

KARACHALIOS PANAGIOTIS

|Address: Akakion 61, Marousi 15125, Athens-Greece |Date of Birth: 7/01/ 1991|
Nationality: Greek| Mobile Number: +30 6972498077|email:pankar791@gmail.com

EDUCATION

October 2009- September 2014

National Technical University of Athens, Greece

Degree in “Chemical Engineering”; specialized in “Process Mechanics”

Average degree: 7.96/10.00

Diploma Thesis: “Laboratory Testing of the Effectiveness of Chemical Dispersants in Oil Spills”

Degree: 10.00/10.00

- Main courses: Chemical Reaction Engineering (Homogeneous and Heterogeneous Processes + Chemical Reactor Design), Process Control, Process Analysis and Plant Design, Environmental Engineering, Environmental Science, Science and Engineering of Biological Systems and Products, Thermodynamics, Technology of Fuels and Lubricants, Process Equipment Selection and Design, Fluid Mechanics (transport phenomena), Chemical Kinetics, Principles of Cell Biology and Biochemistry, Instrumental Methods of Chemical Analysis,
- Direction “Process Mechanics” courses: Industrial Reactor Engineering, Advanced Process Design, Systems of Automatic Control & Informatics, Process Development Engineering, Rational and Sustainable Energy Management
- Elective courses: Design of Clean Industries, Industrial Pollution, Mathematical Foundations of Chemical Thermodynamics, Advanced Catalysis, Economics, Management

June 2011

8th General Lyceum of Marousi, Athens

Average: 18.1/20.0

IMPLEMENTED PROJECTS

- Plant Design: “Acetaldehyde Production 100ktn/year” via **AspenTech**
- Systems of Automatic Control:
 - Installation of poles with the feedback statement of variables
 - Model of Predictive Control, MPC
Completed via **Matlab (Simulink)**
- Advanced Process Design: “Mathematical modeling of a *Non-linear System* of Reactors and Heat Exchangers”, using the **Wegstein and Newton Raphson methods** via **Excel** as an integrated tool for resolving complex problems with the use of **Visual Basic (VB)**
- Process Control:
 - Control of Multivariate Systems
 - Calibration PID Regulators
Completed via **Matlab (Simulink)**
- Bibliographical Research on Green and Sustainable Technologies
- Fuel Technology: Bibliographical Research on “**Monte Carlo method** in Biodiesel Statistical Analysis”
- Process Development Engineering:
 - Semi-Industrial scale Distillation
 - Semi-Industrial scale Extraction
Completed via **Excel (Solver), Aspen Hysys** (UNIFAC model)
- Chemical Reaction Engineering I&II (Homogeneous, Heterogeneous Processes & Chemical Reactor Design): Laboratory Work:
 - Study of Active Coal Combustion in Thermobalance
 - Photocatalytic Reactor for the Study of the Oxidation Reaction of Volatile Organic Associations
 - Photochemical Oxidation of chlorinated organic compounds
 - Saponification of ethyl acetate in a Flow Reactor
 - Gas Absorption Column
 - Heterogeneous catalytic decomposition of peroxide hydrogen in Aqueous Phase in a Batch Reactor
 - Absorption of liquid gas by chemical reaction. Determination of the parameters of the intrinsic rhythm.
- Environmental Science: Bibliographical Research on “The effects of mercury in aqueous environment”
- Transport Phenomena (Fluid Dynamics): Fluid Dynamics System via **Comsol Multiphysics**
- Design of Clean Industries: “Pinch Point Identification and Water Recycling for the minimization of waste-water”

- Industrial Pollution: “Study and design of a system of anaerobic and aerobic processes for the purification of waste disposal of a dairy products industry”

WORKING EXPERIENCE

Currently employed at [I.C.I.](#) as the *Quality and Assurance Executive*, and *Assistant to the Clinical Manager*

Former work experience includes:

- **2013:** While still an undergraduate, I was employed for two (2) months of part-time work at the *“Laboratory of Fuels and Lubricants”*, in the National Technical University of Athens, at the Department of Chemical Engineering. I was deployed in the field of fuel analysis and research for the property determination of liquid fuels.
- **2014:** A five week internship at [I.C.I.](#) as a senior associate

COMPUTER SKILLS

- Various computer programs including: MATLAB (Simulink), MatchCad, aspenONE simulation, Aspen Hysys, Comsol Multiphysics
- Microsoft Office: Word, Excel, Power Point, Outlook
- Languages: Fortran, Visual Basic

LANGUAGES

Greek: Native Language

English: Excellent command of English, fluently spoken and written (Proficiency University of Michigan)

French: Basic knowledge (Delf B1, Institut Français de Grèce)

INTERESTS

Travelling, socializing and making new friends

Sports: Football, Basketball, Table Tennis

Practicing Aikido, 6th Kyu (Bushinkan Dojo Chalandri, awarded by Sensei Kolliopoulos, 6th Dan)

Cinema and Photography

Comics

Literature

Travelling by car

Recommendation letters are available upon request, (from my former and current employers, and from professors of the department of Chemical Engineering).

More information about the projects and diploma thesis are available upon request as well.