

Dr Apostolis Koutinas (Associate Professor)

Diploma (Chemical Engineering), PhD (Biochemical Engineering)

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RESEARCH INTERESTS

- Expertise in biochemical engineering, industrial (white) biotechnology, biorefinery development, bioprocess design, techno-economic evaluation and life cycle assessment.
 - Development of integrated biorefineries utilising renewable resources including food processing and agro-industrial waste and by-product streams (e.g. biodiesel industry by-products, pulp & paper industry by-products, wine lees from wineries, waste streams from confectionery industries and bakeries, whey, organic fraction of municipal solid wastes).
 - Refining and bioconversion of renewable resources is implemented through integration of physical, chemical and biological processing for the production of value-added fractions (e.g. protein isolates, antioxidants), microbial oil, platform chemicals (e.g. succinic acid) and biopolymers (e.g. polyhydroxyalkanoates, bacterial cellulose).
 - Solid state bioconversions are optimised for enzyme consortia production with various applications (e.g. fermentation media production, purification of intracellular products).
 - Application of computer-aided design, modelling and costing studies to evaluate and optimise biorefinery concepts and microbial bioprocesses.
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Career Summary:

2019 – present Associate Professor in the DFSHN at AUA

2014 – 2019 Assistant Professor in the DFSHN at AUA

2009 – 2014 Lecturer in the DFSHN at AUA

2002 – 2007 Research Associate at the School of Chemical Engineering and Analytical Science (University of Manchester, formerly UMIST, UK) and UMIST

Qualifications:

1998 – 2002 PhD in Biochemical Engineering, UMIST, UK

1992 - 1997 Diploma in Chemical Engineering, University of Patras, Greece

Teaching Experience at AUA:

2017 – present *Laboratory of Food Engineering* (6th semester, undergraduate course, 2 h/week DFSHN, AUA)

2015 – present *Principles of Food Engineering* (3rd semester, undergraduate course, 12-15 h, DFSHN, AUA)

2007 – present *Plant Design and Equipment for the Food Industries* (5th semester, undergraduate course, 4 h/week, DFSHN, AUA)

2018 – present Teaching of the following modules in the MSc course entitled “*Food Science and Technology*” (DFSHN, AUA):

1. *Food Engineering* (1st semester, 10 h)

2. *Design of Food Processes, Bioprocesses and Biorefineries* (2nd semester, 4 h/week)

3. *Bioprocess and Biorefinery Engineering* (2nd semester, 4 h/week)

4. *Computer-Aided Bioprocess Optimisation* (2nd semester, 3 h/week)

2012 – 2018 Teaching of the following modules in the MSc course entitled “*Food Science and Technology and Human Nutrition*” (DFSHN, AUA):

1. *Industrial Biotechnology* (1st semester, 3 h)

2. *Valorisation of Renewable Resources* (2nd semester, 12 h)

3. *Computer-Aided Design of Bioprocesses & Biorefineries* (2nd semester, 30 h)

4. *Bioprocess and Biorefinery Engineering* (2nd semester, 18 h)

2009 – 2018 *Design of Industrial Processes – Techno-Economic Evaluation* (MSc course)

2008 – 2017 *Computer-Aided Modelling and Optimisation of Food Processes* (9th semester)

Supervision & co-supervision of postgraduate students / Collaboration with PDRAs

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| 2020 – present | Supervision of 5 PhD students and 4 MSc students at AUA |
| 2011 – present | 9 postdoctoral fellows (DFSHN, AUA, Greece) |
| 2012 – present | 7 graduated PhD students at DFSHN at AUA (supervisor), 1 graduated PhD student at the Department of Chemical Engineering at the University of Patras in Greece (co-supervisor) and 2 graduated PhD students at the Department of Physical Chemistry and Applied Thermodynamics at the University of Cordoba in Spain (co-supervisor) |
| 2010 – present | 29 graduated MSc Students at DFSHN at AUA (supervisor) |
| 2009 – present | Supervision of six undergraduate students in their last year research projects. |
| Jan – Sept 2010 | Supervision of the PhD student Dr Jimmy Andrés López Jiménez (Department of Chemical Engineering, PLAPIQUI - UNS – CONICET, Bahía Blanca, Buenos Aires – Argentina) during his one year research visit at AUA in the frame of a scholarship that was granted by the State Scholarship Foundation (Greece). |

Awards and distinctions:

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| 2014 – 2017 | Awarded a Special Visiting Researcher Fellowship under the Brazilian Scientific Mobility Program "Ciências sem Fronteiras" (Brazil) that took place in UFRJ in collaboration with Professor Denise Maria Guimarães Freire. |
| 2015 | B.BICE+ travel grant (€3000) awarded after the evaluation of competitive proposal submission (12 successful proposals among 115 submitted proposals). |
| 2006 | Awarded the Hanson Medal for 2006 from the <i>Institution of Chemical Engineers, IChemE</i> for the article: Campbell G et al. (July 2006) Biofuels – Cereal potential. <i>The Chemical Engineer</i> . Issue 781, 26-28. |

Reviewer, Editorial Board member and Guest Editor:

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| 2020 – present | Editor in the Biochemical Engineering Journal (Elsevier) |
| 2017 – 2019 | Deputy Editor in the Biochemical Engineering Journal (Elsevier) |
| 2014 – 2016 | Associate Editor in the Biochemical Engineering Journal (Elsevier) |
| 2018 | Guest Editor in the virtual special issue entitled <i>Sustainability Issues of By-Product and Waste Management Systems to Produce Building Material Commodities</i> in the Resources, Conservation and Recycling journal (Elsevier) |
| 2018 | Managing Guest Editor in the special issue entitled <i>Food Waste: Challenges and Opportunity for the Emerging Bio-Economy</i> in the Journal of Cleaner Production (Elsevier) |
| 2016 | Guest Editor in the special issue entitled <i>Advances in Biorefinery Engineering</i> in the Biochemical Engineering Journal (Elsevier) |
| 2002 – present | Reviewer of scientific articles in 16 peer-reviewed scientific journals and 5 international conferences |

Research Funding and Networking Activities (since 2011):

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| Jul – Sept 2020 | Industrial funding by American Process International LLC to develop a bioprocess using a genetically engineered yeast cultivated in a crude hydrolysate. Budget (AUA): €28.783 |
| 2020 – 2024 | LIFE19 ENV/IT/000004 , Ecofriendly multipurpose biobased products from municipal biowaste (LIFE EBP), Dr Koutinas is scientific coordinator for AUA, Budget (AUA): €303.495 |
| 2020 – 2023 | PRIMA , Enhancing diversity in Mediterranean cereal farming systems (CerealMed), Call: Multi-topic 2019, Dr Koutinas is scientific coordinator for AUA, Budget (AUA): €149.920 |
| 2020 – 2023 | Research-Create-Innovate , Production of sustainable biofuels and value-added products from municipal organic solid wastes of catering services (Brew2Bio, MIS 5071807), Project funded by the General Secretariat of Research and Technology (GSRT, Greece), Dr Koutinas is project coordinator, Budget (AUA): €339.485 |
| 2020 – 2023 | Research-Create-Innovate , Valorization of sugar-beet cultivation residues and by-products of sugar manufacturing process for the production of bio-based and biocomposite biodegradable packaging materials (Beet2Bioref, MIS 5069983), Project |

- funded by the General Secretariat of Research and Technology (GSRT, Greece), Dr Koutinas is scientific coordinator for AUA, Budget (AUA): €309.960
- 2020 – 2023 **EΠAvEK 2014-2020**, Development of innovative nanocellulose-reinforced composite wood products with advanced hydrophobic and antimicrobial properties (CELL4GLUE, T6YBΠ-00341), Project funded by the General Secretariat of Research and Technology (GSRT, Greece), Dr Koutinas participates as member of the scientific team of AUTH. Προϋπολογισμός (ΓΠΑ): €63.000
- 2019 – 2022 **China – Greece Bilateral R&D Cooperation**. Development and demonstration of key technologies for industrializable polyhydroxyalkanoates production from industrial and environmental waste streams (WASTES2PLASTICS, T7ΔKI-00100), Project funded by the General Secretariat of Research and Technology (GSRT, Greece), Dr Koutinas participates as member of the scientific team of FORTH/ICE-HT. Προϋπολογισμός (ΓΠΑ): €70.000
- 2018 – 2022 **COST Action CA17128**, *Establishment of a pan-european network on the sustainable valorisation of lignin*, Dr Koutinas is Leader of Working Group 5 focusing on Technical and sustainability aspects, LCA, market potential and implementation
- 2018 – 2021 **Operational Programme "Competitiveness, Entrepreneurship and Innovation" (NSRF 2014-2020)**, *Research Infrastructure on Food Bioprocessing Development and Innovation Exploitation* – Acronym: FOOD INNOVATION RI, Dr Koutinas is scientific coordinator for AUA, Budget (AUA): € 300.000
- 2018 – 2021 **Research-Create-Innovate**, *Exploitation of food industry by-products for the production of biogenic biodegradable active food packaging*, – Acronym: ΒΙΟΣΤΡΟΦΗ, Project funded from the General Secretariat of Research and Technology (GSRT, Greece), Dr Koutinas is scientific coordinator for AUA, Budget (AUA): € 204,350
- 2018 – 2021 **Research-Create-Innovate**, *Bioconversion of food industry wastes to biopolymers for packaging applications in a biorefinery concept*, – Acronym: Wastes-to-Biopolymers, Project funded from the GSRT (Greece), Dr Koutinas is scientific coordinator for AUA, Budget (AUA): € 160,015
- 2018 – 2021 **Research-Create-Innovate**, *Exploitation of cactus pear fruit and leaves focusing on innovative food applications* – Acronym: ExploreOpuntia, Dr Koutinas participates in AUA's research team, Budget (AUA): € 456,115
- 2017 – 2021 **Operational Programme "Competitiveness, Entrepreneurship and Innovation" (NSRF 2014-2020)**, *Research Infrastructure for Waste Valorization and Sustainable Management of Resources* – Acronym: INVALOR, Dr Koutinas is scientific coordinator for AUA, Budget (AUA): € 700.000
- 2017 – 2020 **Horizon 2020 / BBI-JU**, *Chemical building blocks from versatile MSW biorefinery* – Acronym: PERCAL (Topic: BBI-2016-R08), Dr Koutinas is scientific coordinator for AUA, Budget (AUA): €287.820
- 2017 - 2020 **Horizon 2020**, *Sustainability transition assessment and research of bio-based products* – Acronym: STAR-ProBio (Topic: BB-01-2016), Dr Koutinas participates in AUA's research team, Budget (AUA): €535.440
- 2017 - 2020 **LIFE16 ENV/IT/000179**, *Biogas and digestate with controlled ammonia content by a virtuous biowaste cycle with integrated biochemical processes* – Acronym: LIFECAB, Dr Koutinas is scientific coordinator for AUA, Budget (AUA): €164.985
- 2014 – 2017 **ENE2013-47769-R**. *Diseño de biorrefinería mediante la valorización de residuos del sector alimentario (Biorefinery design based on the valorisation of food industry waste)* Project Coordinator: Professor M. Pilar Dorado-Pérez (University of Cordoba, UoC), Dr Koutinas participate as member of UoC's scientific team. Funding body: Spanish Ministry of Economy and Competitiveness, Spain. Budget (UoC): €131.000 + VAT
- 2014 - 2017 **LIFE13 ENV/GR/000958**. *Development of an integrated strategy for reducing the carbon footprint in the food industry sector* – Acronym: LIFE FOODPRINT. Dr Koutinas is scientific coordinator for AUA. Budget (AUA): €50.000
- 2014 - 2015 **German – Greek Bilateral R&D Cooperation**. *New bioprocess for microbial oil from crude glycerol and cellulosic sugars* – Acronym: BIO4OIL, Scientific coordinator for

- AUA: Dr S. Papanikolaou. Funding body: General Secretariat for Research and Technology (Greece). Dr Koutinas participates as member of AUA's scientific team. Budget (AUA): €150.000
- 2014 – 2016 **Special Visiting Researcher Fellowship** - PVE (acronym of Pesquisador Visitante Especial in Portuguese) under the Brazilian Scientific Mobility Program "Ciências sem Fronteiras" (Process number: 313772/2013-4, National Council for Scientific and Technological Development of the Ministry of Science, Technology and Innovation (CNPq/MCTI)). Grant holder: Professor Denise Maria Guimarães Freire (UFRJ, Brazil). Total funding to the project: Real\$ 490.824,56. Total funding to the fellowship: Real\$ 126.000
- 2013 - 2016 *Production of hydrolase enzymes and bifunctional monomers (1,3-PDO, 2,3-BDO and fumaric acid) in order to produce petrochemicals* (project funded by Petrobras, Brazil). Project coordinator: Professor Denise Maria Guimarães Freire (Universidade Federal do Rio de Janeiro, Brazil), the Agricultural University of Athens is involved as subcontractor of UFRJ – Scientific coordinator for AUA: Dr A. Koutinas. Budget (AUA): €380.000
- 2013 – 2015 **11SYN-2-718**, *Novel formulations and nano-structures for enhancing the bioavailability of a bioactive compound. The case of emulsion production* – Acronym: Nonastru. Scientific coordinator for AUA: Dr I. Mantala. Funding body: General Secretariat for Research and Technology, (Greece), Dr Koutinas participates as member of AUA's scientific team. Budget (AUA): €405.000
- 2013 – 2017 **COST Action TD1203**, *Food waste valorisation for sustainable chemicals, materials & fuels (EUBis)*, Dr Koutinas was Leader of Working Group 2 focusing on Bioprocessing of food supply chain wastes
- 2012 – 2016 **FP7-KBBE (Project No 311935)**, *New tailor-made biopolymers produced from lignocellulosic sugars waste for highly demanding fire-resistant applications* – Acronym: BRIGIT (KBBE.2012.3.4-02: Biotechnology for novel biopolymers), Dr A. Koutinas is scientific coordinator for AUA, Budget (AUA): €427.740
- 2011 – 2014 **09SYN-81-715**, *Biorefinery development for the production of biodegradable polymers and value-added products from by-products of biodiesel production processes* – Acronym: Bioref, Dr Koutinas is scientific coordinator for AUA, Funding body: General Secretariat for Research and Technology (Greece), Budget (AUA): €211.200
- 2011 – 2014 **19SMES2009**, *Valorization of cheese dairy and winery wastes for the production of high added-value products*, Dr Koutinas is scientific coordinator for AUA, Funding body: General Secretariat for Research and Technology (Greece), Budget (AUA): €115.000
- 2011 – 2014 **09SYN-32-621**, *Development of novel bioprocesses for the production of biofuels from food industry waste streams* – Acronym: Nutri-Fuel, Dr Koutinas is scientific coordinator for AUA, Funding body: General Secretariat for Research and Technology (Greece), Budget (AUA): €171.600
- 2011 – 2014 **ENE2010-15159**, *Produccion de biocombustibles de segunda generacion a partir de aceite microbiano (Second generation biofuels from microbial oil)*. Project Coordinator: Professor M. Pilar Dorado-Pérez (University of Cordoba, UoC), Dr Koutinas participates as member of UoC's scientific team. Funding body: Spanish Ministry of Science and Education (Spain), Budget (UoC): €79.860 + VAT
- 2010 – 2014 **TEP-4994**, *Optimización integral del proceso de producción de biodiésel (Global optimization of the process for the production of biodiesel)*. Project Coordinator: Professor M. Pilar Dorado-Pérez (University of Cordoba, UoC), Dr Koutinas participates as member of UoC's scientific team. Funding body: Consejería de Innovación, Ciencia y Empresa, Junta de Andalucía, Spain, Budget (UoC): €311.167,68
- 2009 – 2012 Participation in the preparation of **2 successful scholarship applications** from the State Scholarship Foundation (GR).
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Selected publications (more than 135 publications in peer-reviewed scientific journals; 16 book chapters; 1 edited book; h-index 38 including self-citations based on scopus database):

- A1. Carmona-Cabello M, García IL, Sáez-Bastante J, ... **Koutinas AA**, Dorado MP. 2020. Food waste from restaurant sector – Characterization for biorefinery approach. *Bioresource Technology* 301, 122779
- A2. Aroniada M, Maina S, **Koutinas A**, Kookos IK. (*corresponding author*) 2020. Estimation of volumetric mass transfer coefficient (k_{LA})—Review of classical approaches and contribution of a novel methodology. *Biochemical Engineering Journal* 155, 107458.
- A3. Bonatsos N, Marazioti C, Moutousidi E, ... **Koutinas A**, Kookos IK. 2020. Techno-economic analysis and life cycle assessment of heterotrophic yeast-derived single cell oil production process. *Fuel* 264, 116839.
- A4. Dheskali E, **Koutinas AA**, Kookos IK. 2020. A simple and efficient model for calculating fixed capital investment and utilities consumption of large-scale biotransformation processes. *Biochemical Engineering Journal* 154, 107462.
- A5. Papadaki A, Kopsahelis N, Mallouchos A, Mandala I, **Koutinas AA**. (*corresponding author*) 2019. Bioprocess development for the production of novel oleogels from soybean and microbial oils. *Food Research International* 126, 108684.
- A6. Agueiras ECG, Papadaki A, Mallouchos A, ... Freire DMG, **Koutinas AA**. 2019. Enzymatic synthesis of bio-based wax esters from palm and soybean fatty acids using crude lipases produced on agricultural residues. *Industrial Crops and Products* 139: 111499.
- A7. Kookos IK, **Koutinas A**, Vlysidis A. 2019. Life cycle assessment of bioprocessing schemes for poly(3-hydroxybutyrate) production using soybean oil and sucrose as carbon sources. *Resources, Conservation and Recycling* 141: 317-328.
- A8. Maina S, Stylianiou E, ... Kookos IK, **Koutinas A**. (*corresponding author*) 2019. Improvement on bioprocess economics for 2,3-butanediol production from very high polarity cane sugar via optimisation of bioreactor operation. *Bioresource Technology* 274: 343-352.
- A9. Alexandri M, Vlysidis A, ..., Kookos IK, **Koutinas A**. (*corresponding author*) 2019. Downstream separation and purification of succinic acid from fermentation broths using spent sulphite liquor as feedstock. *Separation and Purification Technology* 209:666-675.
- A10. Papadaki A, Fernandes KV, ..., **Koutinas A**, Freire, D.M.G. (*corresponding author*) 2018. Bioprocess development for biolubricant production using microbial oil derived via fermentation from confectionery industry wastes. *Bioresource Technology* 267:311-318.
- A11. Ladakis D, Michailidi K, Vlysidis A, **Koutinas A**, Kookos IK. (*corresponding author*) 2018. Valorization of spent sulphite liquor for succinic acid production via continuous fermentation system. *Biochemical Engineering Journal* 137:262-272.
- A12. Andritsou V, De Melo EM, ..., **Koutinas AA**, Matharu AS. (*corresponding author*) 2018. Synthesis and characterization of bacterial cellulose from citrus-based sustainable resources. *ACS Omega* 3:10365-10373.
- A13. Kantifedaki A, Kachrimanidou V, Mallouchos A, Papanikolaou S, **Koutinas AA**. (*corresponding author*) 2018. Orange processing waste valorisation for the production of bio-based pigments using the fungal strains *Monascus purpureus* and *Penicillium purpurogenum*. *Journal of Cleaner Production* 185:882-890.
- A14. Fernandes KV, Papadaki A, ..., **Koutinas AA**, Freire DMG. (*corresponding author*) 2018. Enzymatic esterification of palm fatty-acid distillate for the production of polyol esters with biolubricant properties. *Industrial Crops and Products* 116:90-96.
- A15. Zabaniotou A, Kamaterou P, Kachrimanidou V, Vlysidis A, **Koutinas A**. 2018. Taking a reflexive TRL3-4 approach to sustainable use of sunflower meal for the transition from a mono-process pathway to a cascade biorefinery in the context of Circular Bioeconomy. *Journal of Cleaner Production* 172:4119-4129.
- A16. Kopsahelis N, Dimou C, ..., Kotseridis G, Papanikolaou S, Kookos KI, **Koutinas AA**. (*corresponding author*) 2017. Refining of wine lees and whey lactose for the production of ethanol, tartrate, antioxidant-rich extracts and microbial oil via fermentation. *Journal of Chemical Technology and Biotechnology* 93:257-268.

- A17. Papadaki A, Mallouchos A, ..., Papanikolaou S, **Koutinas AA**. (*corresponding author*) 2017. Production of wax esters via microbial oil synthesis from food industry waste and by-product streams. *Bioresource Technology* 245: 274-282
- A18. Alexandri M, Papapostolou H, Stragier L, Verstraete W, Papanikolaou S, **Koutinas AA**. 2017. Succinic acid production by immobilized cultures using spent sulphite liquor as fermentation medium. *Bioresource Technology*, 238: 214-222.
- A19. Dheskali E, Michailidi K, de Castro AM, **Koutinas AA**, Kookos IK. 2017. Optimal design of upstream processes in biotransformation technologies. *Bioresource Technology* 224: 509-514.
- A20. Paximada P, Echevoyen Y, **Koutinas AA**, Mandala IG, Lagaron JM. 2017. Encapsulation of hydrophilic and lipophilized catechin into nanoparticles through emulsion electrospraying. *Food Hydrocolloids* 64: 123-132.
- A21. Dimou C, Vlysidis A, Kopsahelis N, Papanikolaou S, **Koutinas AA**, Kookos IK. (*corresponding author*) 2016. Techno-economic evaluation of wine lees refining for the production of value-added products. *Biochemical Engineering Journal* 116:157-165.
- A22. Kachrimanidou V, ..., **Koutinas AA**. (*corresponding author*) 2016. Downstream separation of poly(hydroxyalkanoates) using crude enzyme consortia produced via solid state fermentation integrated in a biorefinery concept. *Food and Bioproducts Processing* 100:323-334.
- A23. Alexandri M, Papapostolou H, ..., Papanikolaou S, **Koutinas AA**. (*corresponding author*) 2016. Evaluation of an integrated biorefinery based on fractionation of spent sulphite liquor for the production of an antioxidant-rich extract, lignosulphonates and succinic acid. *Bioresource Technology* 214:504–513.
- A24. Bonatsos N, ..., **Koutinas AA**, Kookos IK. 2016 A mathematical programming formulation for biorefineries technology selection. *Biochemical Engineering Journal* 116:135–145.
- A25. Tsakona S, Skiadaresis AG, ..., Papanikolaou S, Kookos I K, **Koutinas AA**. (*corresponding author*) 2016. Valorisation of side streams from wheat milling and confectionery industries for consolidated production and extraction of microbial lipids. *Food Chemistry* 198:85–92.
- A26. **Koutinas AA**, Yopez B, Kopsahelis N, Freire DMG, Castro AM, Papanikolaou S, Kookos IK, 2016. Techno-economic evaluation of a complete bioprocess for 2,3-butanediol production from renewable resources. *Bioresource Technology* 204:55–64.
- A27. Lin CSK, **Koutinas AA**, ..., Pfaltzgraff LA, Clark JH, Papanikolaou S, Kwan TH, Luque R. 2014. Current and future trends in food waste valorization for the production of chemicals, materials and fuels: A global perspective. *Biofuels, Bioproducts and Biorefining* 8:686–715.
- A28. **Koutinas AA**, Vlysidis A, ..., Kookos IK, Papanikolaou S, Kwan TH, Lin CSK. 2014. Valorization of industrial waste and by-product streams via fermentation for the production of chemicals and biopolymers. *Chemical Society Reviews* 43:2587-2627.
- A29. **Koutinas AA**, Chatzifragkou A, Kopsahelis N, Papanikolaou S, Kookos IK. 2014. Design and techno-economic evaluation of microbial oil production as a renewable resource for biodiesel and oleochemical production. *Fuel* 116:566-577.
- A30. Lin CSK, Pfaltzgraff LA, Herrero-Davila L, Mubofu EB, Abderrahim S, Clark JH, **Koutinas A**, Kopsahelis N, Stamatelatou K, Dickson F, Thankappan S, Mohamed Z, Brocklesby R, Luque R. 2013. Food waste as a valuable resource for the production of chemicals, materials and fuels - Current situation and global perspective. *Energy and Environmental Science* 6:426-464.

Edited book

Κούκος Κ. Ιωάννης (Kookos K. Ioannis), Αποστόλης Α. Κουτίνας (**Apostolis A. Koutinas**). 2013. Βελτιστοποίηση Διεργασιών και Συστημάτων με εφαρμογές στο MATLAB και στο GAMS (Optimisation of processes and systems with applications in MATLAB and GAMS). Εκδόσεις Τζιόλα (Tziolas Publishing). ISBN: 978-960-418-415-6. *The book is written in Greek*

Invited presentations/lectures and awards in international conferences & universities

22 invited presentations/seminars/mini courses in virtual ESBES 2020, BERSTIC 2020 (Colombia), Universidad Nacional de Colombia sede Manizales in 2019 (Colombia), IBA-IFIBiop 2019 (Malaysia), Jiangnan University in 2018 and 2019 (Wuxi, China), University of York in 2018 (Department of Chemistry, UK), ENZITEC 2014 & 2018 (Brazil), University of Jaen in 2017

(Department of Chemical, Environmental and Material Engineering, Spain), Universidade Federal do Rio de Janeiro in 2014, 2015, 2016 and 2017 (Brazil), Bioprocessing India 2016, ICCB-2016 (VIT Vellore, India), ICSEPM-2016 (New Delhi, India), Total Food 2014 (UK), Instituto Nacional de Tecnologia - Ministério da Ciência, Tecnologia e Inovação in 2014 (Rio de Janeiro, Brazil), 2nd Iberoamerican Congress on Biorefineries 2013, Planta Piloto de Ingeniería Química (PLAPIQUI, Argentina) in 2011 and Universidad Nacional del Sur in 2011 (Bahia Blanca, Argentina)

7 best poster/oral presentation awards in students and postdoctoral researchers from my research group in the following conferences: IBA-IFIBIOP 2019, The International Graduate Symposium on Industrial Biotechnology (Wuxi, China) in 2019, 14th International Conference on Renewable Resources and Biorefineries (RRB14) in 2018, 10th World Congress of Chemical Engineering 2017, 4th International Conference on Sustainable Solid Waste Management 2016, WasteEng 2016 και Bioprocessing India 2016

7 invited presentations/seminars in workshops organised by renown research organisations including AIMPLAS in 2017 (Valencia, Spain), Unitelma – Sapienza in 2017 (Gela, Italy), Federal University of Rio de Janeiro in 2013, 2014, 2015 & 2016 (Brazil), and Petrobras in 2011 (Brazil).

8 Invitations to teach fast track MSc courses in the Universidad Nacional del Sur in 2011 (Argentina), in the University of Cordoba in 2013, 2014 & 2015 (Spain), and the Federal University of Rio de Janeiro in 2014, 2015, 2016 & 2018 (Brazil)
