السيرة الذاتية



الاسم والكنية: **يُمن السيد سليمان الأتاسي**

الجنسية: سوري

تاريخ الولادة: 7 كانون الثاني 1967

الوضع العائلي: متزوجة

العنوان الشخصي: الشقة 4، البناء 7، حي المنارة، برزة، دمشق

هاتف: أرضي 963115130545+، جوال 0994494323، 0944635350

العنوان الوظيفي: قسم الفيزياء التطبيقية

المعهد العالي للعلوم التطبيقية والتكنولوجيا

صندوق بريد: 31983، دمشق، سورية

البريد الإلكتروني: yomen.atassi@gmail.com

yomen.atassi@hiast.edu.sy

الشهادات العلمية:

1996–1993 دكتوراه في الكيمياء الفيزيائية من المدرسة الوطنية العليا لإعداد المدرسين ENS-Paris Saclay فرنسا، بدرجة مشرف جداً مع تهنئة لجنة الحكم.

1993–1992 شهادة دبلوم الدراسات المعمقة DEA في الكيمياء الفيزيائية الجزيئية من جامعة باريس الجنوبية وENS-Paris Saclay - المرتبة الأولى.

1991–1990 التبريز في تدريس الكيمياء (أعلى مسابقة في فرنسا لانتقاء المدرسين للمرحلتين الثانوية والجامعية الأولى). الترتيب السادس على مستوى فرنسا.

1989–1988 شهادة المتريز Maîtrise في الكيمياء الفيزيائية الجزيئية من جامعة باريس الجنوبية.

1988–1987 شهادة الليسانس Licence في الكيمياء الفيزيائية الجزيئية من جامعة باريس الجنوبية.

1987–1984 الدراسة في المعهد العالي للعلوم التطبيقية والتكنولوجيا. دمشق–سوريا.

الصفحات على الانترنت:

Google Scholar: h-index 32, i-index 57

Reserachgate https://www.researchgate.net/profile/Yomen-Atassi

Web of Science https://www.webofscience.com/wos/author/record/C-4973-2019

ORCID https://orcid.org/0000-0002-1338-4993

AD Scientific Index https://www.adscientificindex.com/scientist/yomen-atassi/489181

الزيارات العلمية

أيلول–كانون أول 2018 أستاذ زائر لمركز الأبحاث الوطنية الفرنسية، لإجراء أبحاث في مجال التقانة النانوية. CERMAV، غرنوبل– فرنسا.

Self-assembly of bio-sourced bloc copolymers: nanoparticles, cubosomes and nanocubes.

أيلول–تشرين أول 2017 أستاذ زائر لمركز الأبحاث الوطنية الفرنسية، لإجراء أبحاث في مجال التقانة النانوية. ENS-Cachan – فرنسا.

Preparation of sensors based on aggregation-induced emission.

أيلول–تشرين أول 2016 أستاذ زائر لمعهد ماكس بلانك لأبحاث البوليميرات، لإجراء أبحاث في مجال التقانة النانوية. Mainz، – ألمانيا.

Neural tissue engineering using electrospun nanofiber mats of polylactic acid and polypyrrole.

المسؤوليات الإدارية

- رئيس قسم الفيزياء، منذ عام **2023**.
- رئيسة مخبر المواد **(2006-2012)** ثم من عام **2020–**.
- رئيسة مجموعة البوليميرات، منذ عام **2009**.
- مسؤولة عن ماجيستير علوم وهندسة المواد في المعهد العالي للعلوم التطبيقية والتكنولوجيا، منذ عام **2008**.
- عضوة في اللجنة العلمية المركزية للأولمبياد العلمي السوري في الكيمياء منذ عام **2007**.
- رئيسة اللجنة العلمية المركزية للأولمبياد العلمي السوري في الكيمياء منذ عام **2019**.
- عضو مجلس الإدارة في مركز أبحاث العلاجات الحيوية **2022**.
- مساهمة في التأليف والتقويم لكتب الكيمياء في المركز الوطني لتطوير المناهج التربوية.

التاريخ الوظيفي:

- 2012- مديرة بحوث في المعهد العالي للعلوم التطبيقية والتكنولوجيا
- 2012–2003 باحث رئيسي في المعهد العالي للعلوم التطبيقية والتكنولوجيا
- 2003–1996 باحثة في المعهد العالي للعلوم التطبيقية والتكنولوجيا

الجوائز

تشرين الأول **2003 :** الجائزة الثانية للباحثين العرب الشباب في مجال التقانة النانوية. مقدمة من المدرسة العربية للعلوم والتكنولوجيا.

المنشورات والأوراق البحثية

I. مقالات محكمة عالمياً

1. "Process and operating temperature optimization for polysulfone hollow fiber membrane CO2/CH4 mixture separation via response surface methodology" R. Alqassar Bani Almarjeh, Y Atassi, *Mater. Sci: Mater Eng.* **21, 59 (2026**). https://doi.org/10.1186/s40712-026-00448-3

2. "Novel core-shell composite material based on polyacrylic acid salt and polyaniline for infrared camouflage applications" H.A. Ezzo, R. Alqassar Bani Almarjeh, Y Atassi, *Next Materials* **11 (2026)** 101942**.** https://doi.org/10.1016/j.nxmate.2026.101942.

3. "Novel core-shell composite material based on polyacrylic acid salt and polyaniline for infrared camouflage applications" H.A. Ezzo, R. Alqassar Bani Almarjeh, Y Atassi, *Scientific Reports* **16 (2026)** 1353**.** https://doi.org/10.1038/s41598-025-30985-4.

4. "Novel Sandwich Structure of Electrospun PLA Calixarene Nanofiber Membranes for Improved Heavy Metal Ion Removal Performance" Y. Chiha, R. Alqassar Bani Almarjeh, Y Atassi, *Scientific Reports* **15 (2025)** 32728. https://doi.org/10.1038/s41598-025-18266-6.

5. "Enhancing gas separation efficiency: A comprehensive experimental database for AI-driven modeling of polymeric hollow-fiber membranes" R. Alqassar Bani Almarjeh, Y Atassi, *Next Research* 2**(2025)** 100417 https://doi.org/10.1016/j.nexres.2025.100417

6. "Boosting polymeric hollow-fiber membrane gas separation process by evaluating its performance utilizing AI algorithms" R. Alqassar Bani Almarjeh, Y Atassi, *Separation Science and Technology* **(2025)** https://doi.org/10.1080/01496395.2025.2537706

7. "Development of an innovative cost-effective hemostatic material based on electrospun polyacrylonitrile/exfoliated bentonite/calcium chloride nanocomposite" B. Sakr, R. Alqassar Bani Almarjeh, Y Atassi, *Scientific Reports* **(2025)** 15795 https://doi.org/10.1038/s41598-025-00569-3

1. "The role of polysiloxane and nano-additives in improving hydrophobicity, adhesion, corrosion resistance, and fouling prevention of epoxy marine coatings"N. Al-dawood R. Alqassar Bani Almarjeh, Y Atassi, Y. Johar, *Polymer Bulletin* 82**(2025)** 5743–5769 https://doi.org/10.1007/s00289-025-05763-x

2. "Synergistic effect of calcium chloride as coagulant and (chitosan-graft-polyacrylamide) as flocculant for anionic dyes removal from wastewater" B Ali, HA Ezzo, S Karam, M Said, Y Atassi, *Polymer Bulletin* 82 **(2025)** 3805–3822 https://doi.org/10.1007/s00289-025-05663-0

3. "An Improved Permeation Model for Solution–Diffusion-Based Hollow Fiber Gas Separation Membrane: Implementation and Analysis" R. Alqassar Bani Almarjeh, J. Y. Juang Yeo, Y. Atassi, S.S. Hosseini, J. Sunarso, *Asia-Pacific Journal of Chemical Engineering* 20 **(2025)** e3182 https://doi.org/10.1002/apj.3182

4. "Synthesis and evaluation of new tetrapyrrole derivatives with photodynamic anti-tumor effects" Y. Jiang, H.Y. Liang, Y.J. Zhang, G.H. Han, T. Namulinda, Y.J. Yan, S. Karam, Y. Atassi, X.P. Zhou, Z.L. Chen, *Dyes and Pigments*, **230 (2024),** 112360. https://doi.org/10.1016/j.dyepig.2024.112360

5. "Synthesis and evaluation of 5,15-diaryltetrabenzoporphyrins as photosensitizers for photo-diagnosis and photodynamic activity of tumors" L. Mi, Y.J. Yan, M.Y. Li, T. Xu, T. Namulinda, G.A. Meerovich, I.V. Reshetov, E.A. Kogan, Y. Atassi, Z.L. Chen, *Bioorganic Chemistry*, **151 (2024),** 107710. https://doi.org/10.1016/j.bioorg.2024.107710

6. "pH-Responsive Photinia Glabra–Zinc Oxide–Protoporphyrin IX Nanoconjugates With Enhanced Cellular Uptake for Photodynamic Therapy Towards Cancer Cells" T.Namulinda, Y. Yan, L.H. Wang, Y. Qiu, H. Jin, J. Kwetegyeka, I. Gulula, Y. Atassi, S. Karam, Z.L. Chen, Z. L., *Nanomedicine,* **19**(2) **(2024),** 127–143. https://doi.org/10.2217/nnm-2023-0242

7. "Preparation of a controlled drug release system from semi-interpenetrating polymeric network hydrogel of NaAlg-g-poly(NaA)/PVP" A. Shikhani, Y. Atassi, M. Tally, R. Bandakji, *Journal of Polymer Research* **30** (371) **(2023)** 1-17 https://doi.org/10.1007/s10965-023-03750-2

8. "Preparation of biodegradable and biocompatible chitosan-grafted polylactic acid hydrogel as a hemostatic system" A. Shikhani, S. Karam, M. Said, Y. Atassi, H. Sarhan, *Journal of Polymer Research* **29** (10) **(2022)** 1-17 https://doi.org/10.1007/s10965-022-03258-1

9. "Tailoring the Morphology and Performance of Polyacrylonitrile Ultrafiltration Membranes for Produced Water Treatment via Solvent Mixture Strategy" N. Naderi, S. Saeid Hosseini, Y.Atassi **45** (9)**(2022)**1655-1665 https://doi.org/10.1002/ceat.202100638

10. "New approach for starch dialdehyde preparation using microwave irradiation for removal of heavy metal ions from water" A. Wannous, S. Milaneh, M. Said, Y. Atassi, *SN Applied Sciences*, **4(5),** 133 (**2022**) https://doi.org/10.1007/s42452-022-05024-w

11. "Preparation of separable MnFe2O4/ZnO/CQDs as a visible light photocatalyst for Gentamicin treatment" M. Rahal, Y. Atassi, I. Alghoraibi, *Materials Chemistry and Physics* **286 (2022)** 126123. https://doi.org/10.1016/j.matchemphys.2022.126123

12. "Boosted microwave dissipation performance via integration of magneto/dielectric particles with hierarchical 3D morphology in bilayer absorber" M. Jafarian, S. Bozorg, A. Amadeh, Y. Atassi, *Journal of Magnetism and Magnetic Materials* **539 (2021)** 168363. https://doi.org/10.1016/j.jmmm.2021.168363

13. "Hierarchical brain-coral-like structure (3D) *vs* rod-like structure (1D): Effect on electromagnetic wave loss features of SrFe12O19 and CoFe2O4" M. Jafarian, S. Bozorg, A. Amadeh, Y. Atassi, *Ceramics International* **47 (21) (2021)** 30448-30458. https://doi.org/10.1016/j.ceramint.2021.07.224

14. "Enhancement of removal efficiency of heavy metal ions by polyaniline deposition on electrospun polyacrylonitrile membranes" N. Mohammad, Y. Atassi, *Water Sciences and Engineering,* **14 (2021)129-138** https://doi.org/10.1016/j.wse.2021.06.004

15. "Hemostatic wound dressings based on drug loaded electrospun PLLA nanofibrous mats" S. Nasser, M. Ibrahim, Y. Atassi, *Materials Chemistry and Physics* **267 (2021)**. 124686 https://doi.org/10.1016/j.matchemphys.2021.124686

16. "Quenching photoluminescence of Carbon Quantum Dots for detecting and tracking the release of Minocycline" M. Rahal, Y. Atassi, I. Alghoraibi, *Journal of Photochemistry and Photobiology A: Chemistry* **412 (2021)**. 113257 https://doi.org/10.1016/j.jphotochem.2021.113257

17. "Nano-architectured NiO shell vs 3D microflowers morphology toward enhancement of magneto-electric loss in mesoporous magneto-electric composite" M. Jafarian, S. Bozorg, A. Amadeh, Y. Atassi, *Ceramics International* **(2021)**. https://doi.org/10.1016/j.ceramint.2021.04.069

18. "Microwave absorbing properties of ferrites and their composites: A review" A Houbi, Z A.Aldashevich, Y. Atassi, *Journal of Magnetism and Magnetic Materials* **529 (2021)** 167839. https://doi.org/10.1016/j.jmmm.2021.167839

19. "An Ecofriendly, Cost-effective, Lightweight Microwave Absorber Based on Waste Toner" H. Habib, Y. Atassi, A. Salloum, N. Nasser, M. Jafarian. *Journal of Electronic Materials* **(2021)**. https://doi.org/10.1007/s11664-020-08679-6.

20. "In-Vitro Ibuprofen Release Monitoring Using Carbon Quantum Dots" H. Hassan, R. Alqassar, Y. Atassi. *Journal of Fluorescence* **(2021)**. https://doi.org/10.1007/s10895-020-02659-z.

21. "TiO2/PLLA Electrospun Nanofibers Membranes for Efficient Removal of Methylene Blue Using Sunlight" N. Mohammad, Y. Atassi, *Journal of Polymers and the Environment,* **29 (2021)** 509–519. https://doi.org/10.1007/s10924-020-01895-5

22. "Mesoporous carbon decorated with FeCoNi/polyaniline/polypyrrole towards lightweight and efficient microwave absorption coating" Y. Atassi, X. Fun. *Journal of Materials Science: Materials in Electronics* **24 (2020)**. DOI 10.1007/s10854-020-04698-5.

23. "Adsorption of methylene blue onto electrospun nanofibrous membranes of polylactic acid and polyacrylonitrile coated with chloride doped polyaniline" N. Mohammad, Y. Atassi, *Scientific Reports*, **10 (2020)** 13412. https://doi.org/10.1038/s41598-020-69825-y

24. "Novel microwave absorbers based on polypyrrole and carbon quantum dots" M. Rahal, Y. Atassi, N. Nasser Ali, I. Alghoraibi. *Materials Chemistry and Physics*, **255 (2020)** 123491. https://doi.org/10.1016/j.matchemphys.2020.123491

25. "Design of ternary-component X-band microwave absorber based on FeCo/Sr hexaferrite/PANI nanocomposite in silicon resin matrix" Z. Jing, R. Qinghong, Y. Atassi. *Journal of Magnetism and Magnetic Materials*, **512 (2020)** 167037. DOI: https://doi.org/10.1016/j.jmmm.2020.167037

26. "Novel nitrogen-doped carbon dots prepared under microwave-irradiation for highly sensitive detection of mercury ions" A. Ghanem, R. Al-Qassar and Y. Atassi. *Heliyon*, **6(2020)** e03750. https://www.sciencedirect.com/science/article/pii/S2405844020305958, https://doi.org/10.1016/j.heliyon.2020.e03750

27. "Tuning the impedance matching characteristics of microwave absorbing paint in X-band using copper particles and polypyrrole coating" Q. Gu, M. Jafarian, S. S. S. Afghahi, Y. Atassi and R Al-Qassar. *Materials Research Bulletin*, **125(2020)** 110780. https://doi.org/10.1016/j.materresbull.2020.110780

28. "Remarkable microwave absorption efficiency of low loading ratio of $Ni_{0.25}Co_{0.25}Ti_{0.5}Fe_2O_4$/$SrCoTiFe_{10}O_{19}$/Cu composite coated with polyprrole within polyurethane matrix" D. Xu, M. Jafarian, S. S. S. Afghahi, Y. Atassi and R Al-Qassar. *Materials Research Express*, **7 (2020)** 016103. https://doi.org/10.1088/2053-1591/ab62f1..

29. "Preparation and characterization of a flexible microwave absorber based on MnNiZn ferrite ($Mn_{0.1}Ni_{0.45}Zn_{0.45}Fe_2O_4$) in a thermoset polyurethane matrix" M. Khadour, Y. Atassi and M Abdallah. *SN Applied Sciences*, 2, **236 (2020)**. https://doi.org/10.1007/s42452-020-2004-0

30. "Promoting the Microwave Absorption Characteristics in the X Band using Core-Shell Structures of Cu Metal Particles/PPy and hexaferrite/PPy" M. Jafarian, S. S. S. Afghahi, Y. Atassi and A Loriamini. *Journal of* Magnetism *and Magnetic Materials*, **493 (2020)**165680. https://doi.org/10.1016/j.jmmm.2019.165680.

31. "Synthesis and characterization of chitosan-g-poly(AMPS-co-AA-co-AM)/ground basalt composite hydrogel: antibacterial activity" Y. Atassi, M. Said, M. Tally and L. Kouba. Polymer Bulletin **77 (2020)** 5281–5302. https://doi.org/10.1007/s00289-019-03017-1

32. "Adsorption of methyl orange onto electrospun nanofiber membranes of PLLA coated with pTSA-PANI" R. Al Qassar,Y. Atassi, N. Mohammad, Y. Badour. *Environmental Science and Pollution Research*, **26 (2019)** 37282. https://doi.org/10.1007/s11356-019-06654-1.

33. "New insights on microwave absorption characteristics of magnetodielectric powders: Effect of matrix chemical nature and loading percentage" M. Jafarian, S. S. S. Afghahi, Y. Atassi and A Sabzi. *Journal of Magnetism and Magnetic Materials*, **492(2019)** 165624. https://doi.org/10.1016/j.jmmm.2019.165624.

34. "Lightweight broadband microwave absorbers of core-shell (Polypyrrole/NiZn Ferrite) nanocomposites in the X-band: Insights on interfacial polarization" N. Ali, Y. Atassi, A. Salloum, A. Malki, M. Jafarian, R. Al-Qassar Bani Al-Marjeh. *Journal of Materials Science: Materials in Electronics*, **30(2019)** 6876–6887. https://doi.org/10.1007/s10854-019-01002-y.

35. "Insights on the design of a novel multicomponent microwave absorber based on $SrFe_{10}Al_2O_{19}$ and $Ni_{0.5}Zn_{0.5}Fe_2O_4$/MWCNTs/polypyrrole" M. Jafarian, S. S. S. Afghahi, Y. Atassi and M Salehi. *Journal of Magnetism and Magnetic Materials*, **471(2019)** 30–38. https://doi.org/10.1016/j.jmmm.2018.09.047.

36. "Aligned electrospun nanofiber poly(lactic acid) mats coated with conductive polyaniline: Anisotropy of electrical conductivity" M. Al-Jallad and Y. Atassi. *Journal of electrostatics*, **96(2018)** 69–75. https://doi.org/10.1016/j.elstat.2018.10.005.

37. "Environmentally Friendly Chitosan-g-poly(acrylic acid-co-acrylamide)/Ground Basalt Superabsorbent Composite for Agricultural Applications". M. Said, Y. Atassi M. Tally and H. Khatib. *Journal of Polymers and the Environment,* **26(2018)**:3937-3948 https://doi.org/10.1007/s10924-018-1269-5.

38. "Enhanced microwave absorption characteristics of nanocomposite based on hollow carbonyl iron microspheres and polyaniline decorated with MWCNTs" M. Jafarian, S. S. S. Afghahi, Y. Atassi and M Salehi. *Journal of Magnetism and Magnetic Materials*, **462(2018)** 153–159. https://doi.org/10.1016/j.jmmm.2018.04.061.

39. "Comparative study of microwave absorption characteristics of (Polyaniline/NiZn Ferrite) nanocomposites with different ferrite percentages" N N Ali, Y. Atassi, A. Salloum, A. Malki, M. Jafarian. *Materials Chemistry and Physics*, **211(2018)** 79-87. DOI: 10.1016/j.matchemphys.2018.02.017.

40. "Up-Scalable Synthesis of High Porous Superabsorbent Polymer via Alkaline Hydrolysis of Acrylamide using Microwave Irradiation: Application in Agriculture". H. Kalaleh and Y. Atassi. *Journal of Materials and Environmental Sciences,* **9(2018)** 955-963. https://doi.org/10.26872/jmes.2018.9.3.106 .

41. "Design of lightweight broadband microwave absorbers in the X-band based on (polyaniline/MnNiZn ferrite) nanocomposites" N. Ali, R. Al-Qassar Bani Al-Marjeh, Y. Atassi, A. Salloum, A. Malki, M. Jafarian. *Journal of Magnetism and Magnetic Materials*, **453(2018)** 53-61. DOI: https://doi.org/10.1016/j.jmmm.2018.01.014.

42. "Synthesis of Calcium Titanate Powder with Hollow Square Based Prism Morphology via One-Step Surfactant Free Hydrothermal Method: Temperature Effect and Optical Properties". S. S. S. Afghahi, M. Jafarian, S. Zargari and Y. Atassi. *Transactions of the Indian Ceramic Society.* **76 (2017) 1-5** DOI: 10.1080/0371750X.2017.1374213.

43. "Electromagnetic properties of absorber fabric coated with $BaFe_{12}O_{19}$/MWCNTs/PANi nanocomposite in X and Ku bands frequency" A. Afzali, V. Mottaghitalab, S.S. Afghahi, M. Jafarian and Y. Atassi. *Journal of Magnetism and Magnetic Materials*, **442**(**2017**) 224-230. DOI: 10.1016/j.jmmm.2017.06.119.

44. "Synthesis and swelling behavior of metal-chelating superabsorbent hydrogels based on sodium alginate-*g*-poly(AMPS-*co*-AA-*co*-AM) obtained under microwave irradiation" N. Mohammad Y. Atassi and M. Tally. *Polymer Bulletin,* **74(2017)** 4453–4481 DOI :10.1007/s00289-017-1967-5.

45. "Single and double-layer composite microwave absorbers with hexaferrite BaZn0.6Zr0.3X0.3Fe10.8O19 (X=Ti, Ce, Sn) powders". S.S. Afghahi, M. Jafarian, Y. Atassi and C. Stergiou. Materials Chemistry and Physics, **186(2017)** 584-591. DOI: 10.1016/j.matchemphys.2016.11.039.

46. "Synthesis, Characterization and Microwave Characteristics of Ternary Nanocomposite of multiwalled carbon nanotubes/substituted strontium ferrite/polyaniline". S.S. Afghahi, R. Peymanfar, S. Javanshir, Y. Atassi and M. Jafarian. *Journal of Magnetism and Magnetic Materials*, **423**(**2017**) 152-57. DOI: 10.1016/j.jmmm.2016.09.082.

47. "Improvement of the performance of microwave X band absorbers based on pure and doped Ba-hexaferrite". S.S. Afghahi, M. Jafarian, Mohsen Salehi and Y. Atassi. *Journal of Magnetism and Magnetic Materials*, **421**(**2017**) 340-348. DOI:10.1016/j.jmmm.2016.08.042.

48. "Optimizing Cr3+ concentration and evaluating energy transfer from Cr3+ to Nd3+ in Cr,Nd:GGG nanocrystals prepared by sol gel method". Y. Alshikh Mohamad, Y. Atassi and Z. Moussa. Journal of Rare Earths, **34 (2016)** 1077-1082. DOI: 10.1016/S1002-0721(16)60137-0

49. "A promising lightweight multicomponent microwave absorber based on doped barium hexaferrite/calcium titanate/multiwalled carbon nanotubes". S.S. Afghahi, M. Jafarian and Y. Atassi. Journal of Nanoparticule Research, **18(2016)** 192-203. DOI: 10.1007/s11051-016-3499-6 .

50. "Novel approach for designing a thin and broadband microwave absorber in Ku band based on substituted M-hexaferrites". S.S. Afghahi, M. Jafarian and Y. Atassi. *Journal of Magnetism and Magnetic Materials*, **419**(**2016**) 62-67. DOI:10.1016/j.jmmm.2016.06.003.

51. "Preparation of Nonwoven Mats of Electrospun Poly(lactic acid)/Polyaniline Blend Nanofibers: a New Approach". M. Jallad and Y. Atassi. *Journal of Applied Polymer Science*, **133**(**2016**) 43687-43696, DOI: 10.1002/app.43687.

52. "Synthesis and characterization of pH-sensitive superabsorbent hydrogels based on sodium alginate-g-poly(acrylic acid-co-acrylamide) obtained via an anionic surfactant micelle

templating under microwave irradiation". M. Tally and Y. Atassi. *Polymer Bulletin,* **73**(**2016**) 3183-3208 DOI 10.1007/s00289-016-1649-8.

53. "A new multicomponent material based on carbonyl iron/carbon nanofiber/lanthanum–strontium–manganite as microwave absorbers in the range of 8–12 GHz". S.S. Afghahi, A. Mirzazadeh, M. Jafarian and Y. Atassi. *Ceramics International*, **42**(**2016**) 9697-9702. DOI: 10.1016/j.ceramint.2016.03.058

54. "Microstructural and magnetic studies on $BaMg_xZn_xX_{2x}Fe_{12-4x}O_{19}$ (X=Zr,Ce,Sn) prepared via mechanical activation method to act as a microwave absorber in X-band". S.S. Afghahi, M. Jafarian and Y. Atassi. *Journal of Magnetism and Magnetic Materials*, **406**(**2016**) 184-191. DOI:10.1016/j.jmmm.2016.01.020.

55. "Optimization of the preparation of Bentonite-*g*-Poly(acrylate-*co*-acrylamide) superabsorbent polymer composite for agricultural applications". H. Kalaleh, M. Tally and Y. Atassi. *Polymer Science Series B,* **57**(6) (**2015**) 750-758. DOI: S1560090415060081.

56. "Optimized Synthesis and swelling properties of a pH-sensitive semi-IPN superabsorbent polymer based on sodium alginates-*g*-poly (acrylic acid-*co*-acrylamide) and polyvinylpyrrolidone and obtained via microwave irradiation". M. Tally and Y. Atassi. *Journal of Polymer Research,* **22**, no. 9 (**2015**) 1-13. DOI: 10.1007/s10965-015-0822-3.

57. "New synthesis parameters of GGG:Nd nanocrystalline powder prepared by sol-gel method: Structural and Spectroscopic investigation". Y. Alshikh Mohamad, Y. Atassi and Z. Moussa. *Journal of Luminescence*, **165** (**2015**) 1-5. DOI:10.1016/j.jlumin.2015.04.005.

58. "Oxidative solution polymerization of aniline hydrochloride onto electrospun nano-fibers mats of polyalactic acid: Preparation method and characterization". M. Jallad, Y. Atassi and E. Mounif. *Journal of Applied Polymer Science*, **132**, no. 11 (**2015**) 3426-3432. DOI: 10.1002/app.41618.

59. "Preparation of a clay based superabsorbent polymer composite of copolymer poly(acrylate-co-acrylamide) with bentonite via microwave radiation". H. Kalaleh, M. Tally and Y. Atassi. *Research& Reviews in polymers*, **4**, no. 4 (**2013**)145-150. arXiv:1311.6445v1 [cond-mat.mtrl-sci].

60. "Low sintering temperature of Mg-Cu-Zn ferrites prepared by the citrate precursor method". Y. Atassi and M. Tally. *Journal of the Iranian Chemical Society*, **3**, no. 3(**2006**)242-246, DOI: 10.1007/BF03247214.

61. "Sintering temperature effect on electrical conductivity and initial permeability of $Mg_{0.6-x}Cu_xZn_{0.4}Fe_2O_4$". Tawfik, Y. Atassi and I. Seyd Darwish. *Latvian Journal of Physics and Technical Sciences*, **3**(**2005**)68-74.

62. "On calorimetry by optical beam deflection method". A. Salloum and Y. Atassi. *Thermochimica Acta*, **409**, no 1(**2004**)87-93(7), DOI: 10.1016/S0040-6031(03)00330-7.

63. "Novel applications of photochromes in polymers". J. A. Delaire, J.-F. Delouis, K. Nakatani, Y. Atassi and J. Chauvin. *Photonics Science News*, **5**, no. 3 (**2000**) 130-143.

64. "The second-order nonlinear optical properties of a series of polyesters containing push-pull azobenzene chromophore in their side chain". Y. Shen, L. Qiu, Z. Li, X. Zhang, Y. Zhao, J. A. Delaire, K. Nakatani and Y. Atassi. *Journal of materials Science*, **34** (1999) 1513-1517 DOI: 10.1023/A:1004556011600.

65. "Photoinduced manipulations of photochromes in polymers: Anisotropy, modulation of the NLO properties and creation of surface gratings". Y. Atassi, J. Chauvin, J. Delaire, J. F. Delouis, I. Fanton-Maltey and K. Nakatani. *Pure & Appl. Chem.*, **70**, no. 11 (1998) 2157-2166 DOI: 10.1351/pac199870112157.

66. "Reversible photoinduced modifications of polymers doped with photochromes: anisotropy, photo-assisted poling and surface gratings". Y. Atassi, J. Chauvin, J. Delaire, J. F. Delouis, I. Fanton-Maltey and K. Nakatani. *Molecular Crystals and Liquid Crystals*, **315** (**1998**) 11-22 DOI: 10.1080/10587259808044304.

67. "SHG of organic photochromes in polymer matrix: photoassisted poling and photo-switching". K. Nakatani, Y. Atassi and J. A. Delaire, In *Poled Polymers and their Applications to SHG and EO Devices*, S. Miyata & H. Sasabe eds., Advances in Nonlinear Optics, Vol. **4**, Gordon & Breach Science Publishers, Amesterdam, (**1997**) 257-274.

68. "SHG of organic photochromes in polymer matrix: photo-assisted poling and photo-switching". K. Nakatani, Y. Atassi and J. A. Delaire. *Nonlinear Optics,* **15** (**1996**) 351-358.

69. "Photoassisted poling and photoswitching of second order NLO properties of photochromes in polymers". J. A. Delaire, Y. Atassi, I. Maltey and K. Nakatani. *Pure and Applied Optics*: *Journal of the European Optical Society* Part A, **5** (**1996**) 529-540 DOI: 10.1088/0963-9659/5/5/008.

70. "Coupling between photochromism and second harmonic generation in spiropyran-and spirooxazine- doped polymer films". Y. Atassi, J. A. Delaire and K. Nakatani. *Journal of Physical Chemistry*, **99**, no. 44 (**1995**) 16320-16326. DOI: 10.1021/j100044a019.

71. "Photoinduced electric field poling of NLO chromophores in polymer films". J. A. Delaire, Y. Atassi, R. Loucif-Saibi and K. Nakatani. *Nonlinear Optics*, **9** (**1995**) 317-325

72. "Orientation photo induite sous champ électrique de chromophores pour l'optique non linéaire dans des films de polymères". J. A. Delaire, K. Nakatani, R. Loucif-Saibi and Y. Atassi. *L'onde Electrique*, **74**, no. 6 (**1994**) 16-20.

73. "Room temperature electric field assisted photoinduced orientation of photomerocyanines in a polymethylmethacrylate matrix and second harmonic generation". K. Nakatani, Y. Atassi, J. A. Delaire and R. Guglielmetti. *Nonlinear Optics*, **8** (**1994**) 33-36.

74. "Photoassisted poling of photochromic and optically nonlinear molecules in polymer thin films". Y. Atassi, R. Loucif-Saibi, K. Nakatani and J. A. Delaire. *Molecular Crystals and Liquid Crystals*, **246** (**1994**) 355-358 DOI: 10.1080/10587259408037843.

8. مقالات أكاديمية أخرى

1. "Preparation and in-vitro evaluation of PLLA nanofiber scaffolds loaded by Azithromycin and/or Lidocaine HCl", L. Fateh, S. Waiss, Y. Atassi, R. Al Qassar and M. Othman. A*rab Journal of Pharmaceutical Sciences* ISSN 1683 - 0369, **6** (1)(**2019**) 34-49.
2. "Antimicrobial Chitosan-g-poly(AMPS-co-AA-co-AM)/Ground Basalt Composite Hydrogel: Synthesis and Characterization", M. Said, Y. Atassi, M. Tally, M. Kattan and L. Kouba. DOI: 10.26434/chemrxiv.6233393, (**2018**).
3. " Formulation and biodegradation of polymer blend based on low density polyethylene with starch and compatibilizers", Y. Atassi, N. Aldawood, *Tishreen University Journal for Research and Scientific Studies - Basic Sciences Series* **40** (5) (**2018**) 51-63.
4. Formulation and biodegradation of polymer blend based on low density polyethylene with starch and compatibilizers
5. "Preparation of poly(sodium acrylate-co-acrylamide) superabsorbent copolymer via alkaline hydrolysis of acrylamide using microwave irradiation", H. Kalaleh, M. Tally and Y. Atassi. arXiv:1502.03639 [cond-mat.mtrl-sci], (**2015**).
6. "Preparation and Characterization of Nano-particle Substituted Barium Hexaferrite". Y. Atassi, I. Seyd Darwich and M. Tally. arXiv:1404.1573 [physics.chem-ph], (**2014**).
7. "Preparation of a clay based superabsorbent polymer composite of copolymer poly(acrylate-co-acrylamide) with bentonite via microwave radiation ". Y. Atassi and M. Tally. arXiv:1311.6445 [cond-mat.mtrl-sci], (**2013**).
8. "Electrochemical polymerization of anilinium hydrochloride". Y. Atassi and M. Tally. arXiv:1307.5668 [cond-mat.mtrl-sci], (**2013**).
9. "Synthesis and characterization of chloride doped polyaniline by bulk oxidative chemical polymerization. Doping effect on electrical conductivity". Y. Atassi, M. Tally and M Ismail. arXiv:0809.3552 [cond-mat.mtrl-sci], (**2008**).

9. أوراق قصيرة ومؤتمرات

1. *Nanotechnology at the Service of Medicine.* Y. Atassi. Conference Molecular Genetics and its Clinical Applications (Syria), 12-14 June 2024.
2. *Nanotechnology in Medical Diagnosis and Therapeutics.* Y. Atassi. Conference on Molecular Pathology and its Clinical Applications (Syria), 8-10 August 2022.
3. *Implementation of Nanotechnology at HIAST.* Y. Atassi. Workshop on Challenges and Innovations in Nanotechnology (Syria), 18-19 December 2019.
4. *Applications of Nanotechnology in Medicine and Pharmacy.* Y. Atassi. First Scientific Conference of Syrian Researchers Expats (Syria), 6-8 August 2019.

5. *Nanotechnology in the field of Medicine.* Y. Atassi. Conference on Molecular Pathology (Syria), 15–17 June 2019.

6. *Synthesis and Characterization of Electro-polymerized chloride doped polyaniline.* Y. Atassi. First Conference of Chemistry, Damascus (Syria), October 2010.

5. *Preparation and Characterization of Mg-Cu-Zn ferrites by wet chemical methods.* Y. Atassi. Scientific research outlook & technology development in the Arab world, Damascus (Syria), December 2006.

6. *Synthesis and characterization of chloride doped polyaniline and pTSA polyaniline by bulk oxidative chemical polymerization.* Y. Atassi, E. Mounif and I. Seyd Darwish. Nanotechnology and Microtechnology, Arab School for Science and Technology (ASST), Damascus (Syria), October 2003.

7. *Nano-particle barium hexaferrite for high density magnetic recording.* Y. Atassi and I. Seyd Darwish. Nanotechnology and microtechnology, Arab School for Science and Technology (ASST), Damascus (Syria), October 2003.

8. *Photo-Switching of Second Order Nonlinear Optical Properties by Photochromism: from Microscopic Scale to Macroscopic Scale.* K. Nakatani, F. Poineau, J. Chauvin, Y. Atassi, I. Fanton-Maltey, J. A. Delaire and M. Irie.The 3rd NIMC International Symposium on Photoreaction Control and Photofunctional Materials, Tsukuba (Japan), Mars 2000.

9. *Photoinduced manipulations of photochromes in polymers: Anisotropy, modulation of the NLO properties and creation of surface gratings.*Y. Atassi, J. Chauvin, J. Delaire, J. F. Delouis, I. Fanton-Maltey and K. Nakatani.17th IUPAC Symposium on Photochemistry, Sitges, Barcelona (Spain), July 1998.

10. *National survey of female research and development contributions in Syria.* Y. Atassi. Expert Group Meeting on Assessment and Promotion of Research and Development in the ESCWA Countries, United Nations, Beirut (Lebanon), December 1997.

11. *Photoassisted poling of photochromes in polymers: Application to Second Harmonic Generation.* J. A. Delaire, K. Nakatani and Y. Atassi.Val Thorens (France), January 1996.

12. *SHG of organic photochromes in polymer matrix: photo-assisted poling and photo-switching.* K. Nakatani, Y. Atassi and J. A. Delaire. International Conference on Organic Nonlinear Optics'2, Kusatsu (Japan), July 1995.

13. *Photochromism and second harmonic generation: photoassisted orientation, memory effect and photomodulation.* Y. Atassi, K. Nakatani , J. A. Delaire, V. Lokshin and R. Guglielmetti. Light on Organized materials, Lyon (France), June 1995.

14. *Photoinduced poling of NLO photochromes in polymeric matrix.* K. Nakatani, J. A. Delaire and Y. Atassi. Joint Meeting of the German and French Photochemistry Groups, Strasbourg (France), November 1994.

15. *Photoinduced poling of optically non linear photochromes in a polymethylmetacrylate matrix by spiropyran-photomerocyanine reaction.* Y. Atassi, K. Nakatani and J. A. Delaire. Eurolights I: Light on organized molecular systems, Thessaloniki (Greece), November 1994.

16. *Photoassisted poling of spiropyrans in polymer films. Experiments and theoretical model.* S. Hosotte. G. Froc, M. Dumont, Y. Atassi, K. Nakatani and J. A. Delaire. Cleo-Europe, Amesterdam (Netherlands) August 1994.

17. *Orientation photo induite sous champ électrique de chromophores pour l'optique non linéaire dans des films de polymères.* J. A. Delaire, K. Nakatani and Y. Atassi. Congrès de la Société Chimique de France, Lyon (France), September 1994.

18. *Photoinduced orientation of photomerocyanines in polymer films.* J. A. Delaire, K. Nakatani and Y. Atassi. European Conference on Molecular Electronics'94. Kloster Banz (Germany), September 1994.

19. *Photoinduced electric field poling of NLO chromophores in polymer films.* J. A. Delaire, Y. Atassi, R. Loucif-Saibi and K. Nakatani. International Conference on Organic Nonlinear Optics, Val Thorens (France), January 1994.

20. *Orientation Photo assistée a température ambiante de chromophores (azobenzene, spiropyrane) dans des films de polymère.* Y. Atassi, R. Loucif-Saibi, K. Nakatani, J. A. Delaire, S. Hosotte, G. Froc and M. Dumont. Lumière sur les Systèmes Moléculaires Organisés, Paris (France), December 1993.

21. *Orientation photo induite sous champ électrique de chromophores pour l'optique non linéaire dans des films de polymères.* J. A. Delaire, Y. Atassi, R. Loucif-Saibi and K. Nakatani. Journées d'Etudes SEE: matériaux moléculaires organises, propriétés en électronique et optoélectronique, Cachan (France) September 1993.

22. *Photoassisted poling of photochromic and optically non linear molecules in polymer thin films.* Y. Atassi, R. Loucif-Saibi, K. Nakatani and J. A. Delaire. International Symposium on Organic Photochromisme, Les Embiez (France), September 1993.

الخبرة التعليمية:

2026-1996 **أستاذة في المعهد العالي للعلوم التطبيقية والتكنولوجيا. تدريس مقررات المنهاج الفرنسي في الصفوف التحضيرية لدخول مدارس الهندسة.**

أسماء المقررات المدرّسة:

- 'Structure of matter and atomic theory' for the first year of HIAST. (33 hours, 14 years);
- 'Chemistry of aqueous solutions' for the first year of HIAST, (33 hours, 14 years);
- 'Stereochemistry' for the second year of HIAST, (33 hours, 5 years);
- 'Chemical kinetics' for the second year of HIAST, (33 hours, 3 years);
- 'Molecular orbitals' for the third year of HIAST, (24 hours, 6 years);

- 'Non-linear optics' for the fifth year of HIAST (Physical Engineering, major: opto-electronics), (33 hours, 3 years);
- 'Introduction to polymers' for the fourth year of HIAST (Physical Engineering, major: materials Science), (24 hours, 3 years);
- 'Materials for non-linear optics' for the fifth year of HIAST (Physical Engineering, major: materials science), (24 hours, 1 year);
- 'Scientific writing' for the fourth year of HIAST (systems and control engineering & telecommunications engineering), (33 hours, 5 years);
- 'Chemistry of polymers' for the Specialized diploma in materials sciences and engineering at HIAST, (60 hours, 1 year);
- 'Physical and Chemical properties of Polymers' for the first year of the Master in materials sciences and engineering at HIAST, (60 hours, 8 years);
- 'Advanced course in polymer science' for the first year of the Master in materials sciences and engineering at HIAST, (30 hours, 6 years);
- 'Functional materials' for the fifth year of HIAST (Physical Engineering, major: materials science and engineering), (24 hours, 1 year);
- Lab courses for undergraduates (General Chemistry), (40 hours, 13 years);
- Lab courses for the master in materials sciences, (Chemistry of Polymers) (40 hours, 7 years);
- Lab courses for the Syrian Olympic Team, (Preparatory problems of IChO) (50 hours, 7 years);

1993-1996 Position of Instructor "Moniteur" for 3 years at École Normale Supérieure de Paris. Teaching Chemistry for the preparation of physics agrégation (Students preparation for the oral examination: chemistry lessons, 96 hours/year), Paris.

1993-1994 Teaching undergraduate students (DEUG) at University Paris-Sud "Atomic Theory and Chemical Bonds", 25 hours.

-Chemistry oral examinations, for students at preparatory classes type Math Sup, Bio, at high school Geoffroy Saint Hilaire, Paris.

1992-1993 -Teaching Chemistry at École Normale Supérieure de Cachan (ENS Cachan, France) for the preparation of biochemistry agrégation (Students preparation for the chemistry laboratory examination, 40 hours).

-Teaching Chemistry at ENS Cachan for the preparation of physics agrégation (Students preparation for the chemistry examination, 40 hours).

1991-1992 -Teaching General Chemistry (Undergraduate Level) at HIAST (Syria).

الإشراف على مشاريع التخرج الهندسي

- **Jana Chariti** (5th year): Wound dressings based on sodium alginate and Carrageanean and loaded with propolis and various thyme species extracts, 2025
- **Mohammad Alloush** (5th year): Antimicrobial biopolymeric capsules based on CQDs synthesized from natural materials, 2025
- **Nour Sakhr** (5th year): Starch-based floculent for water remediation against organic pollutents using coagulation- floculation method, 2025

- **Younes Chiha** (5th year): Novel photocatalyst based on electrospun polyacrylonitrile nanofiber mats loaded with TiO_2 sensitized by nitrogen-doped carbon quantum dots (CQDs) and doped with polyaniline (PANI) for water treatment using UV and visible light, 2025
- **Hassan Abdulrahman** (5th year): Development and characterization of mixed matrix membranes composed of chitosan and kappa-carrageenan, reinforced with various carbon-based materials, including reduced graphene oxide (RGO), multi-walled carbon nanotubes (MWCNTs), carbon black, and graphite, 2025
- **Obada Wannous** (5th year): Superabsorbent composite material, based on basalt powder and a copolymer of acrylic acid and acrylamide, grafted onto kappa carrageenan, as a soil enhancer, 2025
- **Hussan Eddin Ezzo** (5th year): Design of Multifunctional Coatings Based on Epoxy Resin and Carbon Quantum Dots, 2025
- **Maha Ali** (4th year): Novel 3D printers filaments based on ABS and recycled Toner, 2025
- **Ali Marouf** (4th year): Effect of the structure of carbon substrate on the final properties of CQDs, 2025
- **Bader Saqr** (5th year): Bentonite/polyacrylonitrile electrospun nanofibrous scaffolds for hemostasis application, 2024
- **Ahmad Mahmoud (**5th year): Nickel-Manganese Electroless plating as a promising anti-corrosion coating, 2024
- **Hassan Rasheed** (5th year): Ecofriendly Smart Packaging using electrospun PLLA and anthocyanin, 2023
- **Alaa Mayya** (5th year): Nickel Electroless plating of Steel St37, 2023
- **Hussam Ezzo** (4th year): Exploration of Pani/Na-Polyacrylate as infrared stealth materials , 2024
- **Younes Chiha** (4th year): Preparation of electrospun calixarine/PLLA nanofibrous membrane for water remediation from heavy metal ions, 2024
- **Batoul Tahan** (4th year): Elaboration of a novel bio-ink for 3D bio-printer, 2024
- **Kawkab Mahmood** (5th year): Novel Cathode for Lithium Battery based on cobalt intercalation ceramics, 2022
- **Batool Ali** (5th year): Preparation of new hemostasis material based on PEG-Chitosan composite hydrogels with zeolite, 2022
- **Sarah Nasser** (5th year): rGO preparation and its potential application in tribology and electricalenegy storage, 2021
- **Amani Chichani** (5th year): Novel hydrogel based on lactic acid and chitosan for hemostasis and wound healing applications, 2021
- **Batul Ali** (4th year): Novel system of coagulant/flocculant based on Ca(II)/polyacrylamide- and chitosan for water water treatment, 2021
- **Al-Nada Wanous** (5th year): Carbohydrates derivatives (dialdehydes and Schiff bases) for detection of heavy metal ions and organic pollutants in water, 2020.

- **Oumama Sarhan** (5th year): Self-healing hydrogels from chitosan and furfural for pharmaceutical applications, 2020.
- **Reem Chahine** (5th year): Cellulose fibers as template for the preparation of novel microwave absorbers, 2020
- **Sarah Nasser** (4th year): AlCl3, Gentamycin, Lidocaine/PLLA electrospun Scaffolds for hemostasis applications, 2020
- **Amani Chichani** (4th year): Semi interpenetrating of sodium alginate-g- poly (sodium cacrylate)/PVP hydrogel as drug release system , 2020
- **Oumama Sarhan** (4th year): Carbon quantum dots prepared from Beans and Peas peels: Preparation and quantum yield estimation, 2019.
- **Reem Chahine** (4th year): Nano ceramic pigments: Preparation and Characterization, 2019.
- **Al-Nada Wanous** (4th year): Starch derivatives (dialdehydes and Schiff bases) for detection of heavy metal ions in water, 2019.
- **Aya Salman** (5th year): Multicomponent microwave absorber based on PANI/MnNiZn ferrite/acetylenic carbon black, 2019.
- **Aya Salman** (4th year): Microwave absorber based on MnNiZn ferrite and acetylenic carbon black, 2018.
- **Mikdad Othman** (5th year): Incorporation of carbon quantum dots into electrospun nanofiber mats of polylactic acid, 2019.
- **Mikdad Othman** (4th year): Preparation of electrospun nanofiber mats of polyacrylonitrile/PANI, 2018.
- **Haytham Hassan** (5th year): Tracking ibuprofen release encapsulated in sodium alginate using carbon quantum dots (CQDs) and studying on-off-on fluorescent probes of CQDs for iron (III) and ascorbic acid, 2019.
- **Haytham Hassan** (4th year): Hydrogels based on sodium alginate-poly(acrylate-co-acrylamide)/bentonite for removal of heavy metals from water, 2018.
- **Hani Al-Khatib** (5th year): Preparation of chitosan-g-poly(acrylate-co-acrylamide)/basalt as a clay based superabsorbent polymer for agricultural applications, 2017.
- **Hani Al-Khatib** (4th year): Preparation of cmc-g-poly(acrylate-co-acrylamide for water treatment, 2016.
- **Rama Qassar** (5th year): Preparation of lightweight broadband microwave absorbers based on MnNiZn ferrite/polyaniline nanocomposite, 2017.
- **Yazan Badour** (4th year): Preparation of microwave absorbers based on NiZn ferrite/polythiophene nanocomposite, 2017.
- **Wala Mohammad** (4th year): Preparation and characterization of electrospun nanofiber mats of polyaniline/p-TSA @polylactic acid, 2016.
- **Wassim Sweid**: Poly(methyl methacrylate-co-butyl methacrylate-co-methyl methacrylate) prepared by a core-shell preparation method as a reinforcing agent of PMMA matrix, 2011.
- Biodiesel: Synthesis, yield of the synthesis, spectroscopic characterization (NMR, FTIR), 2010.

- Preparation of K-F zeolite using Kaolin: Characterization (Elemental analysis, DSC, XRD patterns, FTIR spectroscopy), 2010.
- Comparison between classical and microwave esterification of some selected alcohols in respect to the reaction time and reaction yield, 2008.

الإشراف على مشاريع الماجيستير

- **Fadi Hassan**, 2025. Nanoadditives to promote anticorrosive properties of Epoxy coatings.
- **Mohammad Dayoub** 2022, Preparation and characterization of polymeric matrix composite materials reinforced by non-metallic carbides.
- **Moaz Ali** 2022, Improved mechanical and thermal properties of composite materials based on phenolic (Novolac) modified by epoxy resin.
- **Noor Harh** 2022, Water remediation from cationic organic pollutants and heavy metals using Alginate-g-polyacrylamide/iron ions by coagulation-flocculation mechanism.
- **Lina Shennar** 2021, Nano-encapsulation of curcumin in sodium alginate.
- **Fidaa Tarchee** 2021, Preparation of nanocomposite materials based on graphene.
- **Mais Khadour** 2019, Preparation of microwave absorbers using a thermoset polyurethane matrix.
- **Zein Abedeen Doukanji** 2019, Preparation of organogels for hemostasis applications.
- **Ali Ghanem**, 2019, Preparation of fluorescent carbon quantum dots and their potential applications in bioimaging and nano-medicine.
- **Majd Saeed,** 2017, Preparation of chitosan-*g*-poly(acrylate-*co*-acrylamide)/basalt as a clay based superabsorbent polymer for agricultural applications.
- **Anas Douaji**, 2016, Impedance spectroscopy study of blends based on doped polyaniline.
- **Raed Ghantous**, 2016, Preparation of conductive latex based on polyaniline in aqueous and organic media. .
- **Michel Rahal**, 2015, In-situ polymerization of pyrrole onto electrospun nanofibers mats of polylactic acid: Preparation method and characterization.
- **Noor Mohamad**, 2015, Preparation and characterization of hydrogel–nanosilver composites based on copolymers from sodium 2-acrylamido-2-methylpropanesulfonate, acrylamide and acrylic acid.
- **Koutada Hamad**, 2015, Preparation of a superabsorbent polymers: poly(acrylate-co-acrylamide)/carboxymethyl cellulose for removal of heavy metals from aqueous solution.

- **Hussam Kalaleh**, 2014, Preparation of a clay based composite of superabsorbent polymers: poly(acrylate-co-acrylamide)/bentonite by microwave radiation.
- **Mohammad Chawa**, 2011, Synthesis and characterization of superabsorbent composites: Starch-g-poly(itaconic acid-co-acrylamide).
- **Mazen Ismail**, 2011, Nanocomposites based on polypyrrol: Preparation, structural and electrical characterization.
- **Wassim Sweid**, 2011, Poly(methylmethacrylate-co-butylmethacrylate-co-methylmethacrylate) prepared by a core-shell preparation method as a reinforcing agent of PMMA matrix.
- **Mohammad Tally**, 2011, Preparation of ferrite based composites against electromagnetic pollution using different kinds of thermoplastic and thermosetting matrices.
- **Nariman Dawood**, 2011, Preparation and characterization of biodegradable polymer blends (LDPE-Starch).
- **Wissam Kiwan**, 2011, Protecting metals against corrosion using (Ni-P) electroless plating.

الإشراف على رسائل الدكتوراه

- **Michel Rahal,** 2022-2026, Preparation of fluorescent carbon quantum dots and their pharmaceutical and environmental applications. (Thesis Defense: May 2026)
- **Rama Alqassar,** 2022-, Hollow fiber membranes for Gas Separation: Mathematical model and Process Optimization.
- **Nariman Dawoud,** 2020-2024, Preparation of nano-copper oxide composite materials based on epoxy and PDMS as antifouling materials (Thesis Defense: October 2024)
- **Anas Houbi,** 2019-2022, Preparation of Novel composite materials for EMI shielding applications. Co-direction with Professor Zharmenov Aldashevich at al farabi kazakh national university (Thesis Defense: February 2023)
- **Noor Mohammad,** 2017-2021, Electrospun nanofiber membranes for water ultrafiltration. (Thesis Defense: February 2021)
- **Nassim Ali**, 2015-2019 Broadband lightweight microwave absorbers based on core-shell nanocomposites of inherently conductive polymers and nanoferrites: Preparation and Characterization. (Thesis Defense planned for February 2019)
- **Yassine Cheikh Mohammad**, 2013-2016, Preparation of GGG:Nd,Cr nanocrystalline powder by soft chemistry methods as active medium for high power solid state lasers: Spectroscopique and photoluminescence characterization. (Thesis Defense: October 2016)
- **Mazen Jallad,** 2013-2016, Preparation and characterization of electrospun nanofiber mats of polyaniline@polylactic acid and polylactic/p-TSA: polyaniline as scaffolds for tissue engineering. (Thesis Defense: June 2016).

- **Mohammad Tally**, 2013-2016, Preparation of alginates based superporous superabsorbent polymer using microwave irradiations for agricultural applications. (Thesis Defense: June 2016).

الكتب المؤلفة باللغة العربية

1. «Chemistry of Aqueous Solutions», Yomen Atassi, Textbook for undergraduates, HIAST Publisher, (2011), 316 pages. DOI: 10.13140/RG.2.1.3626.7689. ISBN 978-9933-9228-7-0.

2. «Introduction to Nonlinear Optics», Yomen Atassi & Omran Kouba, Textbook for graduates, HIAST Publisher, second edition (2015), 102 pages. DOI: 10.13140/RG.2.1.2593.8640

3. Three chapters in «Chemistry for medical schools», Textbook for undergraduates, Damascus University Publisher, (2015).

4. «Structure of Matter», Yomen Atassi, Textbook for undergraduates, HIAST Publisher, (2019), 356 pages

5. 13 lecture notes covering topics in general chemistry, physical chemistry, inorganic chemistry and organic chemistry for undergraduate students and Chemistry of polymers for post graduate students.

الكتب المترجمة إلى العربية

1. «Advances in Nanocomposite Technology», Edited by Dr. Abbass Hashim, 2011 by Publisher InTech, translated by Yomen Atassi and Sahar Hariri, Arab Center for Arabization Translation Authorship & Publication, August 2016. ISBN 978-9973-15-371-5.

2. «High Performance Polymers», Johannes Carl Fink, © 2008 by William Andrew Inc., translated by Yomen Atassi, Arab Organization for Translation, January 2011. DOI: 10.13140/RG.2.1.4675.3444. ISBN 978-9953-0-1835-5

3. «Handbook of Petrochemicals Production Processes », Robert A. Meyers, © 2005 by the McGraw-Hill Companies Inc., translated by Yomen Atassi, Arab Organization for Translation, January 2012. DOI: 10.13140/2.1.1956.4480. ISBN 978-9953-82-483-3.

4. «Introduction to Nanoscale Science and Technology », Di Ventra Massimiliano and al., © 2004 by Kluwer Academic/ Plenum Publishing, translated by Yomen Atassi and al., Arab Organization for Translation, February 2012. ISBN 978-9953-82-484-0.

5. «New Technologies for advancing Healthcare and Clinical Practices », Joseph Tan, 2011 IGI Global, translated by Yomen Atassi, Arab Organization for translation, April 2013. ISBN 978-614-434-009-7

مراجعة كتب مترجمة إلى العربية

1. «New Materials:Processes and methods technology », Mel Schwartz, © by CRC Press, translated by Hatem Najdi and revised by Yomen Atassi, Arab Organization for Translation, January 2011.
2. «Bioengineering Fundamentals », Ann Saterbak and al., © 2007 Pearson Education, Inc., translated by Hatem Najdi and revised by Yomen Atassi, Arab Organization for Translation, March 2011.