, Spain  
T +34 981 173 206

[www.itg.es](http://www.itg.es)

Water Department Director: Eng. Juan Sobreira

[adn@itg.es](mailto:adn@itg.es)