

POST-GRADUATE STUDIES IN BIOCHEMISTRY

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF PATRAS

General information

MSc studies in Biochemistry appeared firstly during the organization of Post-Graduate studies in the Department of Chemistry (FEK 866B, 26/11/1993), under the title "Applied Biochemistry – Biotechnology", being modified later (FEK 1028B, 3/4/2012) to "Applied Biochemistry: Clinical Chemistry, Biotechnology, Evaluation of Pharmaceutical products". The duration of the post-graduate training for the award of the Master's degree was initially set at 2 years and after 2012 at 1.5 years, in accordance with the requirements of the respective laws, but also with the requirements of the Department for an one-year experimental Diploma Thesis.

Applications for post-graduate studies in Biochemistry started from the first year of the MSc Programme of the Department of Chemistry by graduates of the Departments of Chemistry, Biology, Agricultural Sciences, Chemical Mechanics, Veterinary Sciences. Twenty-six post-graduate students registered and followed MSc studies in Biochemistry during the first ten years. The next years, the number of graduates followed MSc studies in Biochemistry was increased, and up to 2012 (upgrading of the MSc Programme) a MSc degree has been awarded to additional thirty-four graduates. From 2012 until 2018, where the Inter-departmental MSc Programme in Biochemistry was founded, fifty graduates have followed MSc studies in Biochemistry.

Educational data – Awarded MSc

In total, in all years of MSc studies in "Applied Biochemistry" under the MSc Programme of the Department of Chemistry, there have been registered 105 graduates, 89 of which have been awarded the MSc degree. The number of registered graduates per year amounted to 4 (original law) and 6 (upgrading), indicating that the improved and enriched form of the postgraduate program has been relatively better accepted by the graduates. However, this number indicates that the number of registered graduates per year was significantly lower than the offered positions, which were set to 10.

Students' performance

As shown in Appendices 1-4, students' performance was quite good and above 75% completed their studies (including the title award by the Department) the minimum time required, namely 45 out of 60 (primary law) and 22 out of 29 (upgrading). The percentage of students that have been significantly delayed in receiving their MSc degree (above 2X of the minimum time) is nil in the new PMS, while 6% of the students of the former Programme have significantly delayed (well above 2X of the minimum time). Delay may be due to many factors, including, but not limited to: a. Delay in the maintenance of instruments necessary to complete their experimental work, b. Completion of some experiments abroad, combined with finding a scholarship for the student, c. Delay in the processing of the results and the writing of the Thesis.

Financial data

Since “Applied Biochemistry” was a part of the MSc Programme of the Department of Chemistry, there are no independent financial data to analyze. However, it should be noticed that: a. The budget provided by the Ministry of Education never reached the originally set amount, b. State aid has steadily declined in recent years, c. In the founding law of the postgraduate studies, the expenditure for postgraduate studies included also those of doctoral studies, a practice followed by the Department of Chemistry during all years of operation of the postgraduate program, and d. The grant of the postgraduate program was granted in the last years at the end of the year and with the requirement to spend the money in a very short time, which did not facilitate the distribution according to the Government Gazette, but the amount was used for corrective interventions in the ongoing operational problems of the Department (new equipment and instrument maintenance), thus the MSc studies in “Applied Biochemistry” were mainly supported by research programs of the faculty members.

Conclusions

As stated in the relevant articles of the founding law (article 2, Law 866/26-11-1993) and amending (article 2, Law 1028/3-4-2012), the organization and development of the MSc studies in Chemistry is vital to the social and economic development of the country and contributes to the advancement of knowledge and the development of technology in Chemistry. One of the objectives of the Post-Graduate Programme was to upgrade the studies in the field of Biochemistry with the MSc award, to improve the competitiveness of the sector-related Greek Scientific Resource, and to limit the leakage to the countries of the world of the best graduates the Departments of Chemistry and other departments of the Greek Universities. Judging by the number of students who attended “Applied Biochemistry” and their subsequent occupation, it appears that the Programme has largely met its objectives, contributing to the deepening of the knowledge of its graduates in the field of Biochemistry.

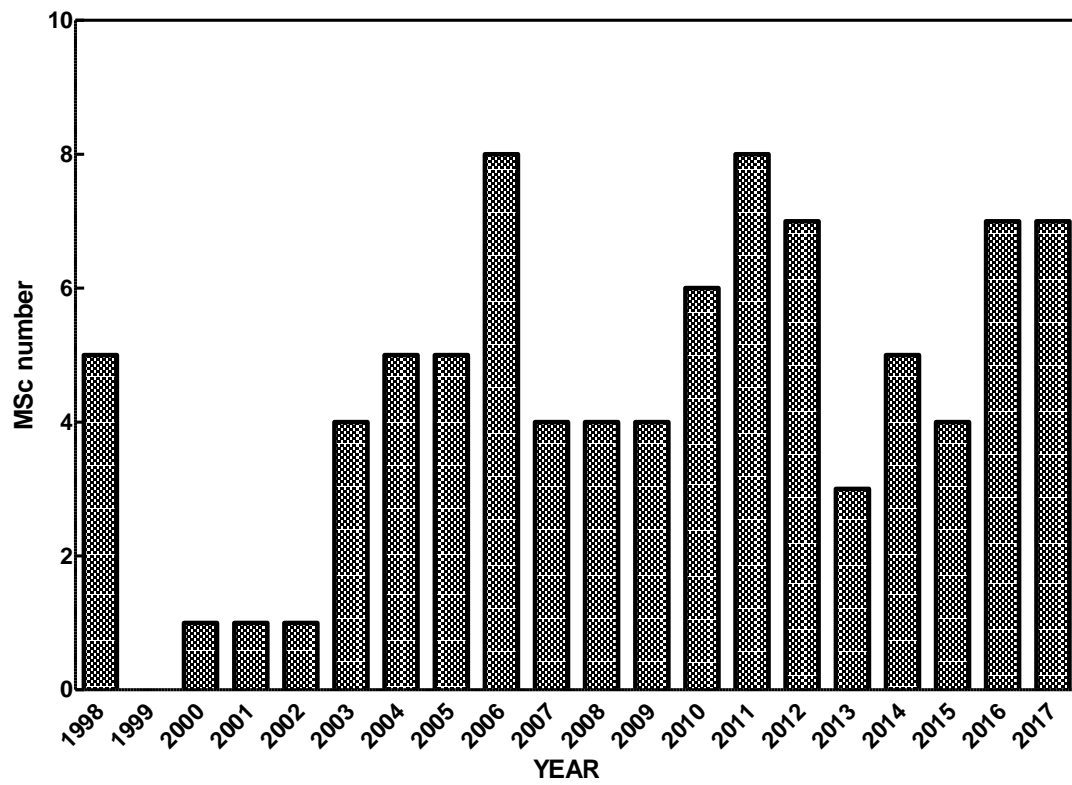
Appendix 1: Students followed “Applied Biochemistry” of the Post-graduate Programme of the Department of Chemistry and their current employment (the official registration and graduation are listed)

name	Registr.	Supervisor	Grad.	Current employment
Applied Biochemistry-Biotechnology (60)				
Andrikos K.	11/1995	A. Aletras	6/1998	
Gavriilopoulou E.-G.	10/1995	N. Papageorgakopoulou	7/1998	High School
Fotiou E.	11/1995	C. Tsiganos	7/1998	General Hospital of Patras
Diamantopoulou S.	11/1995	N. Karamanos	7/1998	
Ninos E.-Ch.	10/1995	D. Vynios	7/1998	Product Manager at KOSTAS PAPAELLINAS (HELLAS) A.E.B.E.
Giakoumaki A.	11/1997	N. Karamanos	10/2000	Private Company - Certification Systems
Filos G.	10/1999	D. Vynios	10/2001	High School
Tsagaraki I.	10/2000	D. Vynios	9/2002	Post-Doctoral Research
Georgaka E.	10/2000	V. Nastopoulos	2/2003	
Spyrakopoulou G.	10/1994	D. Vynios	2/2003	Pharmaceutical company
Kousidou O.	11/2001	N. Karamanos	7/2003	Medical Advisor at Novartis Oncology
Kanakis I.	11/2001	N. Karamanos	9/2003	Post-Doctoral Research, UK
Ziouti N.	11/2002	D. Vynios	10/2004	
Kaltsonoudis Ch.	11/2002	Th. Tsegenidis	10/2004	
Krevvata M.	11/2002	N. Karamanos	10/2004	Senior Research Investigator, University of Pennsylvania, USA
Syrocou A.	12/2002	N. Karamanos	10/2004	REGIONAL CENTER. PLANT PROTECTION AND QUALITY CONTROL
Tziala S.	12/2002	D. Vynios	10/2004	Head of Analytical Development (QA/QP) at Lamda laboratories, GR
Efthymiopoulou K.	11/2001	A. Aletras	2/2005	University Hospital
Koukounari M.	11/2003	N. Karamanos	10/2005	Bayer, GR
Marsouvanidis J.-P.	11/2003	A. Aletras	10/2005	Professor / Researcher at Saxion, Erasmus University Rotterdam
Stahtea X.	11/2003	N. Karamanos	10/2005	
Favvata V.	11/2003	A. Aletras	10/2005	
Eleftheriou S.	12/2002	S. Anagnostides	6/2006	Pharmaceutical company
Athanasίου S.	11/2004	A. Aletras	7/2006	R&D Manager at Prognosis Biotech S.A.
Asimakopoulou A.	11/2004	N. Karamanos	10/2006	
Panagiotou M.	11/2004	N. Papageorgakopoulou	10/2006	Post-Doctoral Research, USA
Christodoulidis S.	11/2004	N. Papageorgakopoulou	10/2006	
Kollias K.	11/2004	A. Aletras	11/2006	
Mania V.	11/2004	N. Karamanos	11/2006	
Stathakopoulou A.	11/2004	D. Vynios	11/2006	Private company (Biochemicals)
Malavaki Ch.	11/2005	N. Karamanos	7/2007	Post-Doctoral Research, UP
Matzourani I.	11/2004	A. Aletras	11/2007	
Bouga E.	11/2005	D. Vynios	12/2007	Switzerland
Kalathas D.	11/2005	D. Vynios	12/2007	High School

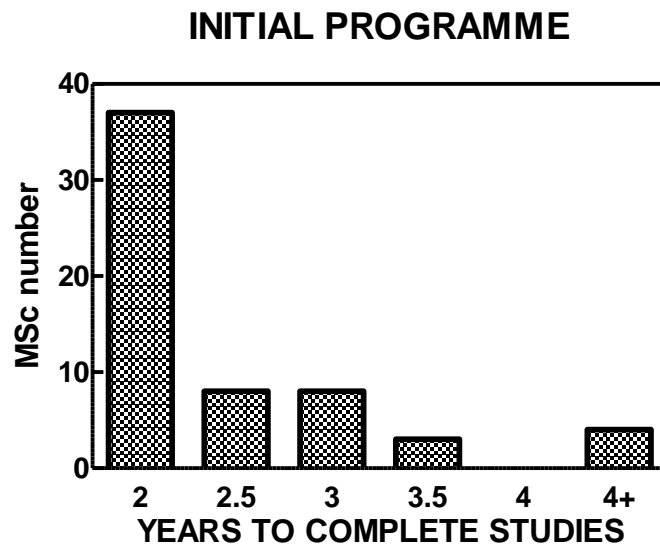
Mpanou M.	11/2005	A. Aletras	6/2008	Chemistry Manufacturing Control Associate (CMC), Regulatory Affairs Department at Pharmathen
Karatsa A.	11/2005	D. Vynios	10/2008	ATEI of Larissa
Karygiannis G.	11/2003	D. Vynios	10/2008	State General Laboratory
Spiliou S.	12/2003	Th. Tsegenidis	10/2008	
Gialeli Ch.	11/2007	N. Karamanos	9/2009	Postdoctoral Research Fellow at Lund University
Giannousa S.	11/2007	Th. Tsegenidis	7/2009	
Kallimani E.	11/2007	N. Karamanos	9/2009	
Milia-Argiti E.	11/2007	A. Theocharis	9/2009	Customer Success Consultant - Account Manager at ContactPigeon
Ellina M.-I.	11/2008	N. Karamanos	9/2010	DRA Specialist I, CMC
Lagios G.	11/2003	D. Vynios	9/2010	High School
Tsonis A.	11/2008	N. Karamanos	9/2010	Clinical Research Associate at CreativePharmaServices providing services to Novartis
Niaraki A.	12/2007	A. Aletras	11/2010	Associate Professor at Université d'Évry Val d'Essonne, Γαλλία
Filou S.	11/2008	D. Vynios	11/2010	Post-Doctoral Research, UP
Chyssikopoulos D.	11/2007	D. Vynios	11/2010	Veterinary Service
Takouli V.	11/2008	D. Vynios	6/2011	Pharmaserve-Lilly S.A.C.I.
Drakouli S.	11/2009	A. Aletras	7/2011	
Kouremenou P.	11/2009	Th. Christopoulos	10/2011	Police (Forensics)
Mpoutsika L.	11/2009	Th. Christopoulos	10/2011	Achaia Clauss Wine Co
Zafiropoulou V.	11/2008	N. Karamanos	11/2011	
Markellou Ch.	11/2009	N. Karamanos	11/2011	Pharmacovigilance & Medical Information, FarmaSyn S.A.
Kourtidis K.	11/2009	A. Theocharis	11/2011	
Smirlaki I.	11/2009	A. Aletras	11/2011	Karolinska Institutet, PhD student
Kaspiris I.	11/2008	D. Vynios	2/2012	Veterinary Service
Tserbini E.-I.	11/2009	D. Vynios	6/2012	PhD studies, UP
Kolliopoulos K.	11/2009	D. Vynios	10/2012	PhD studies, Sweden
Klaoudatos G.	11/2009	Th. Tsegenidis	10/2012	
Applied Biochemistry: Clinical Chemistry, Biotechnology, Evaluation of Pharmaceutical Products (29)				
Afratis N.	11/2010	N. Karamanos	4/2012	Postdoctoral Research Fellow at Weizmann Institute of Science, IL
Pepe A.-I.	11/2010	A. Theocharis	6/2012	University of Athens
Panoutsopoulos A.	11/2010	N. Karamanos	12/2012	PhD studies
Hatziri A.	11/2010	D. Vynios	2/2013	PhD studies
Rigga A.-E.	11/2010	D. Vynios	2/2013	
Mpouris P.	12/2011	N. Karamanos	6/2013	PhD studies
Giannou A.	11/2010	A. Aletras	1/2014	PhD studies
Piperigou Z.	12/2011	N. Karamanos	1/2014	PhD studies
Zadik M.	11/2012	A. Theocharis	7/2014	QC Lab Analyst at DEMO Pharmaceuticals S.A.
Almalioti F.	12/2012	A. Theocharis	11/2014	PhD studies
Kontoni A.	12/2012	D. Vynios	11/2014	

Karamanou K.	5/2014	D. Vynios	7/2015	PhD studies
Zora I.	12/2012	D. Vynios	10/2015	General Hospital of Patras
Kyriakopoulou A.	2/2014	N. Karamanos	11/2015	
Barbouri D.	2/2014	N. Karamanos	12/2015	PhD studies, Københavns Universitet
Sopaki-Valalaki A.	1/2015	A. Theocharis	4/2016	PhD studies
Zioutou K.	2/2014	N. Karamanos	5/2016	Medical student
Kontozi Th.	1/2015	A. Aletras	5/2016	State General Laboratory, Cyprus
Vasileiou S.	1/2015	D. Vynios	6/2016	PhD studies
Karalis Th.	3/2015	S. Skandalis	11/2016	PhD studies
Argyriou R.-Ch.	1/2015	N. Karamanos	12/2016	PhD studies
Manou D.	3/2015	A. Theocharis	11/2016	PhD studies
Dimopoulou D.	1/2015	N. Karamanos	1/2017	
Kolokotroni A.	1/2015	A. Theocharis	3/2017	B.S.R.C. Alexander Fleming, Depart. of Immunology
Voerakos I.	2/2014	A. Aletras	3/2017	
Papadimitriou S.	1/2015	A. Vlamis	3/2017	
Efstathiou V.	2/2014	A. Aletras	4/2017	
Christopoulou M.E.	3/2015	A. Aletras	5/2017	PhD studies
Katela M.	11/2015	D. Vynios	6/2017	

Appendix 2: MSc awarded in “Applied Biochemistry” (all years).



Appendix 3: Years required to complete MSc studies in “Applied Biochemistry” in the initial programme.



Appendix 3: Years required to complete MSc studies in “Applied Biochemistry” in the upgraded programme.

