

Christos L. Chochos

Senior Researcher

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EDUCATION

- 2006 PhD in Polymer Science and Technology
Interdepartmental (Chemistry, Physics, Chemical Engineering, Materials Science and Engineering), University of Patras, Greece
- 2004 M.S. in Polymer Science and Technology
Interdepartmental (Chemistry, Physics, Chemical Engineering, Materials Science and Engineering), University of Patras, Greece
- 2001 B.S. in Chemistry
Chemistry department, University of Patras, Greece

CURRENT POSITION

- 2018- Associate Researcher/ Institute of Chemical Biology/ National Hellenic Research Foundation (ICB/NHRF)/ Greece
- 2019- Chief Executive Officer (CEO) of Advanced Cure Electronics (ACE) a spin-off company of ICB/NHRF
- 2013- Project Manager/ Advent Technologies SA/ Greece

PREVIOUS POSITIONS

- 2012 - Project Manager at Advent Technologies SA
- 2015 - 2017 Research Associate at the National Hellenic Research Foundation (NHRF), Athens, Greece
- 2015 - 2017 Research Associate at the Polymeric Materials' Laboratory Department of Materials Science and Engineering, University of Ioannina, Greece
- 2013 - 2015 Marie Curie Intra European Research Fellow at the Polymeric Materials' Laboratory Department of Materials Science and Engineering, University of Ioannina, Greece
- 2011 - 2012 PostDoc Fellow in the Institute of Chemical Engineering Sciences (ICE-HT), Foundation for Research and Technology Hellas (FORTH) Patras, Greece

- 2009 - 2011 PostDoc Fellow in the Department of Mechanical Engineering and Materials Science and Engineering of the Cyprus University and Technology, Limassol, Cyprus
- 2008 - 2009 PostDoc Fellow in the Laboratoire d'Ingénierie des Polymères pour les Hautes Technologies (LIPHT), Université Louis Pasteur, Ecole Européenne de Chimie, Polymères et Matériaux (E-ECPM), and Centre National de la Recherche Scientifique (CNRS) Strasbourg, France

FELLOWSHIPS-AWARDS

1. Marie Curie Intra-European Fellowship (IEF) Call: FP7-PEOPLE-2012-IEF (2013-2015) Budget 162.000 Euro, Grant agreement no.: 331389. Title: "*Development of Low Band Gap Conjugated Polymers by EcoFriendly Synthetic Methodologies for High Performance Organic Photovoltaics (ECO-CHEM)*". This fellowship ranked 1st in Europe in the IEF calls with an excellent score of 98.4/100.

After my appointment at ICB/NHRF

1. 2019-2021 Pfizer Fellowships for PhD candidates or Post doc researchers under the framework «Advancing Science» funded by Pfizer pharmaceutical company (98.823,60 Euro) at ICB/NHRF.
2. 2020 Scholarship proposal granted in the framework of "Reinforcement of Postdoctoral Researchers" from the State Scholarships Foundation (IKY) of Athens/Greece by Dr Panagiota Koralli.
3. 2021 Award winner of the year for best inventions in Greece from the Hellenic Industrial Property Organisation (OBI).

COMPETITIVE RESEARCH PROJECTS

After my appointment at ICB/NHRF

1. 2021 HFRI 2nd Call for H.F.R.I.'s Research Projects to Support Faculty Members & Researchers Physical Science Category I PI: Christos Chochos 200.000 EUR.
2. 2021 Participation to the NHRF proposal preparation that will be funded by the RRF with €30.700.000 for the establishment of a Center of Excellence which will focus on Theranostics and bioelectronic applications.
3. 2021 EU4H-2021-JA-04 Direct grants to Member states' authorities: network of Comprehensive Cancer Centers: Establishment of new EU Network of Expertise on Cancers and Cancer Conditions (AWP Ref.: DP/C-g-10.1.3)- Budget: 4 000 000 EUR.
4. "Helical systems for chiral organic light emitting diodes (HEL4CHIROLED)". Call: H2020-MSCA-ITN-2019 Innovative Training Networks. At ADVENT Technologies SA; Grant agreement no.: 859752. PI: Christos Chochos, Budget 243.017 Euro

5. "Disruptive sustainable TECHNOLOGIES FOR next generation pvWINDOWS (TECH4WIN)". Call: H2020-LC-SC3-2018-Joint-Actions-3. At ADVENT Technologies SA; Grant agreement no.: 826002. PI: Christos Chochos, Budget 278.160 Euro
6. "Innovative manufacturing processes and in-line monitoring techniques for the OLED and thin film and organic photovoltaic industries (CIGS and OPV) (OLEDSOLAR)". H2020-NMBP-TR-IND-2018-2020 (Transforming European Industry). Topic: DT-FOF-03-2018. At ADVENT Technologies SA; Grant agreement no.: 820789. PI: Christos Chochos, Budget 205.000 Euro

Before my appointment at ICB/NHRF

1. "Design-driven integration of innovative PRinted functional matERialS into inTERactive hIgh-end and fashion consumer Goods addressing tomorrow's societal challENGes (PRESTIGE)". H2020 call for proposals: NMBP-05-2017: Advanced materials and innovative design for improved functionality and aesthetics in high added value consumer goods. At ADVENT Technologies SA; Grant agreement no.: 761112. PI: Christos Chochos, Budget 320.000 Euro
2. 2013-2017 "*Organic Semiconductors for NIR Optoelectronics (OSNIRO)*" Marie Curie Initial Training Networks (ITN) Call: FP7-PEOPLE-2013-ITN at ADVENT Technologies SA (Budget 330.000 Euro); Grant agreement no.: 607585, PI: Christos Chochos.
3. 2013-2016 "*New materials for highly efficient and reliable organic solar cells (MatHero)*" FP7-PEOPLE-2013-NMP at ADVENT Technologies SA (Budget 220.000 Euro); Grant agreement no.: 604603, PI: Christos Chochos.
4. 2012-2014 "*Development of New Low Band Gap Conjugated Polymers for Organic Photovoltaic Applications (ADVEPOL)*" "Support for businesses employing highly scientific training" through the "Human Resources Development" of General Secretariat for Research and Technology in Greece (GSRT) at ADVENT Technologies SA (Budget 45.000 Euro), PI: Christos Chochos
5. 2012 "*Development of nanostructured organic and inorganic materials and thin films for the fabrication of organic electronic devices*" at the Institute of Chemical Engineering Sciences (ICE-HT), Foundation for Research and Technology Hellas (FORTH) Patra, Greece. (PI: Vasilis Gregoriou)
6. 2011 "*Molecular Electronics and Photonics (MEP) Research Unit*" Strategic Infrastructure Project co-funded by the Republic of Cyprus and the European Regional Development Fund (2010-2013, Budget 2.000.000 Euro, PI: Stelios Choulis).
7. 2008-2010 "*Optimization of Inkjet Printing Solar Cells*" Internal Research Program at the Department of Mechanical Engineering and Materials Science and

- Engineering of the Cyprus University and Technology, Limassol, Cyprus (PI: Stelios Choulis).
8. 2007-2008 "*193 nm Photoresists - LER*" European Union Research Program in collaboration with Rohm&Haas electronic materials-microelectronic technologies, CEA-Leti Minatec Grenoble and ST Microelectronics Crolles2 Alliance at the Laboratoire d'Ingénierie des Polymères pour les Hautes Technologies (LIPHT) (PI: George Hadziioannou).
 9. 2006-2007 "*Polymer Electrolytes and Non Noble Metal Electrocatalysts for High Temperature PEM Fuel Cells*" European Union Research Program at the Chemistry Department University of Patra, Greece. (PI: Ioannis Kallitsis)
 10. 2003-2005 "*Development of Flexible Photovoltaics*" Renewable Energy Sources, Ministry of Development, Greece at the Institute of Chemical Engineering Sciences (ICE-HT), Foundation for Research and Technology Hellas (FORTH) Patra, Greece. (PI: Vasilis Gregoriou)
 11. 2002-2004 "*Development of Flexible Photovoltaics*" Konarka Technologies, Lowell MA USA at the Institute of Chemical Engineering Sciences (ICE-HT), Foundation for Research and Technology Hellas (FORTH) Patra, Greece. (PI: Vasilis Gregoriou)

CURRENT RESEARCH & ADMINISTRATIVE DUTIES

- The strategic plan of the **Laboratory of Conjugated Polymers for Healthcare, Bioelectronics and Bioimaging** is the study of conjugated polymers optoelectronic properties for imaging, diagnosis and therapeutic application in order to enhance existing processes and produce innovate new products. The activities of the Laboratory are focusing on the interplay between the science of conjugated polymers and their biological function towards healthcare, bioelectronics and bioimaging applications.
- **Core faculty member** of ICB/NHRF in the scientific topics of **bioimaging** and **theranostics** in the framework of the establishment of the Athens Comprehensive Cancer Center (ACCC) in strong collaboration with the German Cancer Research Center (DKFZ).
- Researcher in charge of the Microscopy Facility at ICB/NHRF/Athens/Greece. This microscopy facility includes state-of-the-art instrumentation such as: JSM-7610F Schottky Field Emission Scanning Electron Microscopy (FE-SEM) JEOL and a Renishaw inVia™ confocal Raman microscope.

LEADERSHIP IN INDUSTRIAL INNOVATION

- *I am the cofounder and chief executive officer (CEO) of ACE*, a spin-off company of ICB/NHRF, which deals with the pre-clinical development and commercial exploitation of

new conjugated polymers as contrast agents for optical imaging modalities (photoacoustic and fluorescence) and therapy (drugs or photodynamic and photothermal) discovered in my laboratory.

- *I am the project manager of Advent Technologies*, a company that deals with the commercialization activities of materials and components in the energy sector such as fuel cells, photovoltaics and others.

PUBLICATIONS IN PEER REVIEW SCIENTIFIC JOURNALS

Total publications: 79

Google Scholar: H-index = 29; Total citations: 2648

Scopus: H-index = 26; Total citations: 2008

ISI Web of Science: H-index = 25; Total citations: 1938

(79) "*Porous organic polymers in solar cells*"

Zhang, T.; Gregoriou, V. G.; Gasparini, N.; Chochos, C. L. *Chem. Soc. Rev.* **2022**, accepted.

(78) "*Surface and grain boundary defect passivation in perovskite solar cells using an amino-functionalized BODIPY fluorophore*"

Soultati, A.; Tountas, A.; Fakharuddin, A.; Skoulikidou, M.-C.; Verykios, A.; Armadorou, K.-K.; Tzoganakis, N.; Vidali, V. P.; Sakellis, I.; Koralli, P.; Chochos, C. L.; Petsalakis, I.; Nikoloudakis, E.; Palilis, L. C.; Filippatos, P.-P.; Argitis, P.; Davazoglou, D.; Yusoff, A. R. b. M.; Kymakis, E.; Coutsolelos, A. G.; Vasilopoulou, M. *Sustain. Energy Fuels* **2022**, *6*, 2570-2580.

(77) "*Enhancing the lifetime of inverted perovskite solar cells using a new hydrophobic hole transport material*"

Loizos, M.; Tountas, M.; Tzoganakis, N.; Chochos, C. L.; Nega, A.; Schiza, A.; Polyzoidis, C.; Gregoriou, V. G.; Kymakis, E. *Energy Adv.* **2022**, *1*, 312-320.

(76) "*Seasonal evaluation of floating microplastics in a shallow Mediterranean coastal lagoon: Abundance, distribution, chemical composition, and influence of environmental factors*"

Simantiris, N.; Vardaki, M. Z.; Koralli, P.; Chochos, C. L.; Gregoriou, V. G.; Kourkoumelis, N.; Avlonitis, M. *Estuar. Coast. Shelf Sci.* **2022**, 107859.

(75) "*Infrared Organic Photodetectors Employing Ultralow Bandgap Polymer and Non-fullerene Acceptors for Biometric Monitoring*"

Jacoutot, P.; Scaccabarozzi, A. D.; Zhang, T.; Qiao, Z.; Anié, F.; Neophytou, M.; Bristow, H.; Kumar, R.; Moser, M.; Nega, A.; Dimitrakopoulou-Strauss, A.; Gregoriou, V. G.; Anthopoulos, T. D.; Heeney, M.; McCulloch, I.; Bakulin, A. A.; Chochos, C. L.; Gasparini, N. *Small* **2022**, *18*, 2200580.

(74) "Ultra-high power efficiency blue organic light-emitting diodes with below-bandgap electroluminescence"

Vasilopoulou, M.; Yusoff, A. R. bin M.; Daboczi, M.; Conforto, J.; Gavim, A. E. X.; da Silva, W. J.; Macedo, A. G.; Soutati, A.; Schneider, F. K.; Dong, Y.; Jacoutot, P.; Rotas, G.; Jang, J.; Vougioukalakis, G. C.; **Chochos, C. L.**; Kim, J.-S.; Gasparini, N. *Nat. Commun.* **2021**, *12*, 4868. (*Impact Factor 2020*: **14.919**)

(73) "Rational Design of New Aqueous Conjugated Polymer Nanoparticles as Theranostic Agents of Breast Cancer"

Koralli, P.; Tsikalakis, S.; Goulielmaki, M.; Arelaki, S.; Muller, J.; Nega, A. D.; Schiza, A.; Herbst, F.; Gregoriou, V. G.; Dimitrakopoulou-Strauss, A.; Wiemann, S.; **Chochos, C. L.* (co-corresponding author)** *Mater. Chem. Front.* **2021**, *5*, 4950-4962. (*Impact Factor 2020*: **6.482**)

(72) "Green Inks for the Fabrication of Organic Solar Cells: A Case Study on PBDTTPD:PC₆₁BM bulk-heterojunctions"

Sprau, C.; Cruz, A. M.; Pérez, L. B.; Molina, L.; Wagner, M.; **Chochos, C. L.**; Pirriera, M. D.; Colsmann, A. *Advanced Energy and Sustainability Research* **2021**, *2*, 2100043. (*Impact Factor 2020*: **New**)

(71) "PEDOT:PSS:sulfonium salt composite hole injection layers for efficient organic light emitting diodes"

Verykios, A.; Pistolis, G.; Bizas, L.; Tselios, C.; Tsikritzis, D.; Kennou, S.; **Chochos, C. L.**; Mouzakis, D. E.; Skandamis, P. N.; Yusoff, A. R. bin M.; Palilis, L. C.; Argitis, P.; Vasilopoulou, M.; Soutati, A. *Org. Electron.* **2021**, *93*, 106155. (*Impact Factor 2020*: **3.721**).

(70) "Adjusting the Interfacial States Energy in Organic Photovoltaics for Maximum Efficiency"

Gasparini, N.; Camargo, F. V. A.; Frühwald, S.; Nagahara, T.; Classen, A.; Roland, S.; Wadsworth, A.; Gregoriou, V. G.; **Chochos, C. L.**; Neher, D.; Salvador, M.; Baran, D.; McCulloch, I.; Görling, A.; Lüer, L.; Cerullo, G.; Brabec, C. J. *Nat. Commun.* **2021**, *12*, 1772. (*Impact Factor 2020*: **14.919**)

(69) "Far-Red to Near Infrared Emissive Aqueous Nanoparticles Based on a New Organic Material with Three BODIPY Dyes at the Periphery of the Core: A Combined Experimental and Theoretical Study."

Squeo, B. M.; Avramopoulos, A.; Nega, A. D.; Pavlou, A.; Siskos, M. G.; Koralli, P.; Schiza, A.; Dimitrakopoulou-Strauss, A.; Gregoriou, V. G.; **Chochos, C. L.* (co-corresponding author)** *Electron. Mater.* **2021**, *2*, 24-38. (*Impact Factor 2020: New*)

(68) "Structural study of hydroxylpropyl-methyl cellulose microemulsion based gels used for biocompatible encapsulations"

Vassiliadi, E.; Mitsou, E.; Avramiotis, S.; **Chochos, C. L.**; Pirolt, F.; Medebach, M.; Glatter, O.; Xenakis, A.; Zoumpantioti, M. *Nanomaterials* **2020**, *10*, 2204. (*Impact Factor 2020: 5.076*)

(67) "The role of exciton lifetime for charge generation in organic solar cells at negligible energy level offsets"

Classen, A.; **Chochos, C. L.**; Luer, L.; Gregoriou, V. G.; Wortmann, J.; Osvet, A.; Forberich, K.; McCulloch, I.; Heumueller, T.; Brabec, C. J. *Nat. Energy* **2020**, *5*, 711 - 719. (*Impact Factor 2020: 60.858*)

(66) "High Performance Conjugated Terpolymers as Electron Donors in Nonfullerene Organic Solar Cells"

Paleti, S. H. K.; Gasparini, N.; **Chochos, C. L.* (co-corresponding author)**; Baran, D. *J. Mater. Chem. C* **2020**, *8*, 13422 - 13429. (*Impact Factor 2020: 7.393*).

(65) "New Conjugated Polymer Nanoparticles with High Photoluminescence Quantum Yields for Far-red and Near Infrared Fluorescence Bioimaging"

Koralli, P.; Nega, A. D.; Vagiaki, L. E.; Pavlou, A.; Siskos, M. G.; Dimitrakopoulou-Strauss, A.; Gregoriou, V. G.; **Chochos, C. L.* (corresponding author)** *Mater. Chem. Front.* **2020**, *4*, 2357 - 2369. (*Impact Factor 2020: 6.482*)

(64) "Revealing the structural effects of non-fullerene acceptors on the performances of ternary organic photovoltaics under indoor light conditions"

Singh, R.; Duan, T.; Kan, Z.; **Chochos, C. L.**; Kini, G. P.; Kumar, M.; Park, J.; Lee, J.; Lee, J.-J. *Nano Energy* **2020**, *75*, 104934. (*Impact Factor 2020: 17.881*)

(63) "Unravelling the complex nanomorphology of ternary organic solar cells with multimodal analytical transmission electron microscopy"

Rechberger, S.; Gasparini, N.; Singh, R.; Kim, M.; **Chochos, C. L.**; Gregoriou, V. G.; Cho, K.; Brabec, C. J.; Ameri, T.; Spiecker, E. *Sol. RRL* **2020**, *4*, 2000114. (*Impact Factor 2020*: **8.582**)

(62) "Highly Efficient Indoor Organic Solar Cells by Voltage Loss Minimization through Fine-Tuning of Polymer Structures"

Singh, R.; **Chochos, C. L.* (co-corresponding author)**; Gregoriou, V. G.; Nega, A. D.; Kim, M.; Kumar, M.; Shin, S.-C.; Kim, S. H.; Shim, J. W.; Lee, J.-J. *ACS Appl. Mater. Interfaces* **2019**, *11*, 36905 – 36916. (*Impact Factor 2020*: **9.229**).

(61) "Monitoring Fluorescent Calcium Signals in Neural Cells with Organic Photodetectors"
Rezaei-Mazinani, S.; Ivanov, A. I.; Biele, M.; **Chochos, C. L.**; Rutz, A.; Gregoriou, V. G.; Avgeropoulos, A.; Tedde, S. F.; Bernard, C.; O'Connor, R.; Malliaras, G. G.; Ismailova, E. *J. Mater. Chem. C* **2019**, *7*, 9049-9056. (*Impact Factor 2020*: **7.393**).

(60) "Current Status, Challenges and Future Outlook of High Performance Polymer Semiconductors for Organic Photovoltaics Modules"

Chochos, C. L.* (co-corresponding author); Spanos, M.; Katsouras, A.; Tatsi, E.; Drakopoulou, S.; Gregoriou, V. G.; Avgeropoulos, A. *Prog. Polym. Sci.* **2019**, *91*, 51 - 79. (*Impact Factor 2020*: **29.190**).

(59) "Effect of Aryl Substituents and Fluorine Addition in a High Efficiency Indacenodithienothiophene-alt-Quinoxaline *n*-Conjugated Polymer on the Optoelectronic Properties and Organic Solar Cell Performance"

Tatsi, E.; Spanos, M.; Katsouras, A.; Squeo, B. M.; Fall, S.; Heiser, T.; Lévêque, P.; Gregoriou, V. G.; Avgeropoulos, A.; Leclerc, N.; **Chochos, C. L.* (co-corresponding author)** *Macromol. Chem. Phys.* **2019**, *220*, 1800418. (*Impact Factor 2020*: **2.527**).

(58) "Thermal Stabilization of the Bulk-Heterojunction Morphology in Polymer:Fullerene Solar Cells Using a Bisazide Cross-Linker"

Landerer, D.; Sprau, C.; Baumann, D.; Pingel, P.; Leonhard, T.; **Chochos, C. L.**; Zimmermann, D.; Krüger, H.; Janietz, S.; Colsmann, A. *Solar RRL* **2019**, *3*, 1800266. (*Impact Factor 2020*: **8.582**)

(57) "Experimental and Theoretical Investigations on the Optical and Electrochemical Properties of Donor-Acceptor-Donor Small Molecules Toward a Universal Model"

Chochos, C. L.* (co-corresponding author); Chavez-Vasquez, P.; Lévêque, P.; Heiser, T.; Spanos, M.; Tatsi, E.; Katsouras, A.; Avgeropoulos, A.; Gregoriou, V. G.; Leclerc, N. *J. Chem. Phys.* **2018**, *149*, 124902/1-9. (*Impact Factor 2020*: **3.488**).

(56) "Suppressing the Surface Recombination and Tuning the Open Circuit Voltage of Polymer/Fullerene Solar Cells by Implementing an Aggregative Ternary Compound"

Galli, D.; Gasparini, N.; Forster, M.; Eckert, A.; Widling, C.; Killian, M. S.; Avgeropoulos, A.; Gregoriou, V. G.; Scherf, U.; **Chochos, C. L.**; Brabec, C. J.; Ameri, T. *ACS Appl. Mater. Interfaces* **2018**, *10*, 28803 - 28811. (*Impact Factor 2020*: **9.229**).

(55) "Electron-transporting Thiazole-based polymer synthesized through direct (hetero)arylation polymerization"

Chávez, P.; Bulut, I.; Fall, S.; Ibraikulov, O.; **Chochos, C. L.**; Lévêque, P.; Leclerc, N. *Molecules* **2018**, *23*, 1270. (*Impact Factor 2020*: **4.411**).

(54) "Synthesis of D- π -A- π type Benzodithiophene-Quinoxaline Copolymers by Direct Arylation and their Application in Organic Solar Cells"

Zimmermann, D.; Sprau, C.; Schröder, J.; Gregoriou, V. G.; Avgeropoulos, A.; **Chochos, C. L.**; Colsmann, A.; Janietz, S.; Krüger, H. *J. Polym. Sci. Part A: Polym. Chem.* **2018**, *56*, 1457 - 1467. (*Impact Factor 2020*: **2.93**).

(53) "High Performance Organic Photodetectors From a High Bandgap Indacenodithiophene-based π -conjugated D-A Polymer"

Benavides, C. M.; Murto, P.; **Chochos, C. L.**; Gregoriou, V. G.; Avgeropoulos, A.; Xu, X.; Bini, K.; Andersson, M. R.; Schmidt, O.; Brabec, C. J.; Wang, E.; Tedde, S. F. *ACS Appl. Mater. Interfaces* **2018**, *10*, 12937 - 12946. (*Impact Factor 2020*: **9.229**).

(52) "Enhancement the Power Conversion Efficiency of Organic Solar Cells via Unveiling the Appropriate Rational Design Strategy in Indacenodithiophene-alt-Quinoxaline π -Conjugated Polymers"

Chochos, C. L.* (co-corresponding author); Singh, R.; Gregoriou, V. G.; Kim, M.; Katsouras, A.; Serpetzoglou, E.; Konidakis, I.; Stratakis, E.; Cho, K.; Avgeropoulos, A. *ACS Appl. Mater. Interfaces* **2018**, *10*, 10236 - 10245. (*Impact Factor 2020*: **9.229**).

(51) " α,β -Unsubstituted meso-Positioning Thienyl BODIPY: A Promising Electron Deficient Building Block for the Development of Near Infrared (NIR) p-type Quaterthiophene Donor-Acceptor (D-A) Conjugated Polymers"

Squeo, B. M.; Gregoriou, V. G.; Han, Y.; Palma-Cando, A.; Serpetzoglou, E.; Allard, S.; Avgeropoulos, A.; Stratakis, E.; Anthopoulos, T. D.; Heeney, M.; Scherf, U.; **Chochos, C. L.* (corresponding author)** *J. Mater. Chem. C* **2018**, *6*, 4030 - 4040. (*Impact Factor 2020*: **7.393**).

(50) "4H-1,2,6-Thiadiazine-containing donor-acceptor conjugated polymers: synthesis, optoelectronic characterization and use in organic solar cells"

Chochos, C. L.* (co-corresponding author); Kalogirou, A. S.; Ye, T.; Tatsi, E.; Katsouras, A.; Zisimou, G. A.; Gregoriou, V. G.; Avgeropoulos, A.; Koutentis, P. A. *J. Mater. Chem. C* **2018**, *6*, 3658 - 3667. (*Impact Factor 2020*: **7.393**).

(49) "New N-Type Solution Processable All Conjugated Polymer Network. Synthesis, Optoelectronic Characterization and Application in Organic Solar Cells"

Bildirir, H.; Di Carlo Rasi, D.; Wienk, M. M.; Janssen, R. A. J.; Avgeropoulos, A.; Gregoriou, V. G.; Allard, S.; Scherf, U.; **Chochos, C. L.* (co-corresponding author)** *Macromol. Rapid Commun.* **2018**, *39*, 1700629. (*Impact Factor 2020*: **5.734**).

(48) "Effects of alkyl side chains positioning and presence of fused aromatic units in the backbone of low-bandgap diketopyrrolopyrrole copolymers on the optoelectronic properties of organic solar cells"

Chochos, C. L.* (co-corresponding author); Katsouras, A.; Drakopoulou, S.; Miskaki, C.; Krassas, M.; Tzourmpakis, P.; Kakavelakis, G.; Sprau, C.; Colsmann, A.; Squeo, B. M.; Gregoriou, V. G.; Kymakis, E.; Avgeropoulos, A. *J. Polym. Sci. Part A: Polym. Chem.* **2018**, *56*, 138 - 146. (*Impact Factor 2020*: **2.93**).

(47) "The Role of Chemical Structure in Indacenodithienothiophene-alt-Benzothiadiazole Copolymers for High Performance Organic Solar Cells With Improved Photo-Stability Through Minimization of Burn-in Loss"

Chochos, C. L.* (co-corresponding author); Leclerc, N.; Gasparini, N.; Zimmerman, N.; Tatsi, E.; Katsouras, A.; Moschovas, D.; Serpetzoglou, E.; Konidakis, I.; Fall, S.; Lévêque, P.; Heiser, T.; Spanos, M.; Gregoriou, V. G.; Stratakis, E.; Ameri, T.; Brabec, C. J.; Avgeropoulos, A. *J. Mater. Chem. A* **2017**, *5*, 25064 - 25076. (*Impact Factor 2020*: **12.732**).

(46) "Impact of the catalytic system to the formation of structural defects for the synthesis of well-defined donor-acceptor semiconducting polymers"

Spanos, M.; Gregoriou, V. G.; Avgeropoulos, A.; **Chochos, C. L.* (corresponding author)** *Macromol. Chem. Phys.* **2017**, *218*, 1700283. (*Impact Factor 2020*: **2.527**).

(45) "Highly Efficient Solid-State Near-infrared Organic Light-Emitting Diodes incorporating A-D-A Dyes based on α,β -unsubstituted "BODIPY" Moieties"

Zampetti, A.; Minotto, A.; Squeo, B. M.; Gregoriou, V. G.; Allard, S.; Scherf, U.; **Chochos, C. L.* (co-corresponding author)**; Franco Cacialli* *Sci. Rep.* **2017**, *7*, 1611. (*Impact Factor 2020*: **4.379**).

(44) "Optimization of the power conversion efficiency in high bandgap naphthodithiophene-based conjugated polymers for organic photovoltaics by the random terpolymer approach"

Gedefaw, D.; Sharma, A.; Pan, X.; Bjuggren, J.; Kroon, R.; Gregoriou, V. G.; **Chochos, C. L.**; Andersson, M. R. *Eur. Polym. J.* **2017**, *91*, 92 - 99. (*Impact Factor 2020*: **4.598**).

(43) "BODIPY-based Polymeric Dyes as Emerging Horizon Materials for Biological Sensing and Organic Electronic Applications"

Squeo, B. M.; Gregoriou, V. G.; Avgeropoulos, A.; Baysec, S.; Allard, S.; Scherf, U.; **Chochos, C. L.* (corresponding author)** *Prog. Polym. Sci.* **2017**, *71*, 26 - 52. (*Impact Factor 2020*: **29.190**).

(42) "Porous Organic Polymers as Emerging New Materials for Organic Photovoltaic Applications: Current Status and Future Challenges"

Bildirir, H.; Gregoriou, V. G.; Avgeropoulos, A.; Scherf, U.; **Chochos, C. L.* (co-corresponding author)** *Mater. Horiz.* **2017**, *4*, 546. (*Impact Factor 2020*: **13.266**).

(41) "Beyond Donor-Acceptor (D-A) Approach: Structure-Optoelectronic Properties-Organic Photovoltaic Performance Correlation in New D-A₁-D-A₂ Low Band Gap Conjugated Polymers"

Chochos, C. L.* (co-corresponding author); Drakopoulou, S.; Katsouras, A.; Squeo, B. M.; Sprau, C.; Colsmann, A.; Gregoriou, V. G.; Cando, A.-P.; Allard, S.; Scherf, U.; Gasparini, N.; Ameri, T.; Brabec, C. J.; Avgeropoulos, A. *Macromol. Rapid Commun.* **2017**, *38*, 1600720. (*Impact Factor 2020*: **5.734**).

(40) "Indacenodithienothiophene-Based Ternary Organic Solar Cells: Concept, Devices and optoelectronic analysis"

Gasparini, N.; Rodriguez, E. A. G.; Katsouras, A.; Avgeropoulos, A.; Pagona, G.; Gregoriou, V. G.; **Chochos, C. L.**; Allard, S.; Scherf, U.; Brabec, C. J.; Ameri, T. *Front. Energy Res.* **2017**, *4*, 40. (*Impact Factor 2020*: **4.008**).

(39) "Rational Design of High Performance Wide Bandgap Gap (~2 eV) Polymer Semiconductors as Electron Donors in Organic Photovoltaics Exhibiting High Open Circuit Voltage (1 V)"

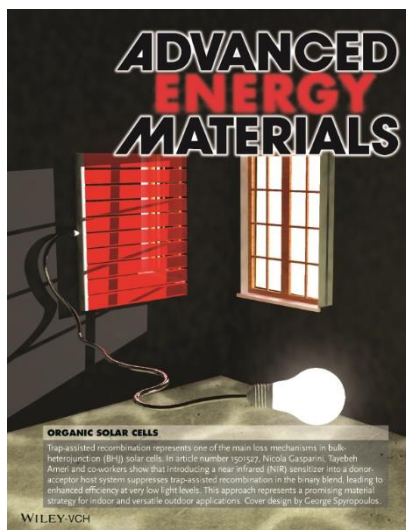
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(38) "Enhancement of the power conversion efficiency in organic photovoltaics by unveiling the appropriate polymer backbone enlargement approach"

Chochos, C. L.* (co-corresponding author); Singh, R.; Kim, K.; Gasparini, N.; Katsouras, A.; Kulshreshtha, C.; Gregoriou, V. G.; Keivanidis, P. E.; Ameri, T.; Brabec, C. J.; Cho, K.; Avgeropoulos, A. *Adv. Funct. Mater.* **2016**, *26*, 1840. (*Impact Factor 2020: 18.81*).

(37) "An Alternative Strategy to Adjust the Recombination Mechanism of Organic Photovoltaics by Implementing Ternary Compounds"

Gasparini, N.; Salvador, M.; Fladischer, S.; Katsouras, A.; Avgeropoulos, A.; Spiecker, E.; **Chochos, C. L.;** Brabec, C. J.; Ameri, T. *Adv. Energy Mater.* **2015**, *5*, 1501527. (*Impact Factor 2020: 29.37*). A Frontispiece Cover in Advanced Energy Materials has been published (<http://onlinelibrary.wiley.com/doi/10.1002/aenm.201570132/full>) for this work.



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Katsouras, A.; Gasparini, N.; Koulogiannis, C.; Spanos, M.; Ameri, T.; Brabec, C. J.; **Chochos, C. L.* (corresponding author);** Avgeropoulos A. *Macromol. Rapid Commun.* **2015**, *36*, 1778-1797. (*Impact Factor 2020: 5.734*). This work has been highlighted in MaterialsViews (7 October 2015) with the title "How to find the "optimal" molecular weight for photovoltaic polymers". (<http://www.materialsviews.com/find-optimal-molecular-weight-photovoltaic-polymers/>)

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Squeo, B. M.; Gasparini, N.; Ameri, T.; Palma-Caldo, A.; Allard, S.; Gregoriou, V. G.; Brabec, C. J.; Scherf, U.; **Chochos, C. L.* (corresponding author)** *J. Mater. Chem. A* **2015**, *3*, 16279-16286. (*Impact Factor 2020*: **12.732**).

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(32) "Impact of thienothiophene isomeric structures on the optoelectronic properties and photovoltaic performance in quinoxaline based donor-acceptor copolymers"

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(30) "Influence of the Electron Deficient Co-monomer on the Optoelectronic Properties and Photovoltaic Performance of Dithienogermole-based Co-polymers"

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Biniak, L.; **Chochos, C. L.**; Hadziioannou, G.; Leclerc, N.; Lévêque, P.; Heiser, T. *Macromol. Rapid Commun.* **2010**, *31*, 651-656. (*Impact Factor 2020*: **5.734**).

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Chochos, C. L.; Stefopoulos, A. A.; Campidelli, S.; Prato, M.; Gregoriou V. G.; Kallitsis, J. K. *Macromolecules* **2008**, *41*, 1825-1830. (*Impact Factor 2020*: **5.985**).

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(11) "Synthesis of a Soluble N-type Cyano Substituted Polythiophene Derivative – Potential Electron Acceptor in Polymeric Solar Cells"

Chochos, C. L.; Economopoulos, S. P.; Deimede, V.; Gregoriou, V. G.; Lloyd, M. T.; Malliaras, G. G.; Kallitsis, J. K. *J. Phys. Chem. C* **2007**, *111*, 10732-10740. (*Impact Factor 2020*: **4.126**).

(10) "Synthesis and Characterization of Random Copolymers Combining Terfluorene Segments and Hole or Electron Transporting Moieties"

Chochos, C. L.; Tzanetos, N. P.; Economopoulos, S. P.; Gregoriou, V. G.; Kallitsis, J. K. *J. Macrom. Sci. Pure and Appl. Chem. A* **2007**, *44*, 923-930. (*Impact Factor 2020*: **2.168**).

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Chochos, C. L.; Kallitsis, J. K.; Keivanidis, P. E.; Balushev, S.; Gregoriou, V. G. *J. Phys. Chem. B* **2006**, *110*, 4657-4662. (*Impact Factor 2020*: **2.991**).

(7) "Synthesis and Optical Properties on a Series of Polyethers Incorporating Terfluorene Segments and Methylene Spacers"

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(6) "Synthesis, optical and morphological characterization of soluble main chain 1,3,4-oxadiazole copolyarylethers – potential candidates for solar cells applications as electron acceptors"

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(4) "Synthesis and Characterization of Conjugated Polymers and Their Blends for Optoelectronic Applications"

Economopoulos, S. P.; Govaris, G. K.; **Chochos, C. L.**; Andreopoulou, A. K. ; Tzanetos, N. P.; Kallitsis, J. K.; Yianoulis, P.; Gregoriou, V. G. *Macromol. Symp.* **2004**, *205*, 19-32. (*Impact Factor 2020*: **0.85**).

(3) "Influence of the Coil Block on the Properties of Rod-Coil Diblock Copolymers with Oligofluorene as the Rigid Segment"

Chochos, C. L.; Tsolakis, P. K.; Gregoriou, V. G.; Kallitsis, J. K. *Macromolecules* **2004**, *37*, 2502-2510. (*Impact Factor 2020*: **5.985**).

(2) "Correlation of the Molecular Orientation and Photonic Properties of Rigid-Flexible Aromatic Polyethers Using FT-IR Linear Dichroism and Photoluminescence Spectroscopic Techniques"

Chochos, C. L.; Kandilioti, G.; Deimede, V. A.; Gregoriou, V. G. *J. Macrom. Sci. Pure and Appl. Chem. A* **2002**, *39*, 1317-1333. (*Impact Factor 2020*: **2.168**).

(1) "Simple syntheses of cyclic polyamines using selectively N-tritylated polyamines and succinic anhydride"

Militsopoulou, M.; Tsiakopoulos, N.; **Chochos, C.**; Magoulas, G.; Papaioannou, D. *Tetrahedron Lett.* **2002**, *43*, 2593-2596. (*Impact Factor 2020*: **2.415**).

PUBLICATIONS IN PEER REVIEW CONFERENCE PROCEEDINGS

1. "Bulk Heterojunction Photovoltaic Cells from Polymer Mixtures with Soluble Oxadiazole and Quinoline Polymers as Electron Acceptors" Economopoulos, S. P.; **Chochos, C. L.**; Govaris, G. K.; Yiannoulis, P.; Kallitsis, J. K.; Gregoriou, V. G. *Mater. Res. Soc. Symp. Proc.* **2005**, *836*, L5.16.1. In *Materials for Photovoltaics*, edited by Michael Durstock, Daniel Friedman, Russell Gaudiana, and Angus Rockett.
2. "On the Origin of Color Degradation in Polyfluorenes – Block Copolymer Approach for Stable Blue Light Emission" **Chochos, C. L.**; Kallitsis, J. K.; Gregoriou, V. G. *Mater. Res. Soc. Symp. Proc.* **2005**, *856E*, BB2.9. In *Multicomponent Polymer Systems-Phase Behavior, Dynamics and Applications*, edited by K. I. Winey, M. Dadmun, C. Leibig, and R. Oliver.
3. "Alkoxy side chains in low band-gap co-polymers: impact on conjugation and frontier energy levels" Biniek, L.; **Chochos, C. L.**; Leclerc, N.; Fall, S.; Lévêque, P.; Heiser, T. *Energy Procedia* **2012**, *31*, 38-45.

PATENTS

1. "Acid-doped polyelectrolyte modified carbon nanotubes and their use in high temperature PEM fuel cell electrodes" US Patent (8,247,521) 21st August 2012. Co-inventors: **C. Chochos**, N. Gourdoupi, N. Triantafyllopoulos, J. Kallitsis. Assignee: Advent Technologies.
2. "Multifunctional materials consisting of regioregular poly(3-alkylthiophene)s covalently attached on carbon nanotubes for photovoltaic applications" US Patent (US 7,854,862) 21st December 2010. Co-inventors: **C. Chochos**, J. Kallitsis. Assignee: Advent Technologies.
3. "Novel polymer networks based on benzimidazole moiety for high performance polymer electrolyte membrane fuel cells" US Provisional Patent (US 61/812,368) 16 April 2013. Co-inventors: **C. Chochos**, V. Gregoriou. Assignee: Advent Technologies.
4. "Novel zwitterionic polyelectrolytes as efficient interface materials for application in optoelectronic devices" US Provisional Patent (US 61/815,788) 25 April 2013. Co-inventors: **C. Chochos**, V. Gregoriou. Assignee: Advent Technologies.
5. "Conjugated polymers containing fused electron rich and electron poor units, preparation method and uses thereof" US Provisional Patent (US 61/817,386) 30 April 2013. Co-inventors: **C. Chochos**, V. Gregoriou. Assignee: Advent Technologies.
6. "Electroconductive Hydrogels based on poly(pyrrole)-poly(sodium vinylsulfonate) copolymers for Bioelectronic Applications" Greek Patent Application 2017- 01333

- filed April 7, 2017. Co-inventors: **C. Chochos**, M. Spanos and V.G. Gregoriou. Assignee: National Hellenic Research Foundation.
7. "*Electroconductive Hydrogels based on poly(thiophene)-poly(sodium acrylate) copolymers for Bioelectronic Applications*" Greek Patent Application 2017- 01334 filed April 7, 2017. Co-inventors: **C. Chochos**, M. Spanos and V.G. Gregoriou. Assignee: National Hellenic Research Foundation.
 8. "*Electroconductive Hydrogels based on poly(ethylenedioxythiophene)-poly(sodium styrenesulfonate) copolymers for Bioelectronic Applications*" Greek Patent Application 2017- 01335 filed April 7, 2017. Co-inventors: **C. Chochos**, M. Spanos and V.G. Gregoriou. Assignee: National Hellenic Research Foundation.
 9. "*Electroconductive Hydrogels based on poly(phenylene)-poly(potassium styrenesulfonate) copolymers for Bioelectronic Applications*" Greek Patent Application 2017- 01336 filed April 7, 2017. Co-inventors: **C. Chochos**, M. Spanos and V.G. Gregoriou. Assignee: National Hellenic Research Foundation.
 10. "*Electroconductive Hydrogels based on poly(furan)-poly(potassium styrenesulfonate) copolymers for Bioelectronic Applications*" Greek Patent Application 2017- 01337 filed April 7, 2017. Co-inventors: **C. Chochos**, M. Spanos and V.G. Gregoriou. Assignee: National Hellenic Research Foundation.
 11. "*Thermally stable conductive polymers for electrochemical gas sensor applications*" US Patent Application 62635582 filed February 27, 2018. Co-inventors: E. S. De Castro, **C. Chochos**, N. Gourdoupi, G. Paloumbis, V. Gregoriou. Assignee: Advent Technologies.
 12. "*Ion-imbibed exchange membranes based on proton conducting aromatic polyether type copolymers and their application in redox flow batteries*" US Patent Application US62/791,115 filed January 23, 2019. Co-inventors: G. Paloumbis, **C. Chochos**, E. S. De Castro, N. Gourdoupi, R. Pavlicek, M. Sharma, V. Gregoriou. Assignee: Advent Technologies.

ORGANIZATION OF CONFERENCES - SYMPOSIUM

1. Symposium organizer at E-MRS Fall Meeting Symposium September 2017 in Warsaw Poland, entitled "NIR Optoelectronics – Organic Semiconductors and Devices". The other members of the organizing committee are: Professor Ullrich Scherf, Professor Franco Cacialli and Dr. Ergang Wang

INVITED TALKS

1. "*Conjugated Polymers for Cancer Diagnosis and Therapy*"
Natural Sciences - Research - Medicines & Health: Integrated Approaches with a Human-Looking Look
NHRF, Athens, Greece. 9th April 2019

2. *"Up-scaling Synthesis of Conjugated Polymers for OPVs Production"*
8th Workshop "Boosting the Organic & Printed Electronics Industry in Greece"
Thessaloniki, Greece. 30 May 2016.
3. *"High performance polymer semiconductors for organic photovoltaics: Design and multigram production efforts"*
MatHero Industrialisation Workshop, University of Barcelona.
Barcelona, Spain. 27 May 2016.
4. *"High Performance Polymer Semiconductors for Organic Photovoltaics: Design and Multigram Production Efforts"*
Research and Industry Forum on Organic Photovoltaics 2014. Karlsruhe Institute of Technology (KIT).
Karlsruhe, Germany. 19 November 2014.
5. *"Upscaling Conjugated Polymers for Organic Photovoltaics. Challenges and Limitations"*
International School: "Synthesis and Characterization of Conjugated Materials for Near IR Applications" 2014. Chalmers University of Technology.
Goteborg, Sweden. 25 - 26 September 2014.
6. *"How easy is the multigram production of the state of the art conjugated polymers for high performance organic photovoltaics?"*
Rhin-Solar International Summer School on Organic Photovoltaics 2014
Strasbourg, France. 1 - 4 September 2014
7. *"Development of Conjugated Polymers with Optimized Optical and Electronic Properties for Organic Photovoltaics"*,
Italian Institute of Technology (Polytechnic School of Milano)
Milan, Italy. 27 May 2014
8. *"Development of Conjugated Polymers with Optimized Optical and Electronic Properties for Organic Photovoltaics"*
Institute of Electronic Structure and Laser of the Foundation for Research and Technology-Hellas (IESL-FORTH)
Herakleion Crete, Greece. 12 March 2014
9. *"Development of Conjugated Polymers with Optimized Optical and Electronic Properties"*
Institute of Physical Chemistry at National Hellenic Research Foundation
Athens, Greece. 04 February 2014
10. *"Theoretical Design, Synthetic Procedures and Molecular Engineering of Low Band Gap Conjugated Polymers For High Performance Optoelectronic Applications"*
Summer School on "An Introduction to Organic Electronics & Applications"
Erasmus Intensive Program, Department of Electronics TEI of Crete
Chania Crete, Greece. July 2012.

11. *"Chemistry & Molecular Engineering of Low Band Gap Conjugated Polymers towards High Performance Solar Cells"*
Summer School on "An Introduction to Organic Electronics & Applications"
Erasmus Intensive Program, Department of Electronics TEI of Crete
Chania Crete, Greece. 3-17 July 2011.
12. *"Design and Synthesis of Luminescent Block Copolymers and Low Bandgap Conjugated Polymers for Various Optoelectronic Applications"*
Summer School on "An Introduction to Organic Electronics & Applications"
Erasmus Intensive Program, Department of Electronics TEI of Crete
Chania Crete, Greece. 5-16 July 2010.

PARTICIPATION IN CONFERENCES

(59) *"Unveiling the Unique Properties of Conjugated Polymers. Horizon Materials for Organic (Bio)Electronic Applications"*

V. G. Gregoriou, A. Avgeropoulos, **C. L. Chochos**

12th Hellenic Polymer Society International Conference

Ioannina, Greece 30/09/2018 – 03/10/2018

(58) *"Rational Design and Synthesis of Polymeric Semiconductors for High Performance Organic Photovoltaics and Photodetectors"*

C. L. Chochos

E-MRS Spring Meeting 2018

Strasbourg, France 18/06/2018 – 22/06/2018

(57) *"Rational Design of Polymeric Semiconductors Towards High Performance and Stable Organic Solar Cells"*

C. L. Chochos

Stability of Emerging Photovoltaics: from Fundamentals to Applications (SEPV18)

Barcelona, Spain 20/02/2018 – 23/02/2018

(56) *"New BODIPY-based Materials for NIR Optoelectronic Applications"*

B. M. Squeo (*poster presentation*), V. G. Gregoriou, S. Allard, N. Gasparini, T. Ameri, A. Zampetti, A. Minotto, U. Scherf, C.J. Brabec, F. Cacialli, **C. L. Chochos**

E-MRS Fall Meeting Symposium "NIR Optoelectronics – Organic Semiconductors and Devices"

Warsaw Poland September 2017.

(55) *"Porous Polymeric Networks for Organic Photovoltaics"*

H. Bildirir (*oral presentation*), V. G. Gregoriou, **C. L. Chochos**

E-MRS Fall Meeting Symposium "NIR Optoelectronics – Organic Semiconductors and Devices"

Warsaw Poland September 2017.

(54) *"Impact of the catalytic system to the formation of structural defects for the synthesis of well-defined donor-acceptor semiconducting polymers for organic photovoltaic applications"*

M. Spanos (*poster presentation*), A. Katsouras, V. G. Gregoriou, A. Avgeropoulos, **C. L. Chochos**

11th Panhellenic Conference in Chemical Engineering
Thessaloniki, Greece May 2017

(53) *"High Performance Organic Photovoltaic Modules for Niche Market Applications. The Role of Chemical Structure Optimization and Scalability of Conjugated Polymers"*

C. L. Chochos (*oral presentation*), V. G. Gregoriou, H. Krüger, S. Janietz, C. Sprau, A. Colsmann, J. F. Winkel, A. Avgeropoulos

11th Panhellenic Conference in Chemical Engineering,
Thessaloniki, Greece May 2017.

(52) *"Structure-Optoelectronic Properties-Organic Photovoltaic Performance Correlation in New D-A₁-D-A₂ Low Band Gap Conjugated Polymers"*

C. L. Chochos (*poster presentation*), S. Drakopoulou, E. Tatsi, A. Katsouras, B. M. Squeo, C. Sprau, A. Colsmann, V. G. Gregoriou, A.-P. Cando, S. Allard, U. Scherf, N. Gasparini, T. Ameri, C. J. Brabec, A. Avgeropoulos

11th Hellenic Polymer Society Conference
Heraklion, Crete, Greece November 2016.

(51) *"High Performance Organic Photovoltaic Modules for Niche Market Applications. The Role of Chemical Structure Optimization and Scalability of Conjugated Polymers"*

C. L. Chochos (*oral presentation*), V. G. Gregoriou, H. Krüger, S. Janietz, C. Sprau, A. Colsmann, J.F. Winkel

11th Hellenic Polymer Society Conference
Heraklion, Crete, Greece November 2016.

(50) *"Highly Efficient Near-infrared (NIR) Polymer Light Emitting Diodes incorporating BODIPY Moieties"*

B. M. Squeo (*oral presentation*), V. G. Gregoriou, A. Zampetti, A. Minotto, F. Cacialli, **C. L. Chochos**

11th Hellenic Polymer Society Conference,
Heraklion, Crete, Greece November 2016.

(49) *"Ultra Low Band Gap $\alpha\beta$ -unsubstituted BODIPY-based Copolymer For Near-Infrared Organic Photovoltaic"*

B. M. Squeo (*poster presentation*), V. G. Gregoriou, S. Allard, N. Gasparini, T. Ameri, U. Scherf, C. J. Brabec, **C. L. Chochos**

11th Hellenic Polymer Society Conference,
Heraklion, Crete, Greece November 2016.

(48) *"Slightly structural modification of BDT-quinoxaline copolymers towards high efficient organic photovoltaics"*

C. L. Chochos (*oral presentation*)

Organic & Perovskite Solar Cells Conference 2016,

Heraklion, Crete, Greece 19 - 20 October 2016

(47) *"Highly Efficient Near-infrared Organic Light-Emitting Diode incorporating BODIPY Moieties"*

A. Zampetti (*oral presentation*), A. Minotto, B. M. Squeo, **C. Chochos**, F. Cacialli

European Optical Society Annual Meeting (EOSAM) 2016,

Berlin, Germany, 26 - 30 September 2016

(46) *"Chemical structure optimization in high performance electron donor conjugated polymers based on indacenodithiophene and indacenodithienothiophene for organic photovoltaic applications"*

A. Katsouras (*oral presentation*), **C. L. Chochos**, A. Avgeropoulos

XXXII Panhellenic Conference on Solid State Physics and Materials Science,

Ioannina, Greece 18 - 21 September 2016

(45) *"New materials for highly efficient and reliable organic solar cells (MatHero)"*

A. Colsmann, H. Krüger, **C. L. Chochos** (*oral presentation*), M. Della Pirriera, J. Winkel, S. Cros, M. Hidalgo

9th International Symposium on Flexible Organic Electronics (ISFOE16),

Thessaloniki, Greece, 4-7 July 2016

(44) *"Development of new BODIPY based materials for NIR optoelectronic applications"*

B. M. Squeo (*poster presentation*), V. G. Gregoriou, S. Allard, N. Gasparini, T. Ameri, A. Zampetti, A. Minotto, U. Scherf, C. Brabec, F. Cacialli, **C. L. Chochos**

16th International Conference "Polymers and Organic Chemistry,

Heraklion, Crete, Greece 13 - 16 June 2016

(43) *"Selection of green solvents of the PBDTPD:PCBM junction based on the study of solubility parameters"*

L. B. Pérez, L. Molina, S. Niembro, M. D. Pirriera, C. Sprau, S. Sankaran, D. Landerer, A. Colsmann, V. G. Gregoriou, **C. L. Chochos**

European PV Solar Energy Conference and Exhibition (EUPVSEC 2015)

Hambourg, Germany. 14 – 18 September 2015

(42) *"Slightly structural modification of BDT-quinoxaline copolymers towards high efficient organic photovoltaics"*

H. Krüger (*oral presentation*), **C. L. Chochos**, V. G. Gregoriou, C. Sprau, A. Colsmann, S. Janietz

12th International Symposium on Functional π -Electron Systems (Fn-12)

University of Washington - Seattle campus, USA. 19 - 24 July 2015.

(41) *"In-depth study of the binary and ternary organic solar cells based on a novel indacenodithieno[3,2-b]thiophene based conjugated polymer"*

N. Gasparini (*poster presentation*), A. Katsouras, M. I. Prodromidis, A. Avgeropoulos, D. Baran, M. Salvador, **C. L. Chochos**, T. Ameri, C. J. Brabec

International Conference on Hybrid and Organic Photovoltaics 2015

Rome, Italy. 10 - 13 May 2015.

(40) *"Development of Conjugated Polymers with Optimized Optical and Electronic Properties for Single and Tandem Organic Photovoltaic Configurations"*

C. P. Yau, Z. Fei, R. S. Ashraf, M. Shahid, P. Pattanasattayavong, R. Singh, G. Pagona, V. G. Gregoriou (*poster presentation*), T. D. Anthopoulos, P. E. Keivanidis, M. Heeney, **C.**

L. Chochos

2014 Materials Research Society (MRS) Fall Meeting & Exhibit

Boston, USA. 1 - 6 December 2014.

(39) *"New Near Infrared (NIR) Organic and Polymeric Materials During the OSNIRO European Project"*

B. M. Squeo (*oral presentation*), V. G. Gregoriou, **C. L. Chochos**

10th Hellenic Polymer Society Conference.

Patra, Greece. 4 – 6 December 2014.

(38) *"High Band Gap Indacenodithiophene and Indacenodithienothiophene Copolymers as Electron Donors in Organic Photovoltaics"*

A. Katsouras (*poster presentation*), **C. L. Chochos**, A. Avgeropoulos

10th Hellenic Polymer Society Conference.

Patra, Greece. 4 – 6 December 2014.

(37) *"High Band Gap Indacenodithiophene and Indacenodithienothiophene Copolymers as Electron Donors in Organic Photovoltaics"*

A. Katsouras (*poster presentation*), **C. L. Chochos**, A. Avgeropoulos

4th Panhellenic Conference on Green Chemistry and Sustainable Growth.

Ioannina, Greece. 30 October – 1 November 2014.

(36) *"High Band Gap Indacenodithiophene and Indacenodithienothiophene Copolymers as Electron Donors in Organic Photovoltaics"*

A. Katsouras (*poster presentation*), **C. L. Chochos**, A. Avgeropoulos

30th Panhellenic Conference on Solid-State Physics and Materials Science.

Heraklion, Crete, Greece. 21 – 24 September 2014.

(35) *"Influence of the Electron Deficient Co-monomer on the Optoelectronic Properties and Photovoltaic Performance of Dithienogermole-based CoPolymers"*

C. L. Chochos (*poster presentation*), V. G. Gregoriou, C. P. Yau, Z. Fei, R. S. Ashraf, M. Shahid, M. Heeney

2013 Materials Research Society (MRS) Fall Meeting & Exhibit

Boston, USA. 1 - 6 December 2013.

(34) *"High Performance Low Band Gap Conjugated Polymers with Upshifted HOMO levels as Electron Donors for Organic Photovoltaics"*

C. L. Chochos (*poster presentation*), V. G. Gregoriou, L. Biniek, N. Leclerc, P. Levêque, T. Heiser, C. P. Yau, Z. Fei, M. Heeney

12th European Conference on Molecular Electronics, 2013
London, United Kingdom. 3 - 7 September 2013.

(33) *"N-type conjugated Polythiophene Derivatives for Organic Photovoltaics"*

C. L. Chochos (*poster presentation*), V. Deimede, J. Kallitsis, V. Gregoriou
Plastic Electronics Conference 2012

Dresden, Germany. 9 - 11 October 2012.

(32) *"Structure – transport property relationships in thieno-thiophene containing donor-acceptor co-polymers"*

N. Leclerc (*poster presentation*), L. Biniek, **C. L. Chochos**, S. Fall, P. Lévêque, T. Heiser
International Conference on Science and Technology of Synthetic Metals (ICSM) 2010
Kyoto, Japan. 4 - 9 July 2010.

(31) *"Alkyl Chain Position Effect on the Optoelectronic Properties of Oligothiophene-Thienothiophene-Benzothiadiazole Copolymers"*

L. Biniek (*oral presentation*), **C. L. Chochos**, N. Leclerc, P. Lévêque, G. Hadziioannou, T. Heiser

International Conference on Science and Technology of Synthetic Metals (ICSM) 2010
Kyoto, Japan. 4 - 9 July 2010.

(30) *"Copolymers based on thiophene, thienothiophene and benzothiadiazole units: synthesis, characterizations and bulk heterojunction device performances"*

L. Biniek (*poster presentation*), **C. L. Chochos**, N. Leclerc, R. Bechara, P. Lévêque, G. Hadziioannou, T. Heiser

E-MRS 2009 Spring Meeting
Strasbourg, France. June 2009.

(29) *"Syntheses and Characterizations of New Donor/Acceptor Alternating Copolymers for Bulk Heterojunction Solar Cells"*

L. Biniek (*poster presentation*), **C. L. Chochos**, R. Bechara, P. Lévêque, N. Leclerc, T. Heiser, G. Hadziioannou

Bordeaux, France. October 2008.

(28) *"Development of New Semiconducting Polymer Functionalized Carbon Nanotubes"*

A. A. Stefopoulos (*poster presentation*), **C. L. Chochos**, Maurizio Prato, K. Papagelis, J. K. Kallitsis

7th Hellenic Polymer Conference
Ioannina, Greece. September 2008.

(27) *"The synthesis and formulation of photosensitive resins towards: low line edge roughness of high resolution photolithography patterns"*

Ismailova, E. (*poster presentation*); Tiron, R.; **Chochos, C. L.**; Brochon, C.; Bandelier, P.; Perret, D.; Sourd, C.; Brault, C.; Serra, C. A.; Schlatter, G.; Hadziioannou, G.
3rd MNE Conference

Athens, Greece. September 2008.

(26) "*Synthesis of Amphiphilic Conjugated Random Copolymers with Solvent, Thermo and pH Responsive Properties in Solution*"

A. A. Stefopoulos, E. K. Pefkianakis, **C. L. Chochos** (*oral presentation*), A. K. Andreopoulou, G. Bokias, J. K. Kallitsis

1st International Symposium on Flexible Organic Electronics

Thessaloniki, Greece. July 2008.

(25) "*The influence of chemical composition on Line Edge Roughness values in 193nm resists*"

Chochos, C. L.; Ismailova, E. (*poster presentation*); Brochon, C.; Leclerc, N.; Tiron, R.; Sourd, C.; Bandelier, P.; Foucher, J.; Ridaoui, H.; Dirani, A.; Soppera, O.; Perret, D.; Brault, C.; Serra, C. A.; Hadziioannou, G.

E-MRS 2008 Spring Meeting

Strasbourg, France. May 2008.

(24) "*Development of new Polymers and Composite Materials for Organic Photovoltaics & Dye Sensitized Solar Cells*"

E. K. Pefkianakis (*poster presentation*), A. A. Stefopoulos, A. K. Andreopoulou, **C. L. Chochos**, V. G. Gregoriou, J. K. Kallitsis

International Symposium Towards Organic Photovoltaics

Linz, Austria. February 2008

(23) "*Polymer Electrolyte Fuel Cell in Electrode/Electrolyte Formation Based on an Aromatic Polyether of Advent TPS® Family*"

V. Deimede (*oral presentation*), N. Gourdoupi, E. Pefkianakis, N. Triantafilopoulos, M. Daletou, M. Geormezi, E. Theodorakopoulou, **C. Chochos**, G. Paloumbis, N. Tzavellas, V. Gregoriou, J. K. Kallitsis, S. Neophytides

3rd National Conference on Hydrogen Technologies

Patras, Greece. November 2007

(22) "*Synthesis of new water-soluble copolymers containing quinoline or thiophene, exhibiting pH- or solvent- responsive photophysical properties in solution*"

G. Bokias (*poster presentation*), A. Kalogianni, E. Pefkianakis, **C. Chochos**, A. Stefopoulos, J. Kallitsis

European Polymer Congress (EPf)

Portoroz-Ljubljana, Slovenia. July 2007.

(21) "*Nanostructured Block Copolymers and Blends for Organic Photovoltaics*"

Kallitsis, J. K. (*oral presentation*); **Chochos, C. L.**; Andreopoulou, A.; Pefkianakis, E.; Stefopoulos, A.; Economopoulos, S.,

4th International Workshop & Summer School, Nanoscience and Nanotechnologies
Thessaloniki, Greece. July 2007

(20) *"Self Organized Brush-Type Copolymers Bearing Polythiophene Backbone and Side Chain Polyquinoline Blocks"*

Chochos, C. L. (*oral presentation*); Economopoulos, S. P.; Stefopoulos, A.; Gregoriou, V. G.; Kallitsis, J. K.,

3rd International Symposium on Nanostructured and Functional Polymer-Based Materials and Nanocomposites
Corfu, Greece. May 2007

(19) *"Novel brush-type copolymers bearing thiophene backbone and side chain quinoline blocks. Synthesis and their use as a compatibilizer in thiophene-quinoline polymer blends"*

Economopoulos, S. P. (*poster presentation*); **Chochos, C. L.**; Gregoriou, V. G.; Barrau, S.; Hadziioannou, G.; Kallitsis, J. K.,

6th Hellenic Polymer Conference,
Patra, Greece. November 2006

(18) *"Synthesis and Characterization of New Rod-Coil Block Copolymers Incorporating Terfluorene Segments and Hole / Electron Transporting Moieties for Stable Blue Light Emission"*

Chochos C. L.; Tzanetos N. P.; Gregoriou V. G. (*poster presentation*); Kallitsis J. K.,
Materials Research Society (MRS) 2005 Meeting,
Boston, MA, USA. November 2005.

(17) *"Bulk Heterojunction Photovoltaic Cells from Polymer Mixtures with Soluble Oxadiazole and Quinoline Polymers as Electron Acceptors"*

Economopoulos, S.; **Chochos, C. L.** (*poster presentation*); Govaris, G. K.; Yiannoulis, P.; Kallitsis, J. K.; Gregoriou, V. G.,

16th European Symposium on Polymer Spectroscopy ESOPS 16,
Kerkrade, The Netherlands. May 2005.

(16) *"Synthesis and Spectroscopic Characterization of Stable Blue Emitters Based on Rod-Coil Block Copolymers Incorporating Terfluorene Segments for PLED applications"*

Chochos, C. L. (*oral presentation*); Tzanetos, N. P.; Economopoulos, S. P.; Kallitsis, J. K.; Gregoriou, V. G.,

16th European Symposium on Polymer Spectroscopy ESOPS 16,
Kerkrade, The Netherlands. May 2005.

(15) *"Polymer blends for Use in Plastic Photovoltaic Cells; Study and Correlation between Morphology and Efficiency"*

Economopoulos, S. (*oral presentation*); **Chochos, C. L.**; Govaris, G. K.; Andreopoulou, K.; Mouzakis, D. E.; Yiannoulis, P.; Kallitsis, J. K.; Gregoriou, V. G.,

5th Greek National Chemical Engineering Conference,
Thessaloniki, Greece. May 2005.

(14) *"Copolymers that Contain Terfluorene Blocks for Stable Blue Light Emission"*

Chochos, C. (*oral presentation*); Tzanetos, N.; Kallitsis, J.; Gregoriou, V. G.,
5th Greek National Chemical Engineering Conference,
Thessaloniki, Greece. May 2005.

(13) *"Spectroscopic Studies on the Origin of Color Degradation in Polyfluorenes"*

Gregoriou, V. G. (*oral presentation*); **Chochos, C. L.**; Kandilioti, G.; Kallitsis, J. K.,
Pittsburgh Conference in Analytical Chemistry and Applied Spectroscopy,
Orlando, FL, USA. March 2005.

(12) *"Bulk heterojunction Photovoltaic Cells from Polymer Mixtures and Copolymers with Soluble Oxadiazole and Quinoline Polymers as Electron Acceptors"*

Gregoriou, V. G. (*poster presentation*); **Chochos, C. L.**; Govaris, G.; Yiannoulis, P.;
Kallitsis, J. K.,
Materials Research Society (MRS) 2004 Meeting,
Boston, MA, USA. November 2004.

(11) *"On the origin of Color Degradation in Polyfluorenes – Block Copolymer Approach for Stable Blue Light Emission"*

Gregoriou, V. G. (*oral presentation*); **Chochos, C. L.**; Kandilioti, G.; Kallitsis, J. K.,
Materials Research Society (MRS) 2004 Meeting,
Boston, MA, USA. November 2004.

(10) *"FT-IR spectroscopic investigation on the origin of the low energy PL emission bands in fluorenes used for OLED applications"*

Chochos, C. L.; Kallitsis, J. K.; Gregoriou, V. G. (*oral presentation*),
31st FACSS Meeting,
Portland, OR, USA. October 2004.

(9) *"Bulk Heterojunction Photovoltaic Cells From Polymer Mixtures and Copolymers Utilizing Oxadiazoles and Quinolines as Electron Acceptors"*

Gregoriou, V. G.; **Chochos, C. L.** (*poster presentation*); Economopoulos, S. P.; Govaris,
G. K.; Andreopoulou, A. K.; Tzanetos, N. P.; Deimede, V.; Kallitsis, J. K.; Yiannoulis, P.,
6th International Symposium on Functional π -Electron Systems,
Cornell, NY, USA. June 2004.

(8) *"Rod-Coil Block Copolymers Containing Conjugated Rigid Segments: Synthesis and Optical Properties"*

Kallitsis, J. K. (*oral presentation*); Gregoriou, V. G.; **Chochos, C. L.**; Tsolakis, P. K.;
Tzanetos, N. P.,
6th International Symposium on Functional π -Electron Systems,
Cornell, NY, USA. June 2004.

(7) *"Characterization of conjugated polymers and their blends for use in flexible photovoltaic cells"*

Gregoriou, V. G. (*oral presentation*); Economopoulos, S. P.; Govaris, G. K.; **Chochos, C. L.**; Andreopoulou, A. K.; Tzanetos, N.; Kallitsis, J. K.; Yianoulis, P., Pittsburgh Conference in Analytical Chemistry and Applied Spectroscopy, Chicago, IL, USA. March 2004.

(6) "*Synthesis and Characterization of Conjugated Polymers and their Blends for Optoelectronic Applications*"

Economopoulos, S. P.; Govaris, G. K.; **Chochos, C. L.**; Andreopoulou, A. K.; Tzanetos, N.; Kallitsis, J. K.; Yianoulis, P.; Gregoriou, V. G. (*oral presentation*), 15th European Symposium on Polymer Spectroscopy ESOPS 15, Heraklion, Greece. June 2003.

(5) "*Synthesis and Characterization of Conjugated Polymers and Their Mixtures for Optoelectronic Applications*"

Gregoriou, V. G. (*oral presentation*); Govaris, G.; **Chochos, C.**; Economopoulos, S.; Andreopoulou, K.; Kallitsis, J. K.; Yianoulis, P. 4th Greek National Chemical Engineering Conference, Patras, Greece. May 2003.

(4) "*Synthesis and Characterization of Conjugated Polymers and Their Mixtures for Optoelectronic Applications*"

Gregoriou, V. G. (*oral presentation*); Economopoulos, S.; Govaris, G.; **Chochos, C.**; Andreopoulou, K.; Kallitsis, J. K.; Yianoulis, P., 1st National Plastics Conference, Athens, Greece. March 2003.

(3) "*Correlation of the Molecular Orientation and Photonic Properties of Rigid-Flexible Aromatic Polyethers Using FT-IR and Photoluminescence Spectroscopic Techniques*"

Chochos, C.; Kandilioti, G.; Deimende, V.; Gregoriou, V. G. (*oral presentation*), 19th National Greek Chemical Conference, Heraklion, Crete, Greece. November 2002.

(2) "*Synthesis and Characterization of Conjugated Polymers and Their Mixtures for Optoelectronic Applications*"

Economopoulos, S. (*poster presentation*); Govaris, G.; **Chochos, C.**; Andreopoulou, K.; Kallitsis, J. K.; Yianoulis, P.; Gregoriou, V. G., 19th National Greek Chemical Conference, Heraklion, Crete, Greece. November 2002.

(1) "*Correlation of the Molecular Orientation and Photonic Properties of Rigid-Flexible Polymers Using FT-IR Linear Dichroism and Photoluminescence Spectroscopic Techniques*"

Gregoriou, V. G. (*oral presentation*); **Chochos, C.**; Kandilioti, G.; Deimede, V., 29th FACSS Meeting, Providence, RI, USA. October 2002.

TEACHING AND TRAINING EXPERIENCE

- *2013 - 2017 (Fall Semester):* Dr Chochos has integrated the science of conjugated polymer in the course: "Polymer Materials-Special Issues" (teaching hours in undergraduate students), which is an elective course focusing in applications of various types of polymers and polymer-related materials. Dr Chochos contributed with three 3-hour lectures and the undergraduate students were also involved in handling a related project concerning conjugated polymers and their application in photovoltaic technology.
- *2013 - 2017 (Fall Semester):* Dr Chochos prepared and presented a new course on the application of conjugated polymers in organic electronic applications (graduate studies program, two 3-hour lectures).
- *2010-Fall Semester:* Independent teaching of the "Polymers/Biomaterials" course to the 4th year undergraduate students at the Department of Mechanical Engineering and Materials Science and Engineering of the Cyprus University of Technology
- *2010-Fall Semester:* Participation in the training of the 3rd year undergraduate students in the Processing Materials Laboratory Course at the Department of Mechanical Engineering and Materials Science and Engineering of the Cyprus University of Technology
- *2009-Fall Semester:* Participation in the Design of the Laboratory Exercises, Preparation of the Laboratory Notes and training of the 3rd year undergraduate students in the Processing Materials Laboratory Course at the Department of Mechanical Engineering and Materials Science and Engineering of the Cyprus University of Technology in collaboration with Associate Professor Stelios Choulis

[The title of the exercises are:

- (1) Synthesis of Materials (Polymers),
- (2) Processing of Conjugated polymers using Spin Coating Technique,
- (3) Processing of Conjugated Polymers using Doctor Blade Technique,
- (4) Characterization of the Optical properties of Conjugated Polymers in solution and as thin films
- (5) Evaporation and Deposition of Metals – Calculation of the power conversion efficiency of solar cells]

- *2005-Spring Semester:* Participation in the training of the 3rd year undergraduate students in the laboratory of the Physical Working Course of Chemistry Department, University of Patras

SUPERVISOR OF RESEARCHERS AND STUDENTS

Total persons = 24 [4 Post Doc Fellows, 6 PhD candidates, 6 postgraduate (master) students, 8 undergraduate (diploma) students]

- **Post Doc Fellows**

- *2020*: Dr Panagiota Koralli (IKY Fellowship)
- *2020*: Dr Maria Goulielmaki (Pfizer Fellowship)
- *2016*: Dr Hakan Bildirir worked under the guidance of Dr Chochos during the European ITN research program OSNIRO at Advent Technologies SA for a period of 12 months. He developed soluble conjugated polymer networks as electron acceptors for organic photovoltaics.
- *2013*: Dr Georgia Pagona worked under the guidance of Dr Chochos during the research program AdvePol at Advent Technologies SA for a period of 9 months.

- **PhD candidates**

- *2020*: Andriana Schiza (Pfizer Fellowship)
- *2020*: Clement Gedeon (ITN Marie Curie Fellow – Advent Technologies)
- *2014*: Mr Athanasios Katsouras was a PhD candidate under the supervision of Prof Avgeropoulos and co-supervision of Dr Chochos. He defended his PhD thesis with title "Design and Synthesis of New Conjugated Polymers for Organic Photovoltaic Applications" at 04/2018.
- *2014*: Ms Benedetta Squeo was a PhD candidate (Early Stage Researcher in Advent Technologies for 36 months) registered at University of Wuppertal in Macromolecular Chemistry Group, under the co-supervision of Prof. Ulrich Scherf in order to obtain a PhD degree at 03/2017, during the OSNIRO ITN European project. The title of her PhD dissertation is "Synthesis and scale up procedures of BODIPY-based oligomers and related copolymers". Dr Chochos is her co-supervisor in Advent Technologies by designing the theoretical and experimental work.
- *2008*: Research Assistant of Dr. Esmá Ismailova during her PhD Studies at the Laboratoire d'Ingénierie des Polymères pour les Hautes Technologies (LIPHT), Université Louis Pasteur, Ecole Européenne de Chimie, Polymères et Matériaux (E-ECPM), and Centre National de la Recherche Scientifique (CNRS) Strasbourg, France
- *2007*: Research Assistant of Dr Andreas Stefopoulos during his PhD Studies at the Chemistry Department of University of Patras

- **Postgraduate (Master) students**

- *2020*: Katerina Mavronasou (SCHOOL OF HEALTH SCIENCES MEDICAL SCHOOL and DEPARTMENT OF PHARMACY Interdisciplinary Postgraduate Studies Program "Nanomedicine")

- 2019: Lida-Evmorfia Vagiaki (SCHOOL OF HEALTH SCIENCES MEDICAL SCHOOL and DEPARTMENT OF PHARMACY Interdisciplinary Postgraduate Studies Program "Nanomedicine")
- Mr Athanasios Katsouras started the experimental work for his Master thesis entitled "Synthesis and Characterization of Indacenodithiophene based Conjugated Polymers for Organic Photovoltaic Applications" on 05/2013. Dr Chochos was his co-supervisor by designing the theoretical and experimental work. Mr Katsouras presented successfully his master thesis on 10/2014.
- Ms Christina Miskaki has started the experimental work for her Master thesis entitled "Synthesis and Characterization of Low Band Gap based Conjugated Polymers for Organic Photovoltaic Applications" on 10/2014. Dr Chochos was his co-supervisor by designing the theoretical and experimental work. Ms Miskaki presented successfully her master thesis on 12/2015.
- Mr Michalis Spanos has started the experimental work for his Master thesis entitled "Determination of homo-coupling structural defect in the backbone of conjugated polymers" on 10/2014. Dr Chochos was his co-supervisor by designing the theoretical and experimental work. Mr Spanos presented successfully his master thesis on 12/2015.
- *2010*: Co-supervisor of Mr Mougkarakis Athanasios during his Master Thesis Dissertation in the Field of the Renewable Energy Management at Albert-Ludwigs-Universität Freiburg Germany, Faculty of Forest and Environmental Science with Title: "*An Investigation of the Role of Energy Storage In the Future Development of Photovoltaic Systems*"
- **Undergraduate (Diploma) students**
 - 2021 Mr Lefas Dimitrios (ESPA Practice) 2 months duration Department of Biological Applications and Technology (BET) University of Ioannina
 - 2020 Mrs Evaggelia Valliou (ESPA Practice) 2 months duration Agricultural University of Athens
 - Mr Chrysanthos Koulogiannis an undergraduate student at the Department of Materials Science and Engineering (University of Ioannina) has started the experimental work for his diploma thesis entitled "Optimizing the molecular weight in new indacenodithiophene-alt-thienopyrrolodione copolymers" on 10/2014. Dr Chochos was his co-supervisor by designing the theoretical and experimental work. Mr Koulogiannis presented successfully his diploma thesis on 07/2015.
 - Mr Dimitris Deligiannis an undergraduate student at the Department of Materials Science and Engineering (University of Ioannina) has started the experimental work for his diploma thesis entitled "Predicting the optoelectronic properties in indacenodithienothiophene copolymers by

theoretical calculations” on 10/2014. Dr Chochos was his co-supervisor by designing the theoretical and experimental work. Mr Deligiannis presented successfully his diploma thesis on 12/2015.

- Ms Elisavet Tatsi an undergraduate student at the Department of Materials Science and Engineering (University of Ioannina) has started the experimental work for her diploma thesis entitled “Synthesis and Characterization of High Bandgap Conjugated Polymers based on Indacenodithiophene Unit” on 10/2015. Dr Chochos was her co-supervisor by designing the theoretical and experimental work. Ms Tatsi presented successfully her diploma thesis on 06/2016.
- Ms Sofia Drakopoulou an undergraduate student at the Department of Materials Science and Engineering (University of Ioannina) has started the experimental work for her diploma thesis entitled “Synthesis and Characterization of Low Bandgap Conjugated Polymers based on Diketopyrrolopyrrole Unit” on 10/2015. Dr Chochos was her co-supervisor by designing the theoretical and experimental work. Ms Drakopoulou presented successfully her diploma thesis on 07/2016.
- Mr Dimitris Alevras an undergraduate student at the Department of Materials Science and Engineering (University of Ioannina) has started the experimental work for his diploma thesis entitled “Characterization of Conjugated Polymers based on Indacenodithiophene for Organic Photovoltaic Applications” on 03/2016. Dr Chochos was his co-supervisor by designing the theoretical and experimental work. Mr Alevras presented successfully his diploma thesis on 11/2016.
- Ms Kiriaki Vavesiou an undergraduate student at the Department of Materials Science and Engineering (University of Ioannina) has started the experimental work for her diploma thesis entitled “Synthesis and Characterization of Low Bandgap Conjugated Polymers for Organic Photovoltaic Applications” on 10/2016. Dr Chochos is her co-supervisor by designing the theoretical and experimental work.
- 2006: Co-supervisor of the 4th year undergraduate student Athanasiou Mougkarakis from the Department of Materials Science, University of Patras during his diploma thesis with title '*Spectroscopic Characterization of Polymeric Compounds and Blends Thereof for Energy Applications*'.
- 2005: Co-supervisor of the 4th year undergraduate student Marios Neophytou from the Chemistry Department, University of Patras during his diploma thesis with title '*Spectroscopic Studies of Conjugated Polymers for Use in Plastic Solar Cells*'.

MEMBER IN SCIENTIFIC SOCIETIES

- 2001 Member of the Greek Chemical Society
- 2018 Member of the Hellenic Society of Biomaterials

JOURNAL REVIEWER

I am frequently reviewer in various scientific journals, such as:

- Nature Communications (Springer)
- Advanced Materials (Wiley)
- Advanced Functional Materials (Wiley)
- Advanced Energy Materials (Wiley)
- Advanced Electronic Materials (Wiley)
- Small (Wiley)
- Macromolecular Rapid Communication (Wiley)
- ChemPlusChem (Wiley)
- Macromolecular Materials and Engineering (Wiley)
- Journal of the American Chemical Society (American Chemical Society)
- Journal of Physical Chemistry (American Chemical Society)
- ACS Applied Materials and Interfaces (American Chemical Society)
- Materials Horizons
- Journal of Materials Chemistry (Royal Society)
- Journal of Materials Chemistry A (Royal Society)
- Journal of Materials Chemistry C (Royal Society)
- Polymer Chemistry (Royal Society)
- RSC Advances (Royal Society)
- Nanoscale (Royal Society)
- Physical Chemistry Chemical Physics (Royal Society)
- New Journal of Chemistry (Royal Society)
- Organic Electronics (Elsevier)
- Solar Energy Materials and Solar Cells (Elsevier)
- Carbon (Elsevier)
- European Polymer Journal (Elsevier)
- Materials Chemistry and Physics (Elsevier)
- Synthetic Metals (Elsevier)
- Materials Science and Engineering B (Elsevier)
- International Journal of Polymer Science (Hindawi Publishing Corporation)

