



Antonios Fytopoulos

Departement Chemische Ingenieurstechnieken
Process Engineering for Sustainable
Systems (ProcESS), Arenberg School
KU Leuven, Brussels Area, BG and
School of Chemical Engineering-NTUA
antonios.fytopoulos@kuleuven.be
m: +306937165965

PERSONAL DATA

Nationality: Greek

Born: 10 February, 1985, Greece

EDUCATION

2017-2023	PhD, KU Leuven - NTUA
2012-2017	National Technical University of Athens - Chemical Engineering School- Diploma in Chemical Engineering (Bachelor's and master's degree), GPA: 9.03/10 First-class honors degree, I graduated in the top 4% of my class.
2002-2006	B.Sc. Evelpidon Hellenic Military Academy, GPA: 8.5/10 First-class honors degree.

LANGUAGES

Greek, (Native)

English, (Proficiency)

AWARDS

2018	Written Citation from the Chief of Army General Staff, for obtaining first class honors degree from National Technical University of Athens.
2012	1st position among all candidates in the entrance examinations held by the Chemical Engineering School of National Technical University of Athens
2010	Commander of the 98th Administration Company – Honorary Insignia
2008	Written Citation for perfect performance in logistics operations for the 98th Support Division.
2006	"Major Georgios Kolokotronis" medal.
2002	5th in the whole Country in entrance examinations for the Evelpidon Hellenic Military Academy
1996-2002	Honorary degrees for excellence in Secondary and High School (for each of the three years)

INTERESTS

Origin of life, Deracemization processes, Viedma Ripening, Temperature Cycling, Crystallization, Process Optimization, Computational Methods, Mathematical Modeling.

GRANTS

2017	e-COST action: European Cooperation in Science and Technology - summer 2017
2017	BOF - Special Research Fund of Belgian Government for Doctoral projects

2012 Full, 5-year scholarship from the Hellenic Ministry of Defense for the School of Chemical Engineering, NTUA

PROFESSIONAL EDUCATION

2002-2006	Basic officer's military training, Operations Management. Evelpidon Hellenic Military Academy Vari, Greece.
2006-2007	Minor: Petroleum Logistics Manager
2007	Basic school for ammunition, Center of training for War
2007	Special training for administration of the Greek Pipeline System (GRPS) – NATO Pipeline System (NPS)
2007	Special training for Chemical - Biological - and Nuclear warfare School of CBRN Defense.
2015	Several basic and advanced topics in laboratory safety, AiChe
2018	Member of the Technical Chamber of Greece (permit to practice as an engineer)
2018	ISO 17025:2005 “General requirements for the competence of testing and calibration laboratories”, Lead Assessor training.
2018	Advanced military training in Petroleum Logistics, Sparta-Chalkida, Greece
2018	ISO 17025:2017 “General requirements for the competence of testing and calibration laboratories”, Lead Assessor training.

AMINISTRATIVE POSITIONS

2006-2008	Trainer in the center of training for petroleum logistics
2008-2010	Senior administrator of fuels for the whole Island of Lesvos
2009-2010	Commander of the 98th Administration Company – Lesvos
2010-2013	Senior Administrator of fuels and transportation vehicles for the Hellenic Army General Staff
2017-2018	Lab member at KU Leuven
2018- 2022	Director of the Analytical Lab of the 2 nd Army Aviation Group, Megara, Attiki
2018- 2022	Hellenic Army administrator of Spectrometric Oil Analysis Program for Helicopters CH-47 D Chinook
2018- 2022	Commander of the Mixed Aviation Logistics Company
2022- now	Hellenic Army General Staff

PERSONAL QUALITIES-SKILLS

1. Ability to handle pressure and meet deadlines
2. Strong leadership skills
3. Flexibility-adapt to new circumstances
4. Interpersonal and teamwork skills

SELECTED PUBLICATIONS – CONFERENCES

1. *Crystal growth, dissolution and agglomeration kinetics of sodium chlorate*, **Fytopoulos, A.** ; Kavousanakis, M. ; Van Gerven, T. ; Boudouvis, A. G ; Stefanidis, G. D; Xiouras, C. ; Ind. Eng. Chem. Res. (2021), 60, 19, 7367–7384
2. *Particle breakage kinetics and mechanisms in attrition-enhanced deracemization*, Xiouras C., **Fytopoulos A.**; Joop H. Ter Horst; Andreas G. Boudouvis; Tom Van Gerven; Georgios D. Stefanidis; *Cryst. Growth Des* (2018) 18, 3051-3061
3. *Applications of ultrasound to chiral crystallization, resolution and deracemization*, Xiouras, C.; **Fytopoulos, A.**; Jordens, J. ; Boudouvis, A. G ;Van Gerven, T. ; Stefanidis, G. D, Ultrasonics Sonochemistry; 2018; Vol. 43; pp. 184 – 192
4. *A population balance model for temperature-cycling enhanced deracemization*, **Fytopoulos, A.**; Xiouras, C.; Cameli, F.; Kavousanakis, M.; Van Gerven, T.; Boudouvis, A.; Stefanidis, G.; Presented at the 25th International Workshop on Industrial Crystallization (BIWIC 2018), Rouen, France, (Poster) 05-07 September 2018.
5. *Intensification of Particle Breakage in Attrition-Enhanced Deracemization*, Xiouras, C.; **Fytopoulos, A.**; Ter Horst, J.; Boudouvis, A.; Van Gerven, T.; Stefanidis, G.; (2018). Presented at the 25th, International Workshop on Industrial Crystallization (BIWIC 2018), Rouen, France, 05-07 September 2018.
6. *Temperature-cycling enhanced deracemization: a computational study based on population balances*, **Fytopoulos, A.**; Xiouras, C.; Kavousanakis, M.E.; Van Gerven, T.; Boudouvis, A.G.; Stefanidis, G.D., (Poster) International Solvay Workshop on "Chiral Symmetry Breaking at Molecular Level", 28-30 November 2018, Brussels, Belgium.
7. *Benefits of Application of Process Optimization in Pharmaceutical Manufacturing: A Panoramic View*, **Fytopoulos, A.**; Pardalos Panos M.; (Conference Proceedings/Book Chapter) International Symposium on Mathematical and Computational Biology-BIOMAT 2022.

- | | |
|-----------|---|
| 2017-2018 | Elise Loppinet (NTUA) Title: " <i>Population balance modeling of growth and agglomeration of crystals in racemic mixtures</i> " (currently PhD student at Stanford University)" |
| 2018-2019 | Marietta Metallinou (NTUA) Title: " <i>Breakage Kinetics of Sodium Chlorate in supersaturated solutions</i> " |

SCHOOLS

1. "Design of Experiments", Spring School, KU Leuven, BG, 2017
2. "Continuous Resolution and Deracemization of Chiral Compounds by Crystallization", Summer school, Radboud University, Nijmegen, The Netherlands, 2017
3. "Crystallization Science and Engineering", Leeds University, Leeds, UK, 2019.

BOOKS

1. *Optimization of Pharmaceutical Processes*, **Fytopoulos, A.**; Ramachandran R.; Pardalos P. M., Springer Nature (2022)
2. *Handbook for management of threats*, Balomenos K.; **Fytopoulos, A.**; Pardalos P. M., Springer Nature (2023 – to appear)

SOCIETIES

1. Technical Chamber of Greece, Licensed Member
2. American Institute of Chemical Engineers (AIChE), Member
3. Society of Petroleum Engineers (SPE), Member

COMPUTER PROGRAMS AND LANGUAGES

1. Microsoft Office Suite (Perfect)
2. Comsol
3. Matlab

FAMILY

Married – 2 daughters

PERSONAL INTERESTS

Traveling, theatre.

VOLUNTARY SERVICE

1. 2004 Olympic Games volunteer, Athens
2. Blood donor Volunteer