

**XXVI ENCONTRO NACIONAL** DA SOCIEDADE PORTUGUESA DE QUÍMICA

# 150 ANOS PARA 118 ELEMENTOS **A TABELA PERIODICA**

## **PROGRAMA CIENTIFICO**

24, 25 E 26 DE JULHO DE 2019

FACULDADE DE CIÊNCIAS DA UNIVERSIDADE DO PORTO



ANO INTERNACIONAL  
DA TABELA PERIÓDICA



**U.PORTO**  
FC  
FACULDADE DE CIÊNCIAS  
UNIVERSIDADE DO PORTO

**Quarta-Feira, 24 de julho 2019**

**09:00 - 10:30 Registo**

**Auditório Ferreira da Silva (AFS)**

**10:30 - 11:30 Cerimónia de Abertura**

Dr. Pedro Nuno Teixeira, Presidência da República - Consultor da Casa Civil para a Ciência e o Ensino Superior

Prof. Sousa Pereira, Reitor da Universidade do Porto

Prof. Ana Cristina Freire, Diretora da FCUP

Prof. Artur Silva, Presidente da SPQ

Dr. Raúl Moreira, Diretor de Filatelia dos CTT

(Philatelic Issuance of the International Year of the Periodic Table: 1st Day Stamp)

Prof. José Ferreira Gomes, Comissário Nacional para o AITP

Prof. Vitor Freitas, Organizador do XXVI EN SPQ

**Auditório Ferreira da Silva | Chair: Artur Silva (Presidente SPQ, UA,PT)**

**11:30 - 12:40 Prémio Ferreira da Silva | Maria José Calhorda (FCUL, PT)**

Pilgrimages in the Periodic Table

**12:40 - 14:00 Almoço**

**AFS | Chair: Ana Isabel Ricardo (FCTUNL, PT)**

**14:00 - 14:15 Christopher Brett, IUPAC (FCTUC, PT)**

**14:15 - 15:00 PL1 | Martyn Poliakoff (U. Nottingham, UK)**

Mendeleev's Gift to Education (and to me)

**Quarta-Feira, 24 de julho 2019**

**AFS | Chair: Pedro Gois (FFUL, PT)**

**15:00 KN1 | Cristina Matos (ISEP, PT)**

REWATER- Sustainable and safe water management in agriculture: increasing the efficiency of water reuse for crop growth while protecting ecosystems, services and citizens' welfare

**15:30 COC1 | Maria Lurdes Cristiano (UAlg, PT)**

Selective photochemistry of 5-aminotetrazole derivatives; effect of the saccharyl moiety on the photostability

**15:50 COC2 | Iola Duarte (UA, PT)**

Modulation of macrophage metabolism by phytochemicals and biomaterials: insights from metabolomics

**16:10 CO1 | José Tavares (FCTUNL, PT)**

Nanoimmunoassays – Metal nanoparticles for sensitivity and Antibodies for specificity

**16:25 CO2 | Hélio Albuquerque (UA, PT)**

Modulating protein aggregation in cell models using modified steroids

**16:40 CO3 | Nuno Alves (FCTUNL, PT)**

Understanding the mechanism of action of a new spiro-β-lactam with dual anti-HIV and anti-Plasmodium activity using in silico target fishing

**16:55 - 17:45 Pausa p/ Café e Discussão de Painéis (Sessão 1)**

**Auditório Ferreira da Silva | Chair: Adelino Galvão (IST-UL, PT)**

**17:45 – 18:30 PL2 | Zita Martins (IST – UL, PT)**

The origin and evolution of organic matter in the solar system - interstellar ices, comets and primitive carbonaceous meteorites

**18:30 – 19:30 PORTO de Honra**

**Quarta-Feira, 24 de julho 2019**

**A1 | Chair: Luis Carlos (UA, PT)**

**15:00 KN2 | Luís Belchior (FCUP, PT)**

Nanostructuration effect on the physical chemical properties of ionic liquids

**15:30 CO4 | Luís Branco (FCTUNL, PT)**

Metal based Ionic Systems for Sustainability

**15:50 CO5 | João Avó (IST-UL, PT)**

Delayed Fluorescence Materials for Imaging Applications

**16:10 CO6 | Paulo Martinho (FCUL, PT)**

The thermosalient effect in Fe(III) salen spin labile complexes

**16:25 CO7 | Carina Crucho (IST-UL, PT)**

Enzyme-responsive silica nanocapsules

**16:40 CO8 | Luís Silva (FCUP, PT)**

Porous Metal-Organic Framework based materials for sustainable catalytic application

**16:55 - 17:45 Pausa p/ Café e Discussão de Painéis (Sessão 1)**

**Quarta-Feira, 24 de julho 2019**

**S1 | Chair: Mariette Pereira (UC, PT)**

**15:00 KN3 | João Paulo André (UM, PT)**

Poções e Paixões na Sala de Aula

**15:30 COC3 | José Moura (FCTUNL, PT)**

Building Artificial Enzymes Using the Metals of the Periodic Table

**15:50 CO9 | Sérgio Rodrigues (FCTUC, PT)**

Periodic Table and Theoretical and Computational Chemistry: a lesser-known link

**16:10 CO10 | Natércia Teixeira (FCUP, PT)**

Study of five iberian medieval iron-gall inks obtained through the use of historically accurate reconstructions

**16:25 CO11 | Fernanda Carvalho (IST-UL, PT)**

Design and synthesis of silver camphorimine compounds with high antimicrobial activity

**16:40 CO12 | José Araújo (FCUP, PT)**

“Química ao pé da letra”: das raízes etimológicas às oportunidades de multidisciplinaridade e divulgação científica

**16:55 - 17:45 Pausa p/ Café e Discussão de Painéis (Sessão 1)**

**Quinta-Feira, 25 de julho 2019**

**AFS | Chair: Augusto Tomé (UA)**

**09:00 - 09:45 PL3 | Nuno Maulide (Vienna University, AT)**

The beautiful simplicity of rearrangements: methodology and total synthesis

**AFS | Chair: Joaquim Faria (Vice-Presidente da SPQ, FEUP)**

**09:45 – 10:40 Medalha Vicente de Seabra 2018 | Mara G. Freire (UA)**

Water, Ionic Liquids and Salts: From the salting-out phenomenon to the formation of aqueous two-phase systems

**10:40 - 11:45 Pausa p/ Café e Discussão de Painéis (Sessão 2)**

**AFS | Chair: Fernanda Proença (UM, PT)**

**11:45 KN4 | Vânia André (IST-UL, PT)**

Antibiotics' coordination frameworks: a new perspective towards improved properties and activity

**12:15 COC4 | Paula Gomes (FCUP, PT)**

AN ODE TO NITROGEN: nitrogen-based functional groups in the core of new approaches to fight infectious diseases

**12:45 - 14:00 Almoço**

**Quinta-Feira, 25 de julho 2019**

**A1 | Chairs: Nuno Maulide/Nuno Candeias/Muna Sidarius**

**Group of Expatriate Chemists (GEC/GQE)**

**11:45 COC5 |Ricardo Mata (U. Gottingen, DE)**

Structured proton wires – a design principle for biochemical regulation

**12:05 COC6 | Margarida Gomes (U.Lyon, FR)**

Chemistry or free volume? Porous liquids for gas absorption

**12:25 COC7 | Pedro Costa (KAUST, SA)**

Alkaline Oxidation of Carbon Materials for Elemental Analysis

**12:45 - 14:00 Almoço**

**S1 | Chair: José Câmara (UMad, PT)**

**11:45 KN5 | Armando Silvestre (UA, PT)**

Nanocellulose fibers: biobased masterpieces for the development of sustainable functional materials

**12:15 COC21 | Fernando Nunes (UTAD, PT)**

As melanoidinas. O que são, como se formam e para que servem?

**12:45 - 14:00 Almoço**

**Quinta-Feira, 25 de julho 2019**

**AFS | Chair: Matilde Marques (IST-UL, PT)**

**14:00 – 14:45 PL4 | Eduardo Fernandes-Megia (U. Santiago de Compostela, ES)**

Dendritic Nanostructures for Biomedical Applications

**AFS | Chair: Teresa Pinho e Melo (UC, PT)**

**14:45 KN6 | Luísa Martins (IST-UL, PT)**

Alkanes or CO<sub>2</sub> to added value commodities - the role of C-scorpionate catalysts

**15:15 COC9 | Nuno Moura (UA, PT)**

Synthesis and emerging applications of β-functionalized porphyrin derivatives bearing N-heterocycles

**15:35 COC10 | Pedro Paulo (IST-UL, PT)**

Single-Molecule Fluorescence from Porphyrins Enabled by Gold Nanodimer Antennas

**15:55 CO13 | João Rodrigues (UA, PT)**

Bioactive chitosan-on-chitosan multilayered assemblies for biomedicine

**16:10 CO14 | Diana Resende (FFUP, PT)**

Synthesis and Biological Evaluation of Nature-Inspired Indole-Containing Alkaloids

**16:25 CO15 | Ana Fernandes (FEUP, PT)**

Morphological Modifications on Carbon Nitride for Enhanced Selectivity Towards the Synthesis of p-Anisaldehyde

**16:40 - 17:15 Pausa p/ Café e Discussão de Painéis (Sessão 3)**

**Quinta-Feira, 25 de julho 2019**

**AFS | Chair: Sérgio Seixas de Melo (UC, PT)**

**17:15 – 18:00 PL5 | João Carlos Lima (FCTUNL – U. Lisbon, PT)**

Auropophilic Luminescent Hydrogels

**18:00 - 19:00 Reunião SPQ**

**20:00 Jantar do Encontro | Restaurante Casa da Música**

Inclui a performance: "When science becomes an art"

**Quinta-Feira, 25 de julho 2019**

**A1 | Chair: Eduardo Marques (FCUP, PT)**

**14:45 KN7 | Luís Mafra (UA, PT)**

Understanding the mechanism of CO<sub>2</sub> chemisorption on amine-modified porous adsorbent solid surfaces for gas capture applications

**15:15 COC11 | Andreia Valente (FCUL, PT)**

Fighting metastatic cancers with ruthenium cyclopentadienyl compounds

**15:35 CO16 | Adrià Gil-Mestres (FCUL, PT)**

Use of Phenanthroline Derivatives in Chemotherapy Treatments for Cancer and as Alternative Therapeutics in the Era of Antibiotic Resistance: Interaction with DNA and Modulation of the Efficiency

**15:55 CO17 | Beatriz Gomes (FFUL, PT)**

H<sub>2</sub>S-diclofenac vs. diclofenac: effects on membrane lipids

**16:10 CO18 | Roberto Russo (FFUL, PT)**

3HQs as Boronic Acid Hotspots for site-selective formation of iminoboronates

**16:25 CO19 | Cláudia Braga (FFUL, PT)**

Triazene-based prodrugs for selective targeting of hypoxic solid tumors

**16:40 - 17:15 Pausa p/ Café e Discussão de Painéis (Sessão 3)**

**Quinta-Feira, 25 de julho 2019**

**S1 | Chair: Jorge Marques (UC, PT)**

**14:45 KN8 | Cláudia Silva (FEUP, PT)**

Metal-free photocatalysis: a great step toward sustainability

**15:15 COC12 | Vânia Calisto (UA, PT)**

Development and application of waste-derived carbon materials for improving wastewater treatments

**15:35 CO20 | Carlos Baleizão (FC-UL, PT)**

Chasing Boron: Optical Detection and Scavenging Materials for Wastewater Remediation

**15:55 CO21 | Eliana da Silva (FEUP, PT)**

Remarkable Solar-Driven H<sub>2</sub> Production from Polymeric Carbon Nitride Doped with Carbon and with Distorted Structure

**16:10 CO22 | J. Richard Gomes (UA, PT)**

A computational study on the water splitting reaction by Mxenes

**16:25 CO23 | Ricardo Sendão (FCUP, PT)**

Insight into the Interaction between Fluorescent Carbon Dots and Molecular By-Products of their Synthesis

**16:40 - 17:15 Pausa p/ Café e Discussão de Painéis (Sessão 3)**

**Sexta-Feira, 26 de julho 2019**

**AFS | Chair: Maria José Calhorda (FCUL, PT)**

**09:00 - 09:45 PL6 | Henry Schaefer (U. California at Berkeley - USA)**

A Brief History of Quantum Chemistry and Computers

**AFS | Chair: Cristina Matos (ISEP, PT)**

**09:45 – 10:15 KN9 | Nuno Mateus (FCUP, PT)**

Exploring the colour and bioactivity of anthocyanin derivatives

**10:15 - 10:45 COC13 | Lilian Barros (IPB, PT)**

Recuperação de antocianinas de biorresíduos de *Ficus carica* L. e *Prunus spinosa* L.: propriedades corantes e bioativas

**10:45 - 11:45 Pausa p/ Café e Discussão de Painéis (Sessão 4)**

**AFS | Chair: Marco Silva (FCTUNL, PT)**

**11:45 KN12 | Lisete Silva (IC, UK)**

The biochemical principles and applications of carbohydrate microarrays

**12:15 COC16 | José Câmara (UMad, PT)**

Foodomics platforms - new avenues to investigate food quality, traceability and bioactivity

**12:40 - 14:00 Almoço**

**Sexta-Feira, 26 de julho 2019**

**A1 | Chair: Celso Reis (I3S, PT)**

**09:45 KN10 | Luísa Maia (UNL, PT)**

Life with Molybdenum

**10:15 COC14 | Filipa Marcelo (UNL, PT)**

Decoding Glycan-Lectin Interactions in Cancer

**10:45 - 11:45 Pausa p/ Café e Discussão de Painéis (Sessão 4)**

**A1 | Chair: Clara Magalhães (UA, PT)**

**11:45 KN13 | Beatriz Royo (ITQB UNL, PT)**

Manganese: The Black Swan

**12:15 COC17 | Nuno Xavier (FCUL, PT)**

Dodecyl-containing Azide and Glucuronamide-based Nucleosides as Promising Anticancer Lead Molecules for Circumventing Chemotherapy Resistance

**12:40 - 14:00 Almoço**

**Sexta-Feira, 26 de julho 2019**

**S1 | Chair: Armando Silvestre (UA, PT)**

**09:45 KN11 | Marcela Segundo (FFUP, PT)**

Greener analytical methods through miniaturization and automation

**10:15 COC15 | Marco da Silva (FCTUNL, PT)**

Multidimensional GC: Reality, alternative or just a separative extravagancy

**10:45 - 11:45 Pausa p/ Café e Discussão de Painéis (Sessão 4)**

**S1 | Chair: Marcela Segundo (FFUP, PT)**

**11:45 KN14 | Verónica Bermudez (UTAD, PT)**

Solutions for improving energy efficiency in buildings

**12:15 COC18 | Eduardo Marques (FCUP, PT)**

Versatile biocompatible vesicles based on cationic/anionic surfactants: from rational design to biomolecular delivery

**12:40 - 14:00 Almoço**

**Sexta-Feira, 26 de julho 2019**

**AFS | Chair: Mário Simões (UA, PT)**

**14:00 – 14:45 PL7 | Cristina Freire (FCUP, PT)**

Catalysis: the successful marriage between Carbon and other Elements in the Periodic Table

**AFS | Chair: Paula Gomes (FCUP, PT)**

**14:45 KN15 | Alberto Canelas Pais (FCTUC, PT)**

Polyelectrolyte interaction, confinement and adsorption

**15:20 COC19 | António Parola (FCTUNL, PT)**

Photoswitching Supramolecular Host-Guest Systems

**15:40 CO24 | Filipe Santos (UTAD, PT)**

On Chondroitin Sulfate/ Citric Acid Electrolytes as a New Electrolyte Material

**AFS | Chair: Victor Freitas (FCUP, PT)**

**15:55 – 16:40 PL8 | Nicola Armaroli (CNR – Bologna, IT)**

Photoactive systems for solar energy conversion, luminescence and catalysis

**16:40 - 17:30 Entrega de Prémios e Sessão de Encerramento**

Prof. Joaquim Faria, Vice-Presidente da SPQ

Prof. José Ferreira Gomes, Comissário Nacional para o AITP

Prof. Victor Freitas, Organizador do XXVI EN SPQ

**17:30 – 17:50 Prof. João Monte | Dra. Ana Rita Almeida**

Leitura encenada de alguns excertos do Livro “O Bairro da Tabela Periódica”

**17:50 Festa de Despedida**

**Sexta-Feira, 26 de julho 2019**

**A1 | Chair: Verónica Bermudez (UTAD, PT)**

**14:45 KN16 | Marta Piñero (FCTUC, PT)**

Sustainable Synthesis of Tetrapyrrolic Macrocycles

**15:20 COC20 | Luisa Ferreira (FCTUNL, PT)**

Design, production and evaluation of a task specific cellulose-based polymer for wine stabilization

**S1 | Chair: Lillian Barros (IPB, PT)**

Young Chemists Group (YCG/GJQ)

**14:45 COC22 | João Borges (UA, PT)**

Supramolecular engineering of modular ECM-like functional nanobiomaterials to instruct cell behavior

**15:20 COC23 | Filipe Reis (IPB, PT)**

Desenvolvimento de formulações cosmecêuticas a partir de extratos obtidos de cogumelos

**15:20 COC24 | Mónica Santos (FEUP, PT)**

Anticancer Drugs: a Growing Environmental Threat

## COMUNICAÇÕES EM PAINEL

Dadas as limitações de espaço e o elevado número de contribuições recebido, os posters serão afixados por tópicos durante o Encontro, de acordo com a seguinte distribuição diária:

Quarta-Feira, 24	Quinta-Feira, 25	Sexta-Feira, 26
<b>Saúde (CPH)</b> <b>Nanotecnologia (CPN)</b>	<b>Materiais (CPM)</b>	<b>Alimentação (CPF)</b> <b>Ambiente (CPEV)</b> <b>Energia (CPEN)</b> <b>Cultura e Ensino (CPCE)</b>

Desta forma, os trabalhos deverão ser afixados nos painéis pelos próprios autores no início do dia e recolhidos no final do mesmo. O material para afixação dos posters (fita cola, alfinetes, etc.) será fornecido no local pela organização. A lista final dos posters pode ser consultada em baixo.

### A TABELA PERIÓDICA E OS ELEMENTOS DA VIDA (SAÚDE, ALIMENTAÇÃO E AMBIENTE)

- (CPH1) Thermochemistry of indane derivatives: analysis of energetic effect of the amino, methoxy and hydroxyl substituents  
M.D.M.C. Ribeiro da Silva, P.M.V. Gama, A.L.R. Silva.....
- (CPH2) The health-promoting potential of *Salix* spp. bark: from the phenolic composition to the *in vitro* bioactivity  
Ramos P A B, Moreirinha C, Santos S A O, Silva S, Coscueta E, Almeida A, Pintado M M, Freire C S R, Silva A M S, Silvestre A J D.....
- (CPH3) Simple approach to the synthesis of a natural alkaloid – Cernumidine A  
Rafael Rippel, Luísa M. Ferreira, Ana Lourenço, Paula S. Branco .....
- (CPH4) Inhibiting metabolism and mitochondria-induced apoptosis in cancer cells: A structure-based virtual screening validation toward HK2 inhibitors  
Sara N. Garcia, Rita C. Guedes, M. Matilde Marques.....
- (CPH5) Synthesis and Analytical Applications of Glycerophospholipid Fluorescent Molecular Probes  
Pedro A. M. M. Varandas, Alexander J. A. Cobb, Marcela A. Segundo, Eduarda M. P. Silva .....
- (CPH6) Design of Silicon-Based Vitamin D Analogs  
H. Gil, J. Loureiro, J.E. Rodríguez-Borges .....
- (CPH7) Biomimetic approach to the synthesis of a singular and challenger pyrrolidine-guanidine core  
Luís Pinheiro, Rafael Rippel, Flávia Leitão, Luísa M. Ferreira, Ana Lourenço and Paula S. Branco .....
- (CPH8) Development of Torin2 Photo-Affinity Probes for Target Identification in *P. falciparum*  
Jorge Grilo, Lara Fidalgo, Pedro Gonçalves, Charlie Saunders, Edward Tate, Rui Moreira, Miguel Prudêncio, Ana S. Ressurreição .....
- (CPH9) Lithium determination in human serum with improved accuracy using potentiometric detection  
R. Gil, M.C. Sarraguça, C.G. Amorim, M.C.B.S.M. Montenegro, A.N. Araújo .....
- (CPH10) Activation of Natural Killer cells – targeting NKp30 with small organic ligands  
Pedro F. Pinheiro, Gonçalo C. Justino, Joana P. Miranda, M. Matilde Marques.....
- (CPH11) High-throughput screening of hydrochlorothiazide cocrystals by vibrational spectroscopy  
Marisa Rodrigues, João Almeida Lopes, João L. Figueirinhas, Carlos Cruz, Alexandra Guedes, Mafalda Sarraguça .....
- (CPH12) Development of a colorimetric immunosensor for *Toxoplasma gondii* serotyping  
Susana Sousa, José Manuel Correia da Costa, Eulália Pereira .....
- (CPH13) Carbon-Based Electrodes for Human Health Diagnosis: Detection of Stress Biomarkers in Sweat  
Gabriel N. Valério, M. João Nunes, José J.G. Moura, Cristina M. Cordas .....

- (CPH14) A first storage study of yoghurt produced under pressure  
Vieira Patrícia, Pinto Carlos A., Saraiva Jorge A., Lopes-da-Silva José A., Delgadillo Ivonne .....
- (CPH15) A naphthoquinones screening shows the ability of 5-hydroxy-1,4-naphtoquinone to modulate cytochrome *b*<sub>5</sub> reductase activity  
Gabriel N. Valério, Carlos Gutiérrez-Merino, Isabel Moura, José J. G. Moura, Alejandro K. Samhan-Arias.....
- (CPH16) Stress Biomarkers Detection Through Non-Invasive Methods  
M.João Nunes, Gabriel N. Valério, José J.G. Moura, Cristina M. Cordas, Carlos Rouco, Gilda Santos, L. Krippahld .....
- (CPH17) Unforeseen tandem Ullmann type C – N coupling and dehydrative cyclization of a thioxanthone and guanidine  
Fernando Durães, Filipa Barbosa, Madalena Pinto, Emília Sousa .....
- (CPH18) Volatilomics skinprinting as an untargeted approach to identify putative biomarkers of neurodegenerative diseases  
Beatriz Andrade, Jorge Pereira, José Câmara.....
- (CPH19) Computational study of polyoxometalates in catalysis of phosphodiester bond hydrolysis for medical applications as artificial phosphoesterases  
Sanchez-Gonzalez A, Martins F F, Bandeira N, Calhorda M J, Lanuza J, Gil A .....
- (CPH20) Determination of nitrate and nitrite in human saliva with a specially designed microfluidic paper-based analytical device ( $\mu$ PAD)  
Francisca T. S. M. Ferreira, Raquel B. R. Mesquita, António O. S. S. Rangel.....
- (CPH21) Montelukast metabolic studies: a Mass Spectrometry approach  
C. F. Marques, G. C. Justino, M. M. Marques .....
- (CPH22) New anti-inflammatory drugs: less, equal or more topical actions on membrane lipids?  
Martins M, Nunes C, Reis S, Pereira-Leite C .....
- (CPH23) Amino Acids Profile for Assessing Serra da Estrela Cheese Producers  
Andréia O. Santos, Soraia I. Falcão, Luísa Fontes, Ana C.A. Veloso, Edite T. Lemos, J. Reis Lima, António M. Peres, Luís G. Dias .....
- (CPH24) Ternary complexes of fluoroquinolones as promising metalloantibiotics  
Mariana Ferreira, Lucinda J. Bessa, Paula Gameiro.....
- (CPH25) Anti-Candida Performance of gold and silver camphor imine complexes  
Joana P. Costa, Maria Joana Pinheiro, Fernanda Marques, Nuno P. Mira, M Fernanda N N Carvalho .....
- (CPH26) Quality by design development of fusogenic magnetoliposomes  
Soares F, Pereira-Leite C, Reis S, Nunes C .....
- (CPH27) Lewis Base Promoted Hydrosilylation of C=X Bonds with Pinacol-derived Chlorohydrosilane  
Assoah B, Vale J. R, Veiros L. F, Candeias N. R.....
- (CPH28) Cationic photosensitizers and protein inhibitors: finding new ways to target antimicrobial resistance  
Rafael T. Aroso, Janusz M. Dabrowski, Barbara Pucelik, Grzegorz Dubin, Rita C. Guedes, Luis G. Arnaut, Mario J. F. Calvete, Mariette M. Pereira .....
- (CPH29) Synthesis of New Chemical Entities based on Tetrapyrrolic Macrocycles for Medical Imaging  
S.M.A. Pinto, D.M.P Gomes, V.A. Tomé, M.J.F. Calvete, A.J. Abrunhosa, C.F.G.C Geraldes, M.M. Pereira .....
- (CPH30) *In vitro* cholinesterase inhibition of five medicinal plants  
Catarina Gonçalves, Adriana Pereira, Cristina Delerue-Matos, Clara Grosso .....
- (CPH31) Unraveling Selectivity Issues in Palladium-catalyzed Quinoline N-Oxide C-H Activation  
Frederico F. Martins, Paulo J. Costa, Maria José Calhorda .....
- (CPH32) Effect of Hyperbaric Storage on Blood Preservation  
Ana P. Martins, Carlos A. Pinto, Álvaro T. Lemos, Jorge A. Saraiva .....
- (CPH33) Síntese de Potenciais Agentes Bimodais para Imagiologia Médica  
Gomes DMP, Pinto SMA, Pereira MM .....
- (CPH34) Spectrofluorimetric determination of iodine in urine samples with on-line UV photooxidation using a miniaturized analyzer chip in a multi-syringe flow system  
Joana L. A. Miranda, Edwin Palacio, Raquel B. R. Mesquita, José M. Estela, Víctor Cerdà, António O. S. S. Rangel.....

- (CPH35) New fluorescing tools for detection of protein aggregation  
R. Nunes da Silva, L. Fontes, M. Q. Alves, S. I. Vieira, J. Rocha, A. M. S. Silva, S. Guieu .....
- (CPH36) Dealing with copper stress - multicopper oxidases in pathogenic Grampositive bacteria  
Barbara Gonçalves, Daniela S. Barreiro, Rita G. Sobral, Sofia R. Pauleta .....
- (CPH37) Hemoglobin-Acrylamide Adduct - a Spectroscopic Study  
Joana N. Martins, André G. Favinha, Daniela S. Barreiro, Philip O'toole, Sofia R. Pauleta .....
- (CPH38) Spiropyrazoline oxindoles: Promising p53 pathway activators for the development of new anti-tumor drugs  
Margarida Espadinha, Elizabeth Lopes, Joana D. Amaral, Cecília M. P. Rodrigues, Maria M. M. Santos .....
- (CPH39) Automated solid-phase extraction using a bead-injection lab-on-valve approach coupled to liquid chromatography and mass spectrometry for determination of tranexamic acid in urine  
Sara R. Fernandes, Luisa Barreiros, Paula Sá, Manuel Miró, Marcela A. Segundo .....
- (CPH40) Synthesis of New Hetero-Arylidene-9(10H)-Anthrone Derivatives and Biological Evaluation as Antiproliferative Agents  
Gabriela Malta, Catarina Roma-Rodrigues, Daniela Peixoto, Luísa M. Ferreira, Pedro V. Baptista, Alexandra R. Fernandes, Paula S. Branco .....
- (CPH41) Synthesis of porphyrin-peptide conjugates by copper(I)-catalysed azide alkyne cycloaddition  
Rodrigo P. Monteiro, José Almeida, Cádia Teixeira, Paula Gomes, Maria Rangel, Baltazar de Castro, Ana M.G. Silva .....
- (CPH42) Ohmic heating approach to pyridyl and *N*-methylpyridinium analogues of rosamines: photophysical properties and behavior towards ethanol  
Andreia Leite, Luís Cunha-Silva, Maria Rangel, Ana I. M. C. Lobo Ferreira, Luís M. N. B. F. Santos, Inês C. S. Cardoso, Vera L. M. Silva, Ana M. G. Silva .....
- (CPH43) In silico studies towards new BACE-1 inhibitors  
Maia M., Palmeira A., Resende D., Sousa E., Kiss L.....
- (CPH44) Exploratory assessemnt of carbonylative Suzuki coupling for the synthesis of benzophenones  
Daniela R. P. Loureiro, Ana Maia, José X. Soares, Álvaro F. Magalhães, Carlos M. G. Azevedo, Salette Reis, Carlos M. M. Afonso, Madalena M. M. Pinto .....
- (CPH45) Fluorescent Boronic Acid Salicylidenehydrazone (BASHY) complex for studying lipid droplets influence on drug effectiveness  
Silvia Baldo, Fabio M. F. Santos, Catia Parente Carvalho, S. N. Pinto, F. Fernandes, Pedro M. P. Gois .....
- (CPH46) Metal Catalysed Regioselective Esterification of Sucrose: A Library of Phenylpropanoic Esters Against Cancer  
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- (CPCE11) Separation of Flavonoids and Anthocyanins from Roses  
Luís F. Sousa, Alice M. Dias .....
- (CPCE12) Phytochemical characterization and determination of biological activity of the hydroethanolic extract of barks of plants from Angola  
A.M. Selua, M. Lucas, M. Gomes, J. A. Figueiredo, J. Rodilla, M. I. Ismael .....
- (CPCE13) Quest for the first Periodic Table in Portugal: the influence of Ferreira da Silva on popularization of chemical nomenclature (1877-1910)  
José Ferraz-Caetano, João Paiva, Francisco Malta Romeiras

**Hovione** 

**60** 1959 - 2019  
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60 anos a inovar  
e a contribuir para  
a saúde humana.





Sistemas Analíticos, Lda.

[www.thermounicam.pt](http://www.thermounicam.pt)

## CROMATOGRAFIA - ESPECTROMETRIA

A UNICAM SISTEMAS ANALITICOS LDA, é especializada na Assistência Técnica e formação, nas áreas da Cromatografia, Espectrometria, Analisadores de Mercúrio e Digestão e Extracção por Micro-Ondas.

Também disponibilizamos um completo e alargado catálogo de consumíveis para Cromatografia, como colunas clássicas e de última geração para HPLC e GC.

Cientes do desafio de trabalhar com cientistas de topo, somos também muito exigentes na nossa formação e no suporte de excelência que pretendemos dar.

Contamos com uma equipa técnica Multidisciplinar para atender todas as suas necessidades e garantir o seu sucesso.

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para lhe proporcionar mais e melhor saúde.  
Cuidar da sua vida,  
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Um sonho hoje tão ou mais vivo do que quando começou.  
E sabemos que a melhor forma de o realizar é inovando.  
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EQUIPAMENTO CIENTÍFICO DE LABORATÓRIO, LDA.

## REPRESENTANTES DAS PRINCIPAIS MARCAS



50 anos



**Soluções**

inovadoras

# A TABELA PERIÓDICA

150 anos para 118 elementos

## XXVI Encontro SPQ

Porto, 24-26 julho

Faculdade de Ciências

*Estamos à sua espera*

He	H
B	C
N	O
F	N
Al	Si
P	S
Cl	Ar
Ge	As
Se	Br
K	
Sn	Te
In	I
Sn	Sb
Bi	Po
Tl	At
	R

Li	Mg
Be	
Ca	Se
Sc	Ti
V	Cr
Mn	Fe
Co	Ni
Cu	Zn
Ga	
Ge	
As	
Se	
Br	
K	
Sr	Y
Zr	Nb
Nb	Mo
Ta	Ru
Ta	Rh
Pt	Pd
Pt	Ag
Pt	Cd
In	
Sn	
Sb	
Te	
I	
W	Re
W	Os
W	Au
W	Hg
W	Tl
W	Ph
W	Bi
W	Po
W	At
Pa	U
Pr	Nd
Eu	Eu
Eu	Gd
Eu	Tb
Eu	Dy
Eu	Tm
Eu	Yb
Eu	Lu



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Desde 1929, a **SOQUIMICA** desenvolve a sua actividade no mercado da comercialização de equipamento de laboratório de elevada qualidade e da prestação de serviços altamente especializados.

Oferecemos aos nossos clientes o *know-how* de uma equipa qualificada e experiente, que permite o apoio ao desenvolvimento de soluções desenhadas à medida das suas necessidades individuais.

Os equipamentos que comercializamos e os serviços que prestamos permitem aos nossos clientes usufruir das melhores soluções para várias Aplicações (Análises químicas, Cromatografia líquida e gasosa, Espectroscopia, Genómica, *Life sciences*, Pesagem de laboratório, Pesagem industrial, Preparação de amostras) e Indústrias (Ambiente, Análise forense e Toxicologia, Energia e Produtos Químicos, Indústria alimentar e Agricultura, Indústria Farmacêutica e Biotecnologia, Indústria Têxtil, Inspecção de produtos e Teste de materiais, Investigação clínica, Refinaria e Petroquímica).

Trabalhamos com o objectivo último de garantir a satisfação de todos os nossos parceiros de negócio:

- **Clientes** - estando atentos às suas necessidades e oferecendo sempre as melhores soluções baseadas na nossa experiência e conhecimento;
- **Fornecedores** – garantindo o cumprimento dos requisitos inerentes às marcas que representamos;
- **Colaboradores** - proporcionando a sua realização profissional e humana;



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# Equipamentos para Laboratório

## ESTUFAS

- Estufas com e sem ventilação
- Incubadoras com e sem ventilação
- Estufas refrigeradas 0°C a 99°C
- Estufas vácuo 5°C a 200°C
- Estufa CO<sub>2</sub>



## CALORÍMETROS

### EQUIPAMENTO GERAL DE LABORATÓRIO

**ika**



## MICROSCÓPIOS SEM

- Microscópio electrónico SEM  
(Sistema EDS-Bruker)



## ANÁLISE TÉRMICA

- TMA - Análise termomecânica
- DSC - Calorímetro diferencial de varimento
- DTA - Análise térmica diferencial
- TGA - Análise termogravimétrica



## VISCOSIDADE/REOMETRIA/TEXTURA

- Vibração
- Torção
- Reómetro
- Textura



## BALANÇAS ELECTRÔNICAS

- Micro-Analíticas
- Analíticas
- Determinação densidades
- Precisão
- Medição de humidade
- Contagem
- Massas calibradas / calibrações balanças



**AND**

## MOINHOS DE LABORATÓRIO

- De maxetas / lâminas / martelos
- De bolas / centrífugos / planetários / nano
- De anéis
- De rolos
- Setor alimentar
- Moagem criogénica (N<sub>2</sub>)
- Moagem de amostras para raios-x / NIR



## ANÁLISE GRANULOMÉTRICA

- Agitadores de peneiros
- Agitador por jato de ar
- Peneiros DIN / ISO / ASTM
- Software
- Divisores de amostras
- Tinas por ultra-sens
- Analisador automático granulometria laser



**HAVER & BOECKER**

## APOIO INSTITUCIONAL

COM O ALTO PATROCÍNIO  
DE SUA EXCELENCIA

UNDER THE HIGH PATRONAGE OF THE  
PRESIDENT OF THE PORTUGUESE REPUBLIC



*O Presidente da República*



**SOCIEDADE PORTUGUESA DE QUÍMICA**

**U.PORTO**

**FC** FACULDADE DE CIÉNCIAS  
UNIVERSIDADE DO PORTO

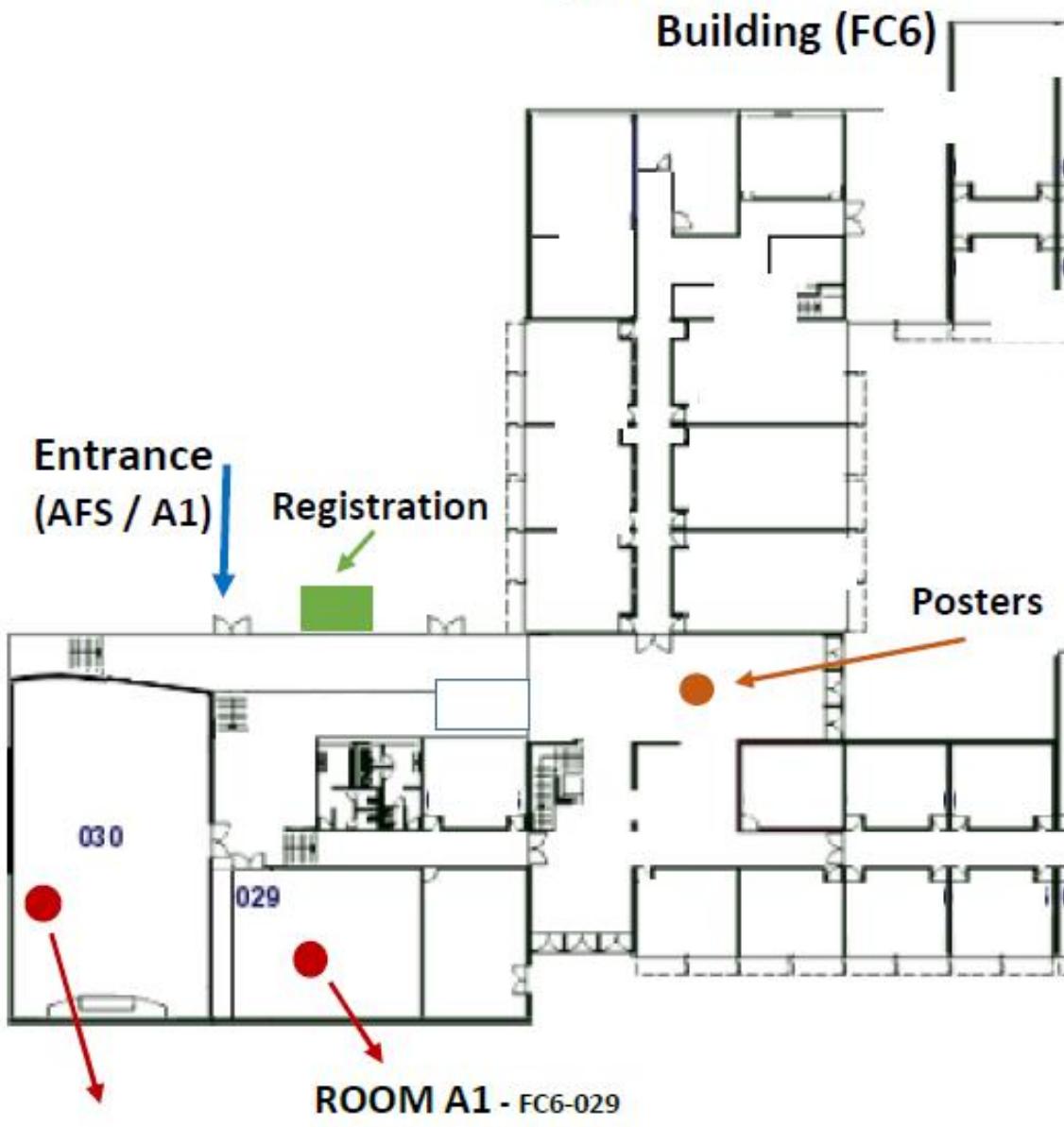
# XXVI ENCONTRO NACIONAL

Sociedade Portuguesa de Química

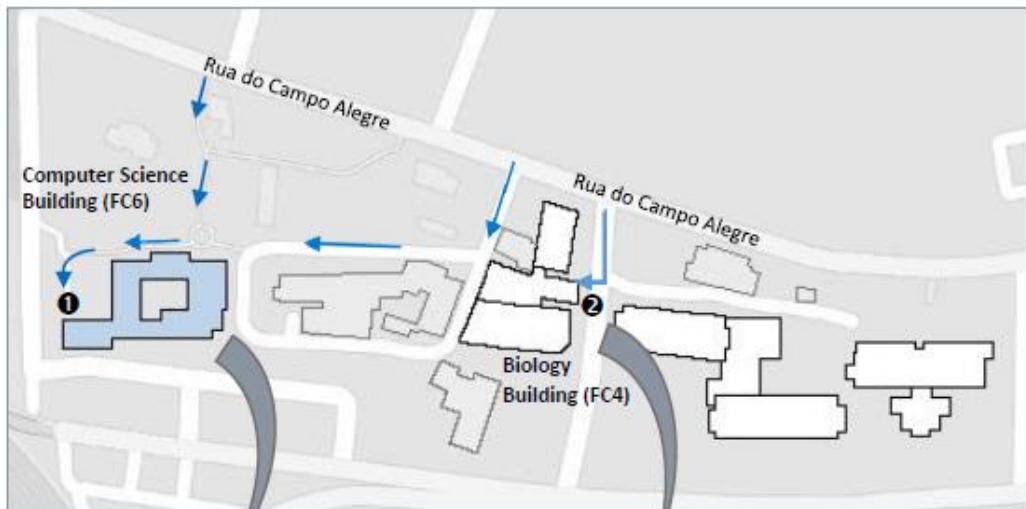


## ① Computer Science

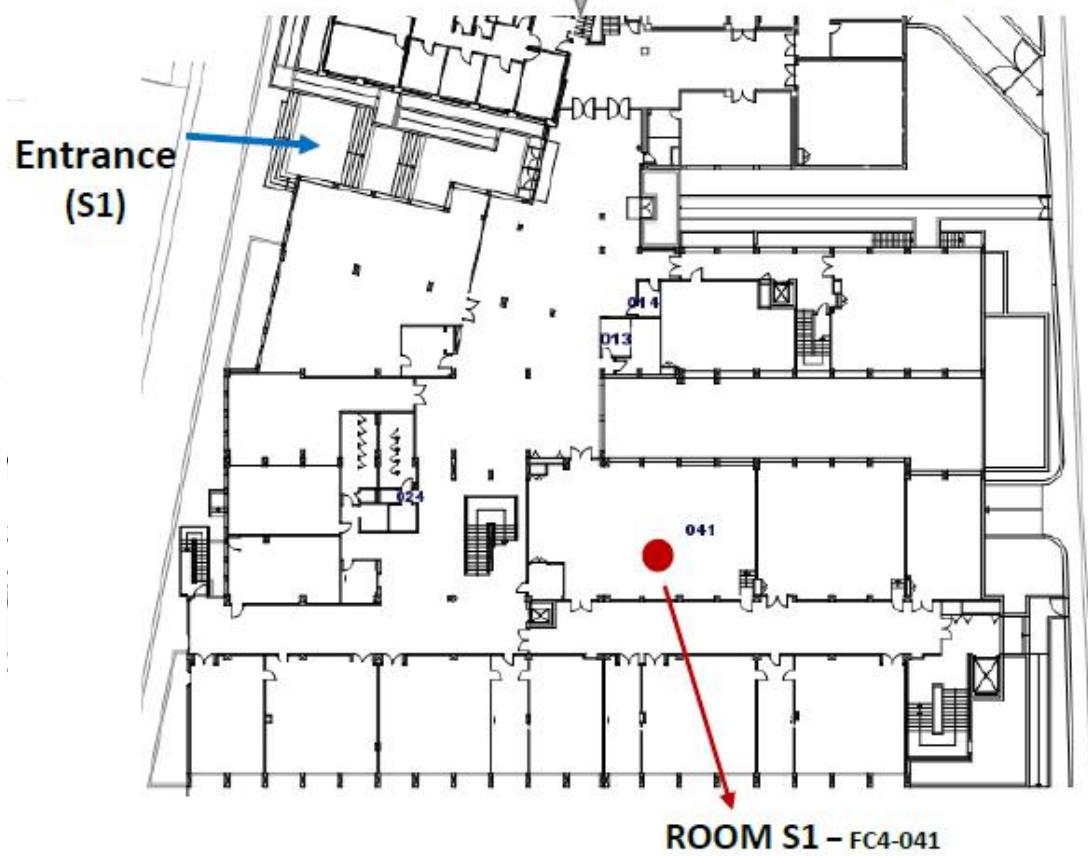
Building (FC6)



ROOM AFS - Auditório Ferreira da Silva



**② Biology Biulding  
(FC4)**



Horas	4º feira (24)	5º feira (25)	6º feira (26)
9h00	AFS 9h00-9h45  ENTREGA DA DOCUMENTAÇÃO	AFS 9h45-10h40  PL3 - Munio Maulide (U/verma - AT)  Medalha Vicente de Seabra 2018 Mara G. Freire (UA)	AFS 9h45-10h40 KN9   Nuno Mateus (FCUP) COC13   Lillian Barros (IPB)  A1 9h45 - 10h40 KN10   Luisa Mata (UNL) COC14   Filipa Marcele (UNL)  \$1 - 9h45 - 10h40 KN11   Luisa Mata (UNL) COC15   Marco da Silva (FCUNL)
10h30	SESSÃO DE ABERTURA (10h30-11h30)	Pausa p/ Café e Discussão de Painéis (10h40 - 11h45 min)	Pausa p/ Café e Discussão de Painéis (10h45 - 11h45 min)
11h30	AFS 11h30-12h40  Premio Ferreira da Silva 2018 Maria Jose Cahorda (FCUL)	AFS 11h45 - 12h40 GEC/GQE A1 11h45 - 12h40 CO25   Ricardo Mata (UGoettingen, DE) CO26   Magarcia Gomes (Ubon, FR) CO27   Pedro Costa (KAUST, SA)	AFS 11h45 - 12h40 KN5   Amândio Silvestre (UA) CCC21   Fernando Nunes (UTAD)  A1 - 11h45 - 12h40 KN12   Luisa Silva (C, UK) COC16   José Câmara (UMad)  \$1 - 11h45 - 12h40 KN13   Beatriz Royo (UNL, ITQB) COC17   Nuno Xavier (FCUL)
12h40		Almoço (12h40 - 14h00)	Almoço (12h40 - 14h00)
14h00	AFS 14h00-14h15  Christopher Brett (UPAC)	AFS 14h00-14h45  PL4 - Eduardo Fernández-Méjia (USantiago de Compostela, ES)	AFS 14h00-14h45  PL7 - Cristina Freire (FCUP)
14h15	AFS 14h15-15h00  PL1 - Martyn Pollakoff (U Nottingham, UK)	AFS 14h45 - 16h35 KN6   Luisa Matos (IST-UL) COC9   Nuno Moura (UA) COC10   Pedro Pade (IST-UL) COC13   João Rodrigues (UA) CO 14   Diana Resende (FFUP) CO 15   Ana Fernandes (FEUP)	AFS 14h45 - 16h35 KN7   Luisa Matra (UA) COC11   Andresa Valente (FCUL) CO16   Adri Gil-Mestres (FCUL) CO17   Beatriz Gomes (FFUP) CO 18   Roberto Russo (FFUL) CO 19   Cláudia Braga (FFUP)  A1 14h45 - 16h35 KN15   Alberto Pais (FCITUC) COC19   António Patola (FCITUNL, PT) COC24   Filipe Santos (UTAD)  \$1 - 14h45 - 16h35 KN16   Maria Pinero (FCITUC) COC20   Luisa Ferreira (FCITUNL) COC24   Filipe Santos (UTAD)  \$1 - 14h45 - 16h35 KN17   São Borges (UA) COC23   Filipa Reis (PB) COC24   Mónica Santos (FEUP)
15h00	AFS 15h00-16h55  KN11 Cristina Matos (ISEP) COC1 Mª Ludes Cristiano (UAlg) COC2 Ilda F. Duarte (UA) CO1 Jose R. Favares (FCIT-UNL) CO2 Jélio Albuquerque (UA) CO3 Nuno Alves (FCIT-UC)	AF1 15h00 - 16h45 KN2   Luis Belchior Santos (FCUP) CO4   Luis Branco (FCITUNL) CO5   João Avô (IST-UL) CO6   Paulo Matinho (FCUL) CO7   Camila Cucio (IST-UL) CO8   Luis Silva (FCUP)	AFS 14h45 - 16h35 KN8   Cláudia Silva (FEUP) COC12   Vanja Calisto (UA) COC20   Carlos Baleirão (IST-UL) CO 21   Eliana da Silva (FEUP) CO22   Richard Gomes (IUA) CO23   Ricardo Semíão (FCUP)
17h00		Pausa p/ Café e Discussão de Painéis (16h55 - 17h45 min)	Pausa p/ Café e Discussão de Painéis (16h40 - 17h15 min)
	AFS 17h45-18h30  PL2 - Zita Martins (IST-UL, PT)	AFS 17h45-18h00  PORTO de Honra	PL5 - João Carlos Lima (FCITUNL)  Reunião SPQ
			Jantar do Encontro   Restaurante Casa da Música
			20h00

PL - Plenárias

KN - Keynotes

COC - Comunicações Orais Convocadas

CO - Comunicações Orais