List of communications

Plenary Lectures

PL1	Antonio M. Echavarren, Catalysis via gold(I) carbenes	
PL2	Frank Glorius, On discovery and sensitivity in (photo)catalysis	
PL3	Jonathan S. Lindsey, Synthesis of native bacteriochlorophylls and analogues	
PL4	Edward A. Anderson, Cycloisomerizations and cycloadditions in alkaloid total synthesis	
PL5	Berit Olofsson, From solution to mechanochemistry - unlocking new modes of reactivity of hypervalent iodine reagents	
PL6	Rui Moreira, Novel chemical tools to modulate cell death mechanisms	
PL7	Mamoru Tobisu, New strategies toward the use of electronically unsaturated carbon species in organic synthesis	
PL8	Carlos R. D. Correia, <i>Tandem one-pot enantioselective Heck-Matsuda reactions for the construction of heterocyclic compounds</i>	
PL9	Andrei K. Yudin, Enthalpy-entropy compensation in heterocycle chemistry	
Award Lectures		
AL1	Jeffrey T. Kuethe, <i>The LARGEST small molecule: Discovery and development of the PCSK9 inhibitor MK-0616</i>	
AL2	Mark Lautens, Thirty-seven years (and counting) of making and breaking heterocycles	
AL3	Ryan Shenvi, Attempts to deliver on the promise of natural products	
Invited Lectures		
IL1	Véronique Michelet, A journey in gold catalysis towards diversity: from heterocycles to fragrances	
IL2	Asunción Barbero, Strategies towards the synthesis of polysubstituted oxacycles	
IL3	Paula C. S. Branco, Tailoring molecular structures for dye-sensitized solar cells	
IL4	Romano Orrù, Biomimetic spirocyclizations for the synthesis of indole alkaloids	
IL5	William P. Unsworth, Ring expansion approaches for the synthesis of functionalised macrocycles	
IL6	Adrian Dobbs, Recent advances in organic electrochemistry for heterocycle synthesis	
IL7	Laurent El Kaïm, Combining isocyanide based multicomponent reactions and complex cascades for the preparation of heterocycles	



IL8	Nuno R. Candeias, Synthesis and bioactivity of heterocyclic phenol Mannich bases
IL9	Gianluca M. Farinola, <i>Direct arylation and cross-dehydrogenative couplings of</i> (hetero)arenes: sustainable routes to organic semiconductors for photovoltaics
IL10	Andrew L. Lawrence, Rethinking enantioconvergent reactions
	Oral Presentations - Advances in synthetic methodologies
OP1	Raquel M. Durão, Easy access to functionalized sparteine derivatives via electrochemical cyanation in batch and in flow of quinolizidine alkaloids
OP2	Telmo N. Francisco, Enabling the synthesis of 3-aminopyridines via stepwise Kröhnke reaction
OP3	Joana L. C. Sousa, Reactivity studies of 3-bromochromone derivatives in conjugate addition reactions
OP4	R. A. Aitken, New reactions of sulfur-containing aryl benzyl ethers
OP15	Susannah C. Coote, Spirocyclic oxetanes via Paternò-Büchi reaction of cyclic ketones with maleic anhydride derivatives
OP16	Mitsuru Kitamura, Development of a safe and efficient diazo-transfer reagent, IPrAP for phenols and aryl methyl ketones
OP17	Antonio Carlos Bender Burtoloso, Synthesis and functionalization of indoles with α -carbonyl sulfoxonium ylides: Expanding the synthetic toolbox
OP18	Alexandre P. Felgueiras, Synthesis of BODIPY dyes using flow chemical processes
OP33	Marc Kimber, Transition-metal-free synthesis of trisubstituted furans
OP34	Shuji Akai, Cross-dehydrogenative coupling reaction of 3-hydroxycarbazoles and indoles using a heterogeneous oxovanadium catalyst
OP35	Willi M. Amberg, Photo- and cobalt-catalyzed synthesis of heterocycles via cycloisomerization of unactivated olefins
OP36	Junji Ichikawa, Construction of fluorinated heterocyclic rings via [4 + 1] annulation with difluorocarbenes
OP46	Masahiko Seki, A new ketone synthesis via Cu(I)-accelerated regioselective coupling of thiopyridine ester with Grignard reagents: In quest of facile access to pharmaceuticals
OP47	Joseph Gillions, $B(C_6F_5)_3$ -Catalyzed dehydrogenation of pyrrolidines
OP48	Yutaka Ukaji, Synthesis of heterocycles by fusion of 1,3-dipoles and carbene-type reagents
	Oral Presentations - Heterocycles for biological applications
OP5	Maria M. M. Santos, Development of tryptophanol-derived fluorescent probes
OP6	Leandro M. O. Lourenço, <i>Photodynamic therapy efficacy: Thioglycerol-modified photosensitizers target UM-UC-3 bladder cancer cells</i>
OP7	Pedro M. O. Gomes, Synthesis of C-glycosylquinolones and evaluation of their anticancer activity



OP8	Flavia lovane, Probing benzimidazole-pyrazole chemical tools to target necroptosis	
OP9	Hélio M. T. Albuquerque, <i>Targeting protein aggregation with hybrid quinoline-steroid compounds</i>	
OP10	Nuno M. M. Moura, Synthesis and photosensitizer activity of Ir(III) and Ru(III) complexes bearing β -modified porphyrin ligands	
OP11	Fernanda Proença, The base-induced isomerization of the 2-amino-3-cyano chromene scaffold in dimethylsulfoxide	
OP19	Susana M. M. Lopes, Cycloaddition and annulation reactions of steroidal heterodienes	
OP20	Patrícia I. C. Godinho, 3-Nitro-2H-chromenes: useful synthons for the preparation of potential antimicrobials targeting multi-drug resistant bacteria	
OP21	Olga Lopes, Functionalized imidazolones as luminescent probes for biological imaging	
OP22	Vishnuprasad Ponnarassery Aravindakshan, An efficient Lewis acid catalysed synthesis of benzimidazole, benzothiazole and benzothiazoline derivatives as building blocks for fluorescent image-guided surgery	
OP23	Daniela Malafaia, <i>Unveiling the potential of chromeno</i> [3,4-b]xanthones as a disruptive scaffold for Alzheimer's disease	
OP24	Filipe M. P. Morais, Boosting the photosensitizer efficiency of meso- tetraarylporphyrins towards bacterial strains by conjugation with triphenylphosphonium salts	
OP25	Pascale Moreau, Synthesis of 1H-pyrrolo[3,2-g]isoquinolines as Haspin inhibitors	
OP41	Théo Frazier, Synthesis and biological activities of diversely substituted indolopyrazolocarbazoles	
OP42	Daniela S. S. Teixeira, Synthesis of tetrapyrrolic macrocycles as potential probes for Magnetic Resonance Imaging	
OP43	Naoya Kumagai, Strategic applications of triquinoline derivatives as G4 ligands and PAH adsorbents	
OP44	Roberto Tallarita, 1,2,3,4,5-Pentathiepins: insights and developments into the molybdenum mediated synthesis of bio-active indolizine-based polysulfides	
OP45	Jens Frackenpohl, New heterobicyclic FAT-inhibitors – Resistance-breaking and PFAS-free grass weed control solutions for sustainable agrochemistry	
Oral Presentations – Natural products chemistry		
OP12	João R. Vale, Total synthesis of (-)-agelastatin A from pyridine: Improving scalability	
OP13	Jason A Smith, Pyrrole as a scaffold for synthesis: approaches to stemona alkaloids	
OP14	Hidetoshi Tokuyama, Divergent total syntheses of discorhabdins and aleutianamine	
Oral Presentations - Sustainable synthetic approaches to heterocycles		
OP29	Elisabetta Rosadoni, Direct C-H functionalization of azoles through radical reactions	



Gabriela A. Corrêa, Green aromatic epoxidation with an iron porphyrin catalyst for **OP30** functionalization of renewable xylene, quinoline, and acridine M. Manuel B. Marques, One-pot bimetallic catalyzed synthesis of N-heterocycles **OP31** Gavin J. Miller, Biocatalytic nucleobase diversification of 4'-thionucleosides: access **OP32** to purines and pyrimidines from a common precursor Oral Presentations – Heterocycles in materials science Samuel Guieu, Luminescence of pyridines bearing an intramolecular hydrogen bond OP26 R. P. Chaudhary, Excited state intra-molecular proton transfer (ESIPT) studies of 2-**OP27** (benzo[d]thiazol-2-yl)naphthalen-1-ol system: experimental and theoretical approach João Sarrato, Asymmetric diketopyrrolepyrroles bearing furan rings for Dye-**OP28** Sensitized Solar Cells Oral Presentations - Stereoselective synthesis Benjamin R Buckley, Small ring heterocycles as efficient mediators for **OP37** dearomatization Brigitte Bibal, Stereoselective oxidative dearomatizations of functionalized **OP38** anthracenes Haoxiang Zhu, Isothiourea-catalysed acylative dynamic kinetic resolution of tetra-**OP39** substituted morpholinone and benzoxazinone lactols Georg Manolikakes, Rapid assembly of complex 3D heterocycles from simple **OP40** enamide building blocks Poster Presentations - Stereoselective synthesis Yoshifumi Yuasa, The synthesis of optically-active erythro-methylphenidate by **P1** diastereoselective hydrogenation using Ru-BINAP complex catalyst Katharina Röser, Chiral quaternary ammonium salt-catalyzed enantioselective **P2** addition reactions of hydantoins Poster Presentations - Sustainable synthetic approaches to heterocycles Maria-João R.P. Queiroz, Synthesis of tetracyclic lactones by Rh(III)-catalyzed C-H **P3** activation/ cycloaddition of thieno[2,3-b]quinoline-2-carboxylic acid and alkynes Ana L. Cardoso, Mechanochemical transformations of furans: sustainability meets **P4** diversity Kamil Świątek, Access to coxib precursors via selective iodination of 1-aryl-3-**P5** trifluoromethylpyrazoles Inesa Zagorskytė, Glycerol-1,2-carbonate: an efficient reagent for the N-glycerylation **P6** of pyrazolecarboxylates Poster Presentations - Advances in synthetic methodologies Nina Wang, A facile method to synthesize fluorescent diketopyrrolopyrrole derivatives **P7** by nucleophilic aromatic substitution Artjoms Ubaidullajevs, Synthesis of fused heterocycles by a novel 1,2-silyl shift -**P8** Friedel-Crafts domino process



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to trioxatriangulene derivatives

Kohei Watanabe, Generation of heteroatom radical species by visible light irradiation

- P10 Carina J. N. Caires, Photocatalytic transformation of quinic acid
 P11 M. J. Verganista, Iron-catalyzed synthesis of isoindingos by hydrogen borrowing
- P12 Dheirya Kalpesh Sonecha, *Approaches to the parent 1,4- and 1,2-thiazines and 1,2-oxazine*
- P13 Joana R. M. Ferreira, Enamide synthesis through a Chan–Evans–Lam reaction as a platform for the synthesis of N-heterocycles
- **P14** João Castro, Catalytic activation of pinacol-derived chlorosilane for hydride transfer
- P15 Melani J. A. Reis, Oxidative nucleophilic substitution: a promising approach to porphyrins bearing N-donor moieties
- P16 Hiroaki Ishida, Synthetic studies on tetrahydrofuro[2,3-d]oxazoles and oxazoles by [2+2+1] cyclization with hypervalent iodine(III)
- P17 Alfredo Vázquez, C-4 Functionalization of isoquinolines via a free radical approach
- P18 Matteo Martina, One pot direct arylation-cyclization reaction induced by infrared irradiation
- P19 Maria I. L. Soares, *Phosphine-catalyzed umpolung γ-addition of iminochromanes to allenes: Synthesis of functionalized 2H-chromenes*
- **P20** Yoshiji Takemoto, A Benzophenothiazine/boronic acid hybrid photocatalyst for the SET-initiated cyclization of α,β-unsaturated carboxylic acids
- P21 João C. S. Simões, Novel trans-A2B2 porphyrins: from oxime meso-substituted dipyrromethanes to functionalized macrocycles
- **P22** Yusuke Yoto, Metal-free heterocycle synthesis from aryl cyclic diketones by fluorinative cut-to-fuse strategy
- P23 Tomáš Hodík, Chalcogen bonding in asymmetric organocatalysis
- P24 Shuji Yasuike, Synthesis of 3-arylquinoxalinones via palladium-catalyzed C–H arylation with triarylantimony difluorides
- P25 Tomoka Tsuda, Metal-free coupling of diaryliodonium(III) salt with fluoroalkoxy boronate New synthesis of fluoroalkoxy (hetero)arenes
- **P26** Taeho Bae, Metal-free new synthesis of benzisoxazolones with diaryliodonium salts
- P27 Kazuho Ban, Development of various deuterated alkylating reagents using D₂O for drug discovery
- P28 Mio Matsumura, Synthesis and properties of nobel dibenzo[b,h]carbazoles and dinaphtho[2,3-b,2',3'-d]phospholes
- Masato Kawakubo, Synthesis of novel monosubstituted pyridoimidazoisoquinoliniums via a silver-catalyzed intramolecular cyclization and their application for live cell imaging
- **P30** Ranjini Laskar, γ-Amino alcohols via EnT-enabled brook rearrangement
- P31 Takayuki Yakura, A conformationally rigid highly reactive hypervalent iodine catalyst: 8-lodoisoquinolinone (IB-lactam)
- P32 Dae Young Kim, One-pot synthesis of 2-amino-4H-chromenes via electrochemical C-H oxidation and cyclization sequences of 2-alkyl phenols



- P33 Phillip S. Grant, Remote proton elimination: C–H activation enabled by distal acidification
- P34 Andreas S. Kalogirou, Chemistry and applications of non S-oxidised 4H-1,2,6-thiadiazines

Poster Presentations - Heterocycles in materials science

- P35 Luis Cruz, Pyranoflavylium-based dyes: from rational synthesis towards fabrication of new smart biomaterials for food applications
- P36 Georgia A. Zissimou, Phthalonitrile Blatter radical
- Preeti, N- Heterocyclic imines on the metal surfaces: binding modes and interfacial charge transfer

Poster Presentations – Natural products chemistry

- Abdullah S. Alshetaili, Novel embelin-loaded transniosomes for topical delivery: comprehensive exploration of in vitro, ex vivo and dermatokinetic assessment for anticancer activity
- **P39** Rui Pereira, Bis-flavones: a novel scaffold for flavonoid chemistry
- P40 Frederick A. Luzzio, *Acyliminium route to a combined isoindoline-indolizidine scaffold:* routes to a pseudonatural product?
- P41 Anas Alkayal, Towards the synthesis of a natural compound as a potential antimesothelioma agent JBIR-101

Poster Presentations – Heterocycles for biological applications

- P42 Patrícia Correia, Structural, chromatic, and photodynamic properties of amino-based flavylium dyes: Development of hydrogel formulations for skin therapy
- P43 Catarina I. V. Ramos, Efficient G-quadruplex DNA stabilization by triphenylposphonium porphyrin conjugates
- P44 Gonçalo F. Oliveira, Synthesis and photophysical properties of bis(4-aminophenyl)diketopyrrolopyrrole derivatives
- P45 Mubarak A. AlAmri, NMR fragment-based screening for design of WNK signaling pathway inhibitors targeting OSR1 protein kinase C-terminal domain
- P46 João A. Pacheco, Exploring the anti-inflammatory potential of alkylaminophenols: integrating computational and experimental approaches for lead optimization
- P47 Vera L. M. Silva, Exploring diarylpyridines and styrylisoxazoles: Promising cholinesterase inhibitors for neurological disorders
- P48 Teodora Aleksandrova, Angular-substituted [1,4]thiazino[3,4-a]isoquinolines as potential DPP-IV inhibitors
- P49 Aleksandar Pashev, Synthesis of aryl-substituted benzo[a]quinolizidine derivatives and evaluation of their DPP-IV inhibitory activity
- P50 Daniela S. N. Branco, Novel tetrahydroquinoline derivatives against Glioblastoma Multiforme
- P51 Lúcia Melo, Development of new amyloid probes with donor-acceptor-donor architectures
- P52 Catarina M. Correia, Synthesis of 1,3,5-trisubstituted and 1,3,4,5-tetrasubstituted pyrazoles: Methods and potential applications



- P53 Bruna D. P. Costa, *Photodynamic therapy of endometrial cancer: Improving the properties of corrole photosensitizers by exploring fluorine effects*
- **P54** Fahad Alkhathami, *Synthesis of the cis- and trans-3-fluoro analogues of febrifugine and halofuginone*
- P55 Ricardo Ribeiro, Synthesis of marine-derived cyclopeptides though an emerging alternative to conventional peptide cyclization
- P56 M. Amparo F. Faustino, Boosting bacterial photodynamic inactivation via the synergistic effect of potassium iodide and cationic zinc(II) phthalocyanine
- **P57** lago C. Vogel, Quinic acid-flavonoid fusion: a promising approach for α-glucosidase inhibition
- P58 Maria Emília Sousa, Synthesis of marine-derived compounds as prospective substance P antagonists for the management of inflammatory pruritic skin conditions
- P59 Joseph O'Sullivan, The synthesis of chromogenic and fluorogenic substrates and their potential application in diagnostics
- P60 Maria Graça P. M. S. Neves, New thiazoloindazole conjugates: synthesis, molecular docking studies and biological evaluation
- P61 Darren William Gardner, Chromogenic enzyme substrates based on [2p61 (nitroaryl)ethenyl]pyridinium and quinolinium derivatives for the detection of nitroreductase activity in clinically important microorganisms
- **P62** Carlos F. M. Silva, Synthesis of novel potential FMN riboswitch inhibitors
- P63 Ricardo M. Carvalho, Novel spiropenicillanates via formal [2+1] cycloaddition of 6-alkylidenepenicillanates with sulfur ylides
- P64 Américo J. S. Alves, Novel sulfoxide- and sulfone-spiropenicillanates with potential broad-spectrum antiviral activity
- P65 Basmah Almohaywi, Anticancer evaluations of iodoquinazoline as dual inhibitors of EGFR^{WT} and EGFR^{T790M}: design, synthesis, ADMET and molecular docking
- P66 Diana C. G. A. Pinto, Structure-activity study of 2-benzylchromone derivatives as monoamine oxidase inhibitors
- P67 Artem Chayka, Quest to discover allosteric inhibitors of SARS-CoV-2 RNA-dependent RNA polymerase
- Pavel Kraina, Structural modifications and biological evaluation of human purine nucleoside phosphorylase inhibitors

