



# Michalis Tzifas

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Date of birth: 5 May 1975 | **Nationality:** Greek | **Gender:** Male |

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Parnassidos 55, Chalandri, 15231, Chalandri, Greece

## WORK EXPERIENCE

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1 DEC 2005 – CURRENT – Agia Paraskevi, Greece

**OPERATOR AND TECHNICIAN OF A HELIUM (HE) LIQUEFIER UNIT – NATIONAL CENTER FOR SCIENTIFIC RESEARCH "DEMOKRITOS" (GREECE)**

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12/2005-6/2008 : Operation and maintenance of a SULZER TCF20 *He* liquefier.

7/2008 : Installation of a LINDE L70 *He* liquefier.

7/2008-today : Operation and maintenance of a LINDE L70 *He* liquefier.

Main responsibilities:

- Exclusive operation and maintenance of the liquefaction plant. The equipment includes the Linde L70 liquefier, a Kaeser CSD122 screw compressor (75Kw), a Hamworthy R22 high pressure He compressor (7.5Kw, 200bar), a Sauer WP4331 high pressure He compressor (13.5Kw, 200bar), the active carbon oil removal system, the line drier and a large recovery system which includes pipes, bundles and a balloon.
- 24/7 remote monitoring and operation of the liquefier whenever needed.
- Exclusive provision of liquid He to more than 13 external scientific instruments (i.e., EPR, NMR, High resolution NMR, PPMS, SQUID, Mossbauer and optical spectroscopy etc.) connected to the plant.
- Solve presented mechanical and electrical problems.
- Management and storage of the produced liquid He.
- Coordination of internal (Demokritos laboratories) & external orders for liquid He (LINDE, Air Liquide).

Familiarity with cryogenic temperatures, high vacuum systems and high pressure piping

11 JUL 2014 – 30 JUN 2015 – Agia Paraskevi, Greece

**DESIGNER AND TECHNICIAN OF A HELIUM (HE) RECOVERY UNIT – NATIONAL CENTER FOR SCIENTIFIC RESEARCH "DEMOKRITOS" (GREECE)**

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**6/2014-10/2015: National Center for Scientific Research "DEMOKRITOS" (Greece):**

***NSRF / Bilateral Project "HeRe to HeRe" (Partnership of Companies with Research Agencies focused in research and technology.): Helium recovery to create a national helium resource:***

Technician and technical advisor for the creation of a new independent *He* recovery system for the high resolution NMR lab which is placed in the NCSR "DEMOKRITOS". The purpose of the facility was the collection of *He* gas coming from the superconductor magnets and its promotion to the *He* liquefaction plant. An extension of the liquefaction to be used in hospitals and diagnostic centers has been foreseen. Main duties of the position were:

- Technical coordination and management of the plant.
- Management of all economic aspects.
- Planning, design and installation of the *He* recovery balloon and the inclination sensor.
- Selection and the installation of an appropriate high pressure He compressor.
- Design and installation of the high pressure cylinders filling ramp.
- Design and installation of the high pressure piping.
- Design of the cell that encloses the compressor and the high pressure ramp.
- Day by day management of all economic aspects.

## EDUCATION AND TRAINING

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5 OCT 1995 – 5 NOV 2004 – Panepistimioupoli, 15701 Ilisia, Ilisia, Greece

**DEGREE (4 YR) IN PHYSICS – National and Kapodistrian University of Athens**

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**Field(s) of study**

- Natural sciences, mathematics and statistics

**Thesis:** Υγρό ήλιο και εφαρμογές- σύγχρονες προκλήσεις. <https://dspace.lib.ntua.gr/xmlui/handle/123456789/43>

8.58 | [www.ntua.gr](http://www.ntua.gr)

**FIRST CERTIFICATE IN ENGLISH** – University of Cambridge

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**LANGUAGECERT TEST OF ENGLISH C1** – LanguageCert

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● **LANGUAGE SKILLS**

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Mother tongue(s): **GREEK**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C1	C1	C1	C1	C1

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

● **DIGITAL SKILLS**

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Outlook | MICROSOFT OFFICE | INTERNET | Microsoft Windows | Skype | Gmail | Social Media (Facebook Instagram Youtube) | Google Drive | Emails | WORD | EXCEL | POWERPOINT