

## Program Overview

| Monday, 22 January 2024 |  |
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| <b>Time (h)</b>         | University of Algarve, Grande Auditório Caixa Geral de Depósitos   |
| 9:00-10:45              | <b>Registration</b>  |
| 10:45-11:15             | <p><b>Opening Ceremony</b></p> <p>Maria Lurdes Cristiano (UAlgarve) - Chairperson of the 15th National Organic Chemistry Meeting (15th ENQO) and National Medicinal Chemistry and Biological Meeting (8th ENQT)</p> <p>Carlos Afonso (FFUL) - Chairperson &amp; President of the Organic Chemistry Division</p> <p>Maria Amparo F. Faustino (UA) - Chairperson &amp; President of the Medicinal Chemistry Division</p> <p>Joaquim Faria - Presidente da Sociedade Portuguesa de Química</p> <p>Carlos Guerrero - Diretor da Faculdade de Ciências e Tecnologia da Universidade do Algarve</p> <p>Nuno Bicho - Vice-Reitor da Universidade do Algarve</p> |
| CHAIRS:                 | Artur M. S. Silva  |
| 11:15-12:00             | <p>PL1 - Going with the flow – The use of continuous processing in organic synthesis</p> <p><i>C. Oliver Kappe, Institute of Chemistry, University of Graz, Heinrichstrasse 28, Graz, Austria</i></p>  |
| 12:00-12:45             | <p>PL2 - New reactions and structures involving main group elements: from hypervalent iodane rearrangements to novel borylated skeletons</p> <p><i>Ana B. Cuenca, BISI-Bonds/CRISOL group, Dept. of Organic and Pharmaceutical Chemistry, Institut Químic de Sarrià, Universitat Ramon Llull, Via Augusta 390, 08017 Barcelona, Spain</i></p>  |
| 12:45-14:30             | <b>Lunch Break</b>   |
| CHAIRS:                 | Emilia Sousa and Rui Moreira   |
| 14:30-15:15             | <p>PL3 - Chemical biology for drug discovery</p> <p><i>Edward Tate, Department of Chemistry, Molecular Sciences Research Hub, London, W12 0BZ and The Francis Crick Institute, 1 Midland Rd, London NW1 1AT, UK</i></p>  |
| 15:15-15:35             | <p>KN1 - Design, synthesis and <i>in vitro</i> evaluation of a series of endoperoxide hybrids designed to tackle latent tuberculosis</p> <p><i>Patrícia Sofia Menalha Amado, Center of Marine Sciences, University of Algarve, P-8005-039 Faro, Portugal</i></p>   |
| 15:35-15:55             | <p>KN2 - Designing bioconjugates and nanomaterials for enhanced photodynamic therapy</p> <p><i>João Paulo Costa Tomé, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1049 001 Lisboa, Portugal</i></p>  |
| 15:55-16:15             | <p>KN3 - Mechanochemistry: in search of sustainable methods for the synthesis of heterocycles</p> <p><i>Marta Pineiro, University of Coimbra, Department of Chemistry, 3004-535 Coimbra, Portugal</i></p>  |

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| 16:15-16:35      | KN4 - Pyrimido[5,4- <i>d</i> ]pyrimidines as new tools to tackle old problems: vector-borne parasitic diseases<br><i>Maria Alice Carvalho, Centro de Química, Escola de Ciências, Universidade do Minho, Braga, Portugal</i>  |              |  |
| 16:35-17:10      | <b>Coffee break</b>   |              |  |
| Grande Auditório | Chairs: Paula Branco and Manuela Raposo   | Anfiteatro A | Chairs: Pedro Góis and Lucinda Reis  |
| 17:10-17:20      | OC1 - Plastic depolymerization using commercially available Mo, Zn, Mn catalysts<br><i>Ana C. Fernandes, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1049-001 Lisboa, Portugal</i>  | 17:10-17:20  | OC8 - Wild-type p53 modification by a tryptophanol-derived oxazoloisoindolinone<br><i>Ricardo J. F. Ferreira, Faculty of Pharmacy, Universidade de Lisboa, Lisboa, Portugal</i>  |
| 17:20-17:30      | OC2 - Active polymeric filtration membranes with siderophore for iron(III) removal from aqueous systems<br><i>Ricardo A. L. S. Santos, Chemistry Department, University of Aveiro, Campus Universitário de Santiago 3810-193 Aveiro, Portugal</i>   | 17:20-17:30  | OC9 - Sphaerococcenol A: Extraction, analogue synthesis, and antitumor assays<br><i>Milene A. G. Fortunato, Faculty of Pharmacy, Universidade de Lisboa, Av. Prof. Gama Pinto, 1649-003, Lisboa, Portugal</i>  |
| 17:30-17:40      | OC3 - Pd-Catalyzed cycloaddition of bicyclic aziridines with isocyanates for imidazolidinone synthesis<br><i>Mariana Crespo Monteiro, Faculty of Pharmacy, Universidade de Lisboa, Av. Prof. Gama Pinto, 1649-003 Lisbon, Portugal</i>  | 17:30-17:40  | OC10 - Study of the action of a tryptophan metabolite, 8-hydroxyquinoline-2-carboxylic acid, and its Ga(III) complex on microbiota exposed to ionizing radiation<br><i>Nádia Ribeiro, Centro de Ciências e Tecnologias Nucleares, Instituto Superior Técnico, Estrada Nacional 10, km 139.7, 2695-066 Bobadela LRS, Portugal</i> |
| 17:40-17:50      | OC4 - The chemistry of malvidin 3- <i>O</i> -glucoside and malvidin 3,5- <i>O</i> -diglucoside networks from acidic and basic paradigms. The irreversible reactions.<br><i>Joana Oliveira, Faculdade de Ciências, Universidade do Porto, Rua do Campo Alegre, 687, 4169-007 Porto, Portugal</i> | 17:40-17:50  | OC11 - Incorporation of unnatural alpha, alpha-dialkylglycines in polymyxins: synthesis and characterization<br><i>Susana P. G. Costa, Centre of Chemistry, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal</i>   |
| 17:50-18:00      | OC5 - Lewis base-catalyzed reactions of chromans and allenates: Access to structurally diverse chroman frameworks<br><i>Maria I. L. Soares, University of Coimbra, Coimbra Chemistry Centre-Institute of Molecular Sciences and Department of Chemistry, 3004-535 Coimbra, Portugal</i>         | 17:50-18:00  | OC12 - Searching novel therapeutic targets against MRSA: a mass spectrometry multi-omics approach<br><i>Pedro C. Rosado, Centro de Química Estrutural - Institute of Molecular Sciences, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1, 1049-001 Lisboa, Portugal</i>                                  |
| 18:00-18:10      | OC6 - Easy access to functionalized sparteine via electrochemical cyanation in batch and in flow of quinolizidine alkaloids<br><i>Raquel M. Durão, Faculty of Pharmacy, Universidade de Lisboa, Av. Prof. Gama Pinto, 1649-003 Lisbon, Portugal</i>   | 18:00-18:10  | OC13 - Layer-by-layer supramolecular assembly of alginate/pyranoflavylium-modified chitosan acidochromic biomembranes<br><i>Luis Cruz, Faculty of Sciences, University of Porto, Rua do Campo Alegre, s/n, 4169-007, Porto, Portugal</i>   |

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| 18:10-18:20 | OC7 - Synthesis of new conjugated elongated tryptanthrin derivatives for optoelectronic devices<br><i>Vítor A. S. Almodôvar, Faculty of Pharmacy, University of Coimbra, Pólo das Ciências da Saúde, Azinhaga de Santa Coimbra, 3000-548 Coimbra, Portugal.</i> | 18:10-18:20 | OC14 - Pharmaceutical ionic (nano)systems: a sustainable approach for infection diseases<br><i>Luis C. Branco, FCT NOVA, Universidade NOVA de Lisboa, 2829-516, Caparica, Portugal</i> |
| 18:20       | <b>Porto de Honra</b>   |             |  |

| <b>Tuesday, 23 January 2024</b> |   |              |  |
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| <b>Time (h)</b>                 | University of Algarve – Grande Auditório Caixa Geral de Depósitos   |              |  |
| <b>CHAIRS:</b>                  | Vítor Freitas and Uwe Pischel   |              |  |
| 9:00-9:45                       | PL4 – Asymmetric autocatalysis and its implications for symmetry breaking and homochirality<br><i>Oliver Trapp, Ludwig-Maximilians-University, Munich/Germany</i>   |              |  |
| 9:45-10:05                      | KN5 - When less is more: downsizing peptide-ionic liquid conjugates delivers new candidates for topical treatment of skin infections<br><i>Paula Gomes, LAQV-REQUIMTE, Departamento de Química e Bioquímica, Faculdade de Ciências, Universidade do Porto, Portugal</i> |              |  |
| 10:05-10:25                     | KN6 - $\beta$ -Modifications of <i>meso</i> -arylporphyrins: a roadmap to targeted applications<br><i>Nuno M. M. Moura, LAQV-Requimte and Department of Chemistry, University of Aveiro, 3810-193 Aveiro, Portugal</i>  |              |  |
| 10:25-10:45                     | KN7 - Oxindole-small-molecule hybrids in complex diseases<br><i>Carolina Silva Marques, LAQV-REQUIMTE, Institute for Advanced Studies and Research (IIFA), University of Évora, Rua Romão Ramalho, 59, 7000-641, Évora, Portugal</i>                                    |              |  |
| 10:45-11:15                     | <b>Coffee break</b>   |              |  |
| Grande Auditório                | Chairs: Mariette Pereira and Nuno Candeias  | Anfiteatro A | Chairs: Graça Neves and Maria Manuel Marques   |
| 11:15-11:25                     | OC15 - Radicals at very low temperatures: Monitoring reactions and interactions through IR spectroscopy,<br><i>Elisa M. Brás, Universidade de Coimbra, Coimbra, Portugal</i>  | 11:15-11:25  | OC23 - Bioorthogonal pretargeting for anchoring photoactive BODIPY on the plasma membrane of HER2+ gastric tumours<br><i>Sara R. D. Gamelas, LAQV-REQUIMTE, Department of Chemistry, University of Aveiro, 3810-193 Aveiro, Portugal</i> |

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| 11:25-11:35 | OC16 - Revealing the potential of phthaloperinones as key optoelectronic components for electronic devices<br><i>Ana C. Amorim, University of Coimbra, Coimbra Chemistry Centre – Institute of Molecular Sciences and Department of Chemistry, 3004-535 Coimbra, Portugal</i> | 11:25-11:35 | OC24 - Graphitic carbon nitride: new support for glucose oxidase immobilisation towards cancer therapy<br><i>Rita A. M. Barros, Faculty of Engineering, University of Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal</i>  |
| 11:35-11:45 | OC17 - Synthesis of C-glycosyl quinolones, acridones and related compounds: Classical <i>versus</i> ohmic heating conditions<br><i>Vera Lúcia Marques da Silva, Department of Chemistry, University of Aveiro, 3810-193 Aveiro, Portugal</i>                                  | 11:35-11:45 | OC25 - Blocking replication of tumour cells with G-quadruplex DNA stabilizing ligands<br><i>Catarina I. V. Ramos, LAQV-Requimte and Department of Chemistry, University of Aveiro, 3010-193 Aveiro, Portugal</i>  |
| 11:45-11:55 | OC18 - Efficient visible-light-driven imines synthesis using carbon nitride photocatalyst<br><i>Joana C. Lopes, Faculty of Engineering, University of Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal</i>  | 11:45-11:55 | OC26 - Exploring the cytotoxic diterpenoid 7 $\alpha$ -acetoxy-6 $\beta$ -hydroxyroyleanone from <i>Plectranthus</i> spp. as a PKC- $\alpha$ activator for breast cancer therapy<br><i>Vera M. S. Isca, CBIOS – Universidade Lusófona’s Research Center for Biosciences &amp; Health Technologies, Lisbon, Portugal</i> |
| 11:55-12:05 | OC19 - Furan-based asymmetric diketopyrrolepyrrole dyes: Optimization of acceptor unit for Dye-Sensitized Solar Cells<br><i>João Sarrato, FCT NOVA, Universidade NOVA de Lisboa, 2829-516, Caparica, Portugal</i>   | 11:55-12:05 | OC27 – Inhibition of G4-helicase interactions: A promising approach for cancer targeting therapy<br><i>Israa Aljnadi, Medicinal Organic Chemistry Group, Research Institute for Medicines (iMed.U LISBOA), Faculty of Pharmacy, Universidade de Lisboa, Av. Prof. Gama Pinto, 1649-003 Lisboa, Portugal</i>             |
| 12:05-12:15 | OC20 - Mechanochemistry of chiral oligosulfides by inverse vulcanization<br><i>Vasco D. B. Bonifácio, Bioengineering Department, Instituto Superior Técnico, Lisboa, Portugal</i>   | 12:05-12:15 | OC28 - High“light”ing dansylpiperazino-functionalized squaraine dyes for enhanced anticancer photodynamic purposes<br><i>Eurico Lima, University of Trás-os-Montes and Alto Douro, Quinta de Prados 5001-801, Vila Real, Portugal</i>   |
| 12:15-12:25 | OC21 - Photocatalytic oxidation of bio-based heterocyclic compounds<br><i>Késsia H. S. Andrade, Faculdade de Farmácia, Universidade de Lisboa, Lisboa, Portugal</i>   | 12:15-12:25 | OC29 - Shining against resistance: Photodecontaminant materials for inactivation of bacteria<br><i>Carolina V. Domingos, Centro de Química de Coimbra, Departamento de Química, Universidade de Coimbra, Rua Larga, 3004-535 Coimbra, Portugal</i>  |
| 12:25-12:35 | OC22 - Degradation products of plastic polymers as markers of microplastics<br><i>José P. Da Silva, Centre of Marine Sciences (CCMAR/CIMAR LA), University of Algarve, Campus de Gambelas, 8005-139 Faro, Portugal</i>  | 12:25-12:35 |   |
| 12:35-14:00 | <b>Lunch Break</b>  |             |   |

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| CHAIRS:     | Paulo Almeida and António Deométrio Pereira   |
| 14:00-14:45 | PL5 - Structure based identification of novel albumin binders for half-life extensions of proteins and peptides<br><i>Maria Méndez Pérez, Sanofi, Germany</i>   |
| 14:45-15:05 | KN8 - New dual-color photoinitiators derived from photochromic naphthopyrans for 3D printing<br><i>Paulo Jorge dos Santos Coelho, University of Trás os Montes e Alto Douro, 5000-801 Vila Real, Portugal</i>     |
| 15:05-15:25 | KN9 - The BASHY dye platform as theranostic tool - from bioimaging to photodynamic therapy<br><i>Uwe Pischel, University of Huelva, 21071 Huelva, Spain</i>   |
| 15:25-15:45 | KN10 - (Thio)barbiturates combined with fatty acids with potential interest against prostate cancer<br><i>Samuel Martins Silvestre, Faculty of Sciences, University of Beira Interior, Covilhã, Portugal</i>      |
| 15:45-16:05 | KN11 - C-N and S-N bond formation via hypervalent iodine reagents: the missing link<br><i>Maria Manuel B. Marques, School of Science and Technology, Universidade Nova de Lisboa, 2829-516 Caparica, Portugal</i> |
| 16:05-16:15 | SOC - The Elsevier's Chemistry Ecosystem<br><i>Marta Da Piana, Elsevier B.V., Radarweg 29, Amsterdam</i>  |
| 16:15-16:35 | <b>Flash Poster Communication in 90 s</b>   |
| 16:35-18:00 | <b>Coffee break &amp; Poster discussion</b>   |
| 18:00-19:00 | <b>Assembleia Geral</b>   |
| 19:45       | <b>Congress Dinner – Eva Sense Hotel</b>  |

| Wednesday, 24 January 2024 |  |
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| <b>Time (h)</b>            | University of Algarve  |
| CHAIRS:                    | Teresa Pinho e Melo and Fernanda Proença   |
| 9:00-9:45                  | PL6 - Development of new catalytic systems. Applications in asymmetric catalysis<br><i>Rosario Fernández Fernández, Departamento de Química Orgánica, Facultad de Química, Universidad de Sevilla, Spain</i>   |
| 9:45-10:05                 | KN12 - The Évora-Coimbra rearrangement: Tales from two (cities) labs<br><i>Anthony J. Burke, Faculty of Pharmacy, University of Coimbra, Pólo das Ciências da Saúde, Azinhaga de Santa Coimbra, 3000-548 Coimbra, Portugal</i>   |
| 10:05-10:25                | KN13 - Development of synthetic methodologies to obtain dicarboxymethyl cellulose with differentiated structure and properties<br><i>Luísa Maria da Silva Pinto Ferreira, Departamento de Química, NOVA School of Science and Technology, Universidade NOVA de Lisboa, 2829-516 Caparica, Portugal</i> |

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| 10:25-10:45      | KN14 - Uncovering novel chemotypes targeting the mycobacterial energy metabolism as a strategy to control tuberculosis<br><i>Francisca da Conceição Lopes, Faculdade de Farmácia, Universidade de Lisboa, Av. Prof. Gama Pinto, 1649-003 Lisboa, Portugal</i>  |              |   |
| 10:45-11:15      | <b>Coffee break</b>  |              |   |
| Grande Auditório | Chairs: Anthony J. Burke and Rita Ventura  | Anfiteatro A | Chairs: Maria Alice Carvalho and Paula Gomes  |
| 11:15-11:25      | OC30 - On the development of novel cellulose derivatives for microplastic flocculation<br><i>Bruno Medronho, Faculty of Sciences and Technology (MEDITBIO), University of Algarve, Campus de Gambelas, Ed. 8, 8005-139 Faro, Portugal</i>  | 11:15-11:25  | OC38 - Total synthesis of marine natural product (-)-agelastatin A: Biological evaluation of N3-alkylation<br><i>João R. Vale, Faculty of Pharmacy, Universidade de Lisboa, Av. Prof. Gama Pinto, 1649-003 Lisbon, Portugal</i>   |
| 11:25-11:35      | OC31 - Recent insights on the multifunctional scaffold of chromeno[3,4- <i>b</i> ]xanthone derivatives against Alzheimer's disease<br><i>Daniela Malafaia, LAQV-REQUIMTE and Department of Chemistry, University of Aveiro, 3810-193 Aveiro, Portugal</i>  | 11:25-11:35  | OC39 - The neurotoxic effects of emerging synthetic cathinones and its metabolites: the role of metabolism<br><i>Rita P. Lopes, Instituto Superior Técnico, Departamento de Engenharia Química, Universidade de Lisboa, Portugal</i>  |
| 11:35-11:45      | OC32 - Synthesis of 3-(arylamino)thieno[3,2- <i>b</i> ]pyridines and evaluation of their neuroprotective activity on transgenic <i>C. elegans</i> for Machado-Joseph disease<br><i>Maria-João R. P. Queiroz, Centre of Chemistry, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal</i> | 11:35-11:45  | OC40 - Towards therapeutical applications of camphorimine Ag(I) and Au(I) complexes<br><i>Joana P. Costa, Centro de Química Estrutural - Institute of Molecular Sciences, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal</i>                          |
| 11:45-11:55      | OC33- Electrochemical oxidation of abietanes using continuous-flow<br><i>Inês S. Martins, Faculty of Pharmacy, Universidade de Lisboa, Av. Prof. Gama Pinto, 1649-003 Lisboa, Portugal</i>   | 11:45-11:55  | OC41 - Antimicrobial evaluation of water-soluble pyrazole-pyridinium zinc(II) phthalocyanines: A promising approach for microorganism eradication<br><i>Leandro M. O. Lourenço, LAQV-REQUIMTE, Department of Chemistry, University of Aveiro, 3810-193 Aveiro, Portugal</i> |
| 11:55-12:05      | OC34 - Uncovering the origins of supramolecular similarity in a series of benzimidazole structures<br><i>Paulo R. S. Salbego, Federal University of Santa Maria (UFSM), 98400-000, Frederico Westphalen Campus, RS, Brazil</i>   | 11:55-12:05  | OC42 - Bacterial siderophores – iron thievery weapons in environmental research<br><i>Diana I. S. P. Resende, Laboratório de Química Orgânica e Farmacêutica, Faculdade de Farmácia, Universidade do Porto, Porto, Portugal</i>   |
| 12:05-12:15      | OC35 - Synthesis of amphiphilic di-cationic imidazolyl porphyrins for photoinactivation of bacteria<br><i>Madalena F. C. Silva, Coimbra Chemistry Center, Department of chemistry, University of Coimbra, Rua Larga, 3004-535, Coimbra, Portugal</i>   | 12:05-12:15  | OC43 - Promising antiviral small molecules: from <i>in silico</i> studies to effects on cellular infection and cytotoxicity<br><i>Francisca Carvalhal, Faculty of Pharmacy, University Porto, 4050-313 Porto, Portugal</i>  |

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| 12:15-12:25 | OC36 - Nitrogen rich biomass furanics – synthesis and applications<br><i>Rafael F. A. Gomes, Faculty of Pharmacy, Universidade de Lisboa, Av. Prof. Gama Pinto, 1649-003 Lisbon, Portugal</i>  | 12:15-12:25 | OC44 - Unveiling the COVID impact on biochemical pathways through an integrated omics expedition towards preparedness<br><i>Gonçalo C. Justino, CQE - Centro de Química Estrutural – Institute of Molecular Sciences, Instituto Superior Técnico, Universidade de Lisboa, 1049-001 Lisboa, Portugal</i> |
| 12:25-12:35 | OC37 - Chan-Lam reaction of arylvinyl boron reagents with (hetero)aromatic amines: application in the synthesis of <i>N</i> -heterocycles<br><i>Joana R. M. Ferreira, LAQV-REQUIMTE, Department of Chemistry, University of Aveiro, 3010-193 Aveiro, Portugal</i>      | 12:25-12:35 | OC45 - Exploring the hyaluronidase inhibitory activity of phytosterol derivatives<br><i>Gonçalo P. Rosa, LAQV-REQUIMTE, Department of Chemistry, University of Aveiro, Portugal</i>   |
| 12:35-14:00 | <b>Lunch Break</b>   |             |   |
| CHAIRS:     | Carlos A. M. Afonso and Jorge Salvador   |             |   |
| 14:00-14:20 | KN15 - Perspectives on catalytic continuous flow process in fine chemical industry<br><i>Mariette M. Pereira, Universidade de Coimbra, Rua Larga, 3004-535 Coimbra, Portugal</i>   |             |   |
| 14:20-14:40 | KN16 - A novel functional assay for the discovery of new drug targets in mycobacteria<br><i>Maria Rita Ventura, Instituto de Tecnologia Química e Biológica António Xavier, Universidade Nova de Lisboa, 2780-157 Oeiras, Portugal</i>                                 |             |   |
| 14:40-15:00 | KN17 - Electroorganic oxidation of biorenewable resources into functionalized products<br><i>Jaime A. S. Coelho, Centro de Química Estrutural, Institute of Molecular Sciences, Faculty of Sciences, University of Lisbon, Campo Grande, 1749-016 Lisbon, Portugal</i> |             |   |
| 15:00-15:45 | PL7 - Biologically active xanthone and chromone-type compounds and their aza-analogues<br><i>Artur M. S. Silva, LAQV-REQUIMTE, Department of Chemistry, University of Aveiro, 3810-193 Aveiro, Portugal</i>  |             |   |
| 15:45-16:00 | <b>Closing Ceremony and Best PhD and MSc awards</b>  |             |   |