#### **Exhibition Credits:**

#### Science Committee/Exhibition development team

- Evangelos Vitoratos, Professor, Department of Physics, Direct at S.T.M.
  Kordulis Christos, Professor, Department of Chemistry, Dean of the Faculty
- of Natural Sciences • Zelilidis Abraham, Professor, Former Dean of the Faculty of Natural
- Sciences and performing debts of Director at S.T.M. up to 31/8/2010 Theodoros Deligainnis, Emeritus Professor, Department of Physics, Team
- Ineodoros Deligainnis, Emeritus Professor, Department of Physics, Team Coordinator
- Christopher Krontiras, Professor, Chairman, Department of Physics
- Stavros Kotsopoulos, Professor, Department of Electrical and Computer Engineering
- Dimitris Lymberopoulos, Professor, Department of Electrical and Computer Engineering

#### Exhibition Design and Curator

Peny Theologi-Gouti, Architect-Ethnologist, S.T.M.

#### **Research and Material Collection**

- · Peny Theologi-Gouti, Architect-Ethnologist, S.T.M.
- Athena Pilarinos, Electrical Engineer, S.T.M.

#### **Design and Construction of Experiments**

- Theodoros Deligiannis, Emeritus Professor, Department of Physics
- Evangelos Vitoratos, Professor, Department of Physics
- Spyros Koutsouvelis, Department of Physics
- Giannis Stais, Physisist
- Students of the Department of Pyysics

#### Presentation of experiments

Made possible with the support of volunteer students from the Department of Physics

# Study and Coordination of Installation and Activation of the Telephone Exchange ATZ-65 model

Costas Bourdoulis, Former Technical Staff and Instructor of OTE, Hellenic Telecommunications Organisation, Leader in charge

# Installation and Activation of Telephone Exchange ATZ-65

- Costas Kaipanos, Former Technical Staff of OTE
- Andreas Economopoulos, Former Technical Staff of OTE
- Lefteris Raptis, Former Technical Staff of OTE With the support of Former and Current OTE Staff members.

#### Implementation of Interactive Exhibit for the History of Telecommunications

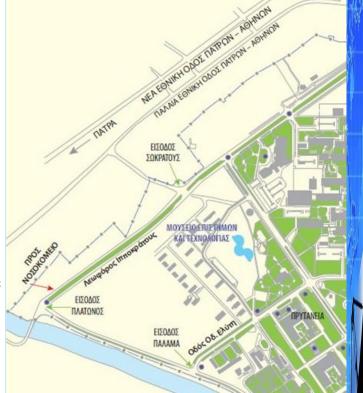
- Nikolaos Avouris, Professor, Department of Electrical and Computer Engineering (ECE)
- Peny Theologi-Gouti, Architect-Ethnologist, S.T.M.
- Vasilis Vlahokyriakos, student
- Development of other interactive applications
- Dimitrios K. Tsolis, Computer Engineer, MSc, PhD, Department of Computer Engineering and Informatics
   Department of Computer Compu
- Students of CEID

#### **Donors of Museum Objects**

- Members of the Academic Community and private individuals
- OTE Museum of Telecommunications
- Regional Directorate of OTE S.A.-The Hellenic Telecommunications Organisation, Telecommunications region of Southern and Western Greece
- European Space Agency
- Hellenic Army General Staff 3<sup>rd</sup> Battalion of War Materials
- OSE Hellenic Railways Organization, National Administrator of Railway Infrastructure, Production Management
- Wind Hellas
- Vodafone-Panafon S.A.
- Greek Safer Internet Awareness Centre, Saferinternet.gr

#### Sponsors

- Vodafone-Panafon S.A.
  COSMOTE Mobile Telecommunications S.A.
- INTRACOM-TELECOM
- OTE S.A.-Telecommunications Region of Southern and Western Greece



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Hours of operation: 9.00 - 14.00 From Monday to Friday except major holidays.

Groups visits and educational programs by appointment only.



# **EXHIBITION**

# 'Telecommunications in our life'









MUSEUM OF SCIENCE AND TECHNOLOGY UNIVERSITY OF PATRAS

# 'Museum of Science and Technology, University of Patras'

The Museum of Science and Technology (S.T.M.) was established in 2001, as a Laboratory of the University of Patras; School of Natural Sciences.

The main goal of S.T.M. is to spread science on as many levels as possible, becoming an important educational tool.

## 'Telecommunications in our life'

The S.T.M.'s current thematic exhibition is titled 'Telecommunications in our life', which shows the characteristics of telecommunications and their development in 3 thematic sections:

## 1. Historical development of Telecommunications, which includes:

- Video Projection 'from Beacon-signals to the Internet'
- Ancient Telecommunications
- Timetable of Telecommunications from the mid 17th century up to today
- Video projection, scenes from Greek and foreign films, showing the use of the telephone
- Interactive Application concerning the History of





2. Basic Physics, principles which formed the basis for the development of telecommunications, including demonstrations of experiments on topics listed below:

#### ♦ Electromagnetics

- · Experiments on Induction.
- Oersted Experiment,
- Diversion of an electron beam using a magnet.
- Diversion of a current carrying conductor by means of a magnetic field.

# ♦ Waves - Optics

- Creation of waves in a water tank.
- · Laser Optics: Reflection-Refraction.
- Oscillation of Synthesis: Lissajous Figures, Beats, Amplitude and Frequency Modulation.
- A Short Range Optical Communication System,
- Digital Logic Gates.

# 3. Telecommunications past and modern.

which includes object, photographic and audiovisual collections, interactive exhibits and information on:

- Wired Telephony,
- Wireless Telephony,
- ♦ Satellite
- ♦ Modern Communications

Services and Presentation of a Prototype Educational Device offered to visitors.

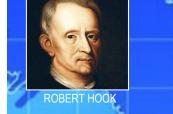
- ♦ Different
- types of Telephone Exchange Units,

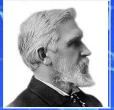
and a demonstration of the operation of the Telephone Exchange ATZ-65 model.











**ELISHA GRA** 

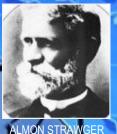


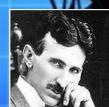


SAMUEL MORSE

ANTONIO MEUCCI







**NIKOLA TESLA** 





**HEINRICH HERTZ** 

MARTIN COOPER







Communications,